



Plant and Soil Sciences

2013

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>
AATREX	ATRAZINE	SYNGENTA
ABUNDIT EXTRA	GLYPHOSATE	DUPONT
ACTIVATOR 90	NON-IONIC SURFACTANT	LOVELAND
AMS	AMMONIUM SULFATE	CLEAN CROP
ANTHEM	PYROXASULFONE + FLUTHIACET-METHYL	FMC
ANTHEM ATZ	PYROXASULFONE + FLUTHIACET-METHYL + ATRAZINE	FMC
ARMEZON	TOPRAMEZONE	BASF
AUTHORITY ELITE	SULFENTRAZONE + S-METOLACHLOR	FMC
AUTHORITY FIRST	SULFENTRAZONE + CLORANSULAM	FMC
AUTHORITY MAXX	SULFENTRAZONE + CHLORIMURON-ETHYL	FMC
AUTHORITY MTZ	SULFENTRAZONE + METRIBUZIN	FMC
AUTHORITY XL	SULFENTRAZONE + CHLORIMURON-ETHYL	FMC
BALANCE FLEXX HERBICIDE	ISOXAFLUTOLE	BAYER
BICEP II MAGNUM	S-METOLACHLOR + ATRAZINE + BENOXACOR	SYNGENTA
BOUNDARY	S-METOLACHLOR + METRIBUZIN	SYNGENTA
CADET	FLUTHIACET-METHYL	FMC
CANOPY	METRIBUZIN + CHLORIMURON ETHYL	DUPONT
CANOPY EX	CHLORIMURON + TRIBENURON	DUPONT
CAPRENO HERBICIDE	TEMBOTRIONE + THIENCARBAZONE-METHYL	BAYER
CINCH	S-METOLACHLOR	DUPONT
CINCH ATZ	S-METOLACHLOR + ATRAZINE	DUPONT
CLASSIC	CHLORIMURON	DUPONT
COBRA	LACTOFEN	VALENT
CORVUS HERBICIDE	ISOXAFLUTOLE + THIENCARBAZONE-METHYL	BAYER
CROP OIL CONCENTRATE (COC)		LOVELAND
CRUSHER	RIMSULFURON + THIFENSULFURON	CHEMINOVA
DUAL II MAGNUM	S-METOLACHLOR + BENOXACOR	SYNGENTA
DURANGO DMA	GLYPHOSATE	DOW AGROSCIENCE
ENLITE	CHLORIMURON + THIFENSULFURON + FLUMIOXAZIN	DUPONT
ENVIVE	FLUMIOXAZIN + THIFENSULFURON	DUPONT

HERBICIDES IN REPORT CONTINUED

<u>TRADE NAME</u>	<u>COMMON NAME</u>	<u>COMPANY</u>
F9387		FMC
FASTAC	ALPHA-CYPERMETHRIN	BASF
FIERCE	FLUMIOXAZIN + PYROXASULFONE	VALENT
FIRSTRATE	CLORANSULAM	DOW AGROSCIENCE
FLEXSTAR	FOMESAFEN	SYNGENTA
FLEXSTAR GT	FOMESAFEN + GLYPHOSATE	SYNGENTA
GANGSTER FR	CLORANSULAM	VALENT
GANGSTER V	FLUMIOXAZIN	VALENT
GLYFOS X-TRA	GLYPHOSATE	CHEMINOVA
GRAMOXONE INTEON	PARAQUAT	SYNGENTA
GUARDSMAN MAX	DIMETHENAMID-P + ATRAZINE	BASF
HALEX GT	GLYPHOSATE (PS)+ MESOTRIONE + S-METOLACHLOR	SYNGENTA
HARNESS XTRA	ACETOCLOR + ATRAZINE	MONSANTO
HEADLINE AMP	PYRACLOSTROBIN + METCONAZOLE	BASF
IMPACT	TOPRAMEZONE	AMVAC
INSTIGATE	RIMSULFURON + MESOTRIONE	DUPONT
INTIMIDATOR	S-METOLACHLOR + METRIBUZIN + FOMESAFEN	LOVELAND
KEYSTONE NXT	ACETOCHLOR + ATRAZINE	DOW
LAUDIS	TEMBOTRIONE	BAYER
LEADOFF	RIMSULFURON + THIFENSULFURON	DUPONT
LEXAR EZ	S-METOLACHLOR + MESOTRIONE + ATRAZINE	SYNGENTA
LIBERTY 280	GLUFOSINATE AMMONIUM	BAYER
LOW VOL 4	2,4-D ESTER	LOVELAND
LUMAX EZ	S-METOLACHLOR + MESOTRIONE + ATRAZINE	SYNGENTA
MAKAZE	GLYPHOSATE	LOVELAND
MAKAZE YIELD PRO	GLYOHOSATE + HORMONE PREMIX	LOVELAND
MARVEL	FLUTHIACET METHYL + FOMESAFEN	FMC
MATADOR S	S-METOLACHLOR + METRIBUZIN + IMAZETHAPYR	LOVELAND
MSO	METHYLATED SEED OIL	LOVELAND
NIS	NON-IONIC SURFACTANT	
NPAK AMS LIQUID	AMMONIUM SULFATE	WINFIELD
OPTILL	SAFLUFENACIL + IMAZETHAPYR	BASF
OUTLOOK	DIMETHENAMID-P	BASF
PHOENIX	LACTOFEN	VALENT
PREFIX	S-METOLACHLOR + BENOXACOR	SYNGENTA
PRINCEP	SIMAZINE	SYNGENTA
PRIAXOR	FLUXAPYROXAD + PYRACLOSTROBIN	BASF

HERBICIDES IN REPORT CONTINUED

<u>TRADE NAME</u>	<u>COMMON NAME</u>	<u>COMPANY</u>
REALM Q	RIMSULFURON + MESOTRIONE + SAFENER	DUPONT
RESOLVE Q	RIMSULFURON + SAFENER	DUPONT
ROUNDUP WEATHERMAX	GLYPHOSATE (ISOPROPYLAMINE SALT)	MONSANTO
ROUNDUP POWERMAX	GLYPHOSATE (POTASSIUM SALT)	MONSANTO
SELECT MAX	CLETHODIM	VALENT
SENCOR	METRIBUZIN	BAYER
SEQUENCE	GLYPHOSATE + S-METOLACHLOR	SYNGENTA
SHARPEN	SAFLUFENACIL	BASF
SONIC	SULFENTRAZONE + CLORANSULAM-METHYL	DOW AGROSCIENCE
STALWART XTRA	METOLACHLOR + ATRAZINE	SIPCAM
STALWART XTRA LITE	METOLACHLOR + ATRAZINE	SIPCAM
STALWART MTZ	METOLACHLOR	SIPCAM
STATEMENT	FOMESAFEN + METOLACHLOR	CHEMINOVA
STATUS	DIFLUFENZOPYR + DICAMBA	BASF
SURESTART	ACETOCHLOR + FLUMETSULAM + CLOPYRALID	DOW AGROSCIENCE
TOUCHDOWN TOTAL	GLYPHOSATE	SYNGENTA
TRIVENCE	CHLORIMURON + METRIBUZIN + FLUMIOXAZIN	DUPONT
UAN	28% UREA AMMONIUM NITRATE FERTILIZER	
V-10206	PUROXASULFONE	VALENT
VALOR SX	FLUMIOXAZIN (V-53482)	VALENT
VALOR XLT	FLUMIOXAZIN + CHLORIMURON	VALENT
VERDICT	SAFLUFENACIL + DIMETHENAMID-P	BASF
WARRANT	ACETOCHLOR	MONSANTO
WEATHER GARD COMPLETE	ADDITIVE	LOVELAND
WEEDONE LV4	2,4-D ESTER	NUFARM AMERICAS INC
ZIDUA	PYROXASULFONE	BASF

DEFINITIONS FOR METHODS OF APPLICATION

PREEMERGENCE

30D EPP	30 DAYS BEFORE PLANTING
- 2 WK	2 WEEKS BEFORE PLANTING
-7 DAY	7 DAYS BEFORE PLANTING
PRE	PREEMERGENCE

POSTEMERGENCE

EP	EARLY POSTEMERGENCE, WEEDS 0-2"
MP	MID-POSTEMERGENCE, WEEDS 2-4"
LP	LATE POSTEMERGENCE, WEEDS 4-6"
EP-V2	EARLY POSTEMERGENCE, 8 INCH CORN
V3	FOUR NODES WITH 3 UNFOLDED LEAFLETS, 7-9 INCH SOYBEAN, 3 VISABLE COLLARS, 10 INCH CORN
2 TRI	TWO TRIFOLIATE SOYBEANS
MP-V4	MID-POSTEMERGENCE, 12 INCH CORN
V4	12 INCH CORN
V5	LATE POSTEMERGENCE, 20 INCH CORN
R1	SILKING IN CORN
R3	BEGINNING POD ON SOYBEAN
28 DAP	28 DAYS AFTER PLANTING
42 DAP	42 DAYS AFTER PLANTING
V10	42 INCH CORN, PRE TASSLE
VT	TASSLING CORN

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>
CHEAL	Common Lambsquarters	<i>Chenopodium album</i>
GLXMA	Soybean	<i>Glycine max</i>
ERICA	Marestail	<i>Conyza canadensis</i>
IPOSS	Morningglory	<i>Ipomoea sp.</i>
LAMAM	Henbit	<i>Lamium amplexicaule</i>
SETFA	Giant Foxtail	<i>Setaria faberi</i>
STEME	Common Chickweed	<i>Stellaria media</i>
ZEAMX	Corn	<i>Zea mays</i>

MARCH CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
03-01-2013	37	32	34	0.04	100	88	40	38	42	41	
03-02-2013	32	27	29	0.01	94	69	39	37	41	40	
03-03-2013	34	22	28	0.01	95	56	37	36	40	39	
03-04-2013	46	19	32		98	40	38	35	41	37	
03-05-2013	46	29	37	0.99	100	64	40	37	42	40	
03-06-2013	32	28	30	0.01	98	87	38	37	41	40	
03-07-2013	34	30	32		94	75	37	37	40	40	
03-08-2013	46	29	37		90	56	42	36	44	39	
03-09-2013	63	28	45		94	34	44	37	46	40	
03-10-2013	69	51	60		50	25	46	43	48	45	
03-11-2013	60	38	49	0.73	100	41	47	45	49	47	
03-12-2013	47	35	41		88	55	45	42	47	45	
03-13-2013	35	25	30		95	54	42	39	45	42	
03-14-2013	45	21	33		90	32	42	37	44	39	
03-15-2013	58	32	45		88	53	43	38	46	41	
03-16-2013	70	42	56	0.07	92	51	49	43	50	45	
03-17-2013	41	33	37	0.41	100	89	47	41	49	44	
03-18-2013	55	36	45	1.93	100	80	45	41	47	43	
03-19-2013	47	33	40		95	29	44	41	46	44	
03-20-2013	46	22	34		68	38	42	38	44	41	
03-21-2013	34	18	26		85	42	40	36	42	39	
03-22-2013	45	18	31		92	33	42	36	44	38	
03-23-2013	53	35	44		77	36	46	40	47	42	
03-24-2013	41	34	37	1.08	100	54	43	40	45	43	
03-25-2013	35	30	32	0.01	99	84	40	38	43	41	
03-26-2013	37	32	34	0.04	98	73	40	38	42	41	
03-27-2013	43	27	35		87	50	41	37	43	40	
03-28-2013	49	25	37		95	42	45	37	46	40	
03-29-2013	57	30	43		94	35	47	39	48	42	
03-30-2013	61	30	45		100	40	48	41	50	44	
03-31-2013	59	47	53	0.14	100	62	49	46	50	48	

Summary for the period 3-1-2013 through 3-31-2013:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
	47	30	39	5.47	92	54	43	39	45	42	
(Deviation from normal)	-7	-4	-5	+1.07							

APRIL CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS MX	GRASS MN	BARE MX	BARE MN	
04-01-2013	50	33	41		93	42	48	46	50	48	
04-02-2013	48	26	37		76	30	48	42	49	44	
04-03-2013	51	28	39		58	24	53	48			
04-04-2013	52	36	44		56	34	52	45			
04-05-2013	66	32	49		90	30	54	44	56	42	
04-06-2013	70	41	55		60	25	56	49	60	47	
04-07-2013	71	55	63		54	37	49	48			
04-08-2013	72	54	63		82	51	54	49	55	51	
04-09-2013	78	60	69		84	47	57	51	59	53	
04-10-2013	81	62	71		84	45	59	54	61	56	
04-11-2013	70	58	64	0.74	100	62	58	57	60	58	
04-12-2013	58	39	48	0.45	100	58	57	53	59	55	
04-13-2013	60	35	47		91	44	54	50	56	52	
04-14-2013	71	39	55		88	44	55	50	56	52	
04-15-2013	69	55	62		89	62	57	54	58	55	
04-16-2013	80	60	70		95	61	60	55	62	57	
04-17-2013	74	59	66	0.91	100	74	62	58	62	60	
04-18-2013	80	63	71		86	44	62	59	63	61	
04-19-2013	72	38	55	0.57	99	60	61	54	62	57	
04-20-2013	54	34	44		92	42	55	52	57	54	
04-21-2013	59	33	46		81	36	56	51	57	53	
04-22-2013	68	36	52		79	38	56	51	58	54	
04-23-2013	68	45	56		84	57	56	53	58	55	
04-24-2013	62	39	50	0.94	100	65	55	53	57	55	
04-25-2013	58	34	46		99	48	54	50	56	52	
04-26-2013	61	37	49		81	45	55	51	56	53	
04-27-2013	58	49	53	T	99	64	54	53	56	55	
04-28-2013	66	52	59	0.85	100	75	57	54	58	56	
04-29-2013	64	51	57		99	74	58	56	59	57	
04-30-2013	77	49	63		100	45	63	55	61	56	

Summary for the period 4-1-2013 through 4-30-2013:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS MX	GRASS MN	BARE MX	BARE MN	
	66	44	55	4.46	87	49	56	52	58	54	
(Deviation from normal)	+0	-0	-0	+0.58							

MAY CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS		BARE		
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05-01-2013	82	54	68		96	50	66	59	63	58	
05-02-2013	76	54	65		87	52	65	61	63	60	
05-03-2013	74	56	65		89	47	65	61	63	60	
05-04-2013	72	53	62	0.25	100	42	64	60	63	61	
05-05-2013	54	47	50	1.69	99	96	62	57	61	59	
05-06-2013	66	53	59	0.14	98	74	60	56	61	58	
05-07-2013	70	55	62	0.09	100	59	64	58	63	60	
05-08-2013	72	53	62	0.25	100	67	65	61	63	61	
05-09-2013	79	55	67	0.01	99	53	68	61	64	61	
05-10-2013	67	62	64	0.73	99	73	66	64	64	63	
05-11-2013	62	51	56	0.20	99	62	64	62	63	61	
05-12-2013	58	39	48		98	40	64	59	61	59	
05-13-2013	63	39	51		79	35	64	57	60	56	
05-14-2013	79	43	61		85	47	65	58	61	57	
05-15-2013	83	65	74		75	38	69	62	65	61	
05-16-2013	72	61	66	0.60	100	63	66	64	64	63	
05-17-2013	78	60	69	T	100	60	68	63	65	62	
05-18-2013	77	64	70	0.21	98	71	70	66	67	64	
05-19-2013	83	63	73		100	59	72	67	69	65	
05-20-2013	83	64	73		96	65	74	69	70	67	
05-21-2013	83	65	74	0.19	95	57	74	70	71	68	
05-22-2013	77	63	70	0.15	97	64	72	69	69	68	
05-23-2013	72	54	63	0.07	99	63	71	68	68	67	
05-24-2013	66	47	56	0.06	89	44	69	65	67	64	
05-25-2013	67	41	54		99	44	66	62	64	61	
05-26-2013	71	51	61	0.01	94	48	67	63	65	62	
05-27-2013	82	56	69		85	38	71	64	68	63	
05-28-2013	82	66	74	0.01	87	46	72	67	69	66	
05-29-2013	85	65	75		83	55	73	68	71	67	
05-30-2013	85	66	75		85	54	75	69	72	68	
05-31-2013	83	66	74	0.57	99	56	73	70	71	69	

Summary for the period 5-1-2013 through 5-31-2013:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS		BARE		
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	74	56	65	5.23	94	56	68	63	65	63	
(Deviation from normal)	-1	+1	-0	+0.76							

JUNE CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
06-01-2013	81	68	74	0.07	94	65	74	70	72	69	
06-02-2013	77	62	69		95	63	74	70	72	70	
06-03-2013	73	56	64		96	51	74	69	71	68	
06-04-2013	75	52	63		97	48	74	67	71	66	
06-05-2013	83	56	69		94	47	74	68	70	66	
06-06-2013	77	64	70	0.19	97	71	74	70	71	69	
06-07-2013	76	61	68		100	57	74	70	71	68	
06-08-2013	79	58	68	0.05	99	60	73	69	70	67	
06-09-2013	79	60	69	0.15	97	61	72	69	70	67	
06-10-2013	75	63	69	1.42	100	70	73	69	71	68	
06-11-2013	82	62	72		99	58	77	69	73	68	
06-12-2013	92	71	81		88	49	79	73	77	71	
06-13-2013	80	62	71	0.47	98	56	76	73	75	72	
06-14-2013	80	56	68		90	47	76	70	75	70	
06-15-2013	83	58	70		97	40	78	70	79	69	
06-16-2013	81	64	72	0.46	100	60	76	72	77	72	
06-17-2013	87	65	76	0.70	99	51	78	72	80	72	
06-18-2013	82	63	72	0.68	98	54	78	72	82	73	
06-19-2013	80	61	70		97	49	78	73	82	73	
06-20-2013	84	60	72		94	42	78	72	82	73	
06-21-2013	86	62	74		94	43	80	73	83	74	
06-22-2013	86	65	75	T	96	50	80	74	82	76	
06-23-2013	86	64	75		95	50	80	75	83	76	
06-24-2013	80	66	73	0.23	96	70	78	75	80	76	
06-25-2013	87	66	76		99	57	80	74	83	75	
06-26-2013	83	65	74	0.97	100	64	78	73	81	76	
06-27-2013	83	66	74	1.93	100	65	77	72	80	74	
06-28-2013	83	63	73		92	47	79	74	81	76	
06-29-2013	78	62	70		99	61	77	73	78	75	
06-30-2013	78	61	69		100	55	79	72	80	74	

Summary for the period 6-1-2013 through 6-30-2013:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
	81	62	72	7.32	97	55	77	71	77	71	
(Deviation from normal)	-2	+0	-1	+3.66							

JULY CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
07-01-2013	79	60	69	0.31	100	67	78	74	80	76	
07-02-2013	78	60	69	0.87	100	67	76	73	78	74	
07-03-2013	76	66	71		97	73	76	73	77	75	
07-04-2013	69	63	66	2.36	100	85	75	72	76	74	
07-05-2013	73	64	68	1.18	100	90	73	71	75	74	
07-06-2013	74	66	70	0.75	100	82	73	72	76	74	
07-07-2013	80	65	72	0.01	99	60	77	72	79	74	
07-08-2013	84	64	74		97	58	79	73	80	75	
07-09-2013	86	73	79	0.02	91	53	80	76	82	78	
07-10-2013	86	69	77	1.04	98	66	80	77	82	79	
07-11-2013	81	64	72		99	62	80	76	81	78	
07-12-2013	77	59	68		89	50	78	74	79	76	
07-13-2013	78	61	69	0.08	92	66	76	73	78	75	
07-14-2013	87	66	76		96	58	79	74	80	76	
07-15-2013	87	69	78		94	57	81	76	82	78	
07-16-2013	92	68	80		97	50	81	76	82	78	
07-17-2013	91	70	80		97	51	82	78	82	79	
07-18-2013	89	71	80		96	58	81	78	81	79	
07-19-2013	87	70	78		94	62	82	77	81	79	
07-20-2013	86	71	78		93	58	82	78	81	79	
07-21-2013	85	69	77	0.26	97	58	81	78	80	79	
07-22-2013	76	69	72	1.93	99	80	79	76	79	77	
07-23-2013	84	68	76	0.22	100	63	80	76	80	77	
07-24-2013	77	62	69		95	57	79	76	79	77	
07-25-2013	77	57	67		94	53	78	74	77	75	
07-26-2013	80	56	68		97	52	77	72	77	73	
07-27-2013	73	62	67	0.01	94	71	75	74	76	75	
07-28-2013	72	54	63		93	46	75	71	75	72	
07-29-2013	76	53	64		96	49	74	70	74	71	
07-30-2013	77	58	67	0.04	98	52	73	70	74	72	
07-31-2013	72	62	67	0.25	99	82	73	71	74	73	

Summary for the period 7-1-2013 through 7-31-2013:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
	80	64	72	9.33	96	62	78	74	79	76	
(Deviation from normal)	-6	-1	-3	+4.33							

AUGUST CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
08-01-2013	79	61	70	0.01	100	56	76	72	76	74	
08-02-2013	80	58	69		96	53	75	71	75	72	
08-03-2013	81	67	74		99	64	76	73	76	74	
08-04-2013	78	58	68		100	45	76	72	75	73	
08-05-2013	78	53	65		99	42	76	70	74	71	
08-06-2013	81	63	72		95	61	74	72	75	72	
08-07-2013	83	69	76	0.12	99	68	76	73	76	74	
08-08-2013	81	70	75	0.24	100	74	76	74	77	75	
08-09-2013	81	70	75	0.06	99	74	76	74	77	76	
08-10-2013	79	69	74	0.01	99	71	77	75	78	76	
08-11-2013	83	68	75	0.02	100	61	78	75	79	76	
08-12-2013	80	64	72	1.28	100	71	77	75	78	76	
08-13-2013	77	61	69	0.03	99	67	76	74	77	76	
08-14-2013	71	51	61		93	50	74	72	76	73	
08-15-2013	73	49	61		97	53	73	70	74	71	
08-16-2013	78	54	66		95	54	74	69	75	71	
08-17-2013	80	59	69		92	53	75	71	75	72	
08-18-2013	77	60	68		99	65	75	71	75	72	
08-19-2013	79	65	72		99	68	76	72	76	73	
08-20-2013	82	63	72	0.03	98	61	76	73	76	73	
08-21-2013	83	66	74		99	58	77	74	76	74	
08-22-2013	84	68	76	0.01	99	57	78	74	77	74	
08-23-2013	83	65	74	0.01	99	54	78	75	77	75	
08-24-2013	83	60	71		99	40	78	73	77	74	
08-25-2013	84	58	71		96	41	78	73	76	72	
08-26-2013	84	63	73		95	56	78	73	76	73	
08-27-2013	86	68	77		97	65	78	74	77	74	
08-28-2013	87	70	78		99	54	78	76	77	75	
08-29-2013	84	65	74		99	62	79	75	77	75	
08-30-2013	87	64	75		100	52	79	74	77	74	
08-31-2013	86	67	76	1.86	98	68	78	74	76	74	

Summary for the period 8-1-2013 through 8-31-2013:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
	81	63	72	3.68	98	59	76	73	76	74	
(Deviation from normal)	-3	+0	-1	-0.25							

SEPTEMBER CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
09-01-2013	82	66	74	0.01	97	61	77	74	76	74	
09-02-2013	83	68	75	0.10	99	68	78	75	77	75	
09-03-2013	75	56	65		93	55	78	74	76	75	
09-04-2013	78	53	65		99	50	76	72	75	72	
09-05-2013	82	56	69		100	50	76	72	74	71	
09-06-2013	80	58	69		94	44	76	72	74	72	
09-07-2013	83	56	69		95	55	76	72	74	71	
09-08-2013	86	66	76		97	46	78	73	75	72	
09-09-2013	87	66	76		96	51	78	74	76	73	
09-10-2013	88	71	79	0.12	93	55	79	75	76	74	
09-11-2013	86	69	77	0.08	96	60	78	75	76	75	
09-12-2013	79	66	72	0.27	97	63	77	75	76	74	
09-13-2013	67	50	58		92	47	75	71	74	71	
09-14-2013	69	45	57		97	38	72	68	71	68	
09-15-2013	76	47	61		95	52	70	66	70	66	
09-16-2013	69	55	62	0.06	96	70	70	68	70	69	
09-17-2013	74	51	62		99	46	70	66	70	67	
09-18-2013	70	57	63	0.01	95	80	78	73	70	68	
09-19-2013	77	63	70	0.09	98	72	71	68	71	69	
09-20-2013	82	66	74	0.02	96	55	72	69	72	70	
09-21-2013	69	51	60	1.45	100	54	71	68	72	69	
09-22-2013	67	47	57		99	51	69	66	69	67	
09-23-2013	69	45	57		97	46	68	65	68	66	
09-24-2013	77	47	62		96	54	69	65	69	66	
09-25-2013	74	59	66		94	58	70	67	70	68	
09-26-2013	77	50	63		100	50	70	66	70	67	
09-27-2013	78	49	63		100	35	71	66	70	66	
09-28-2013	78	51	64		98	43	70	65	69	65	
09-29-2013	71	59	65		94	62	68	67	68	66	
09-30-2013	75	59	67		96	49	70	67	69	67	

Summary for the period 9-1-2013 through 9-30-2013:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
	77	57	67	2.21	97	54	73	70	72	70	
(Deviation from normal)	-1	+1	+0	-0.99							

OCTOBER CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MX	
10-01-2013	78	57	67		95	56	70	67	69	67	
10-02-2013	81	59	70		98	62	71	67	70	67	
10-03-2013	80	64	72	0.05	98	56	72	69	72	69	
10-04-2013	81	62	71		97	54	72	69	72	69	
10-05-2013	81	65	73	1.80	100	60	72	70	72	70	
10-06-2013	74	52	63	3.21	100	77	70	67	71	68	
10-07-2013	61	44	52		99	51	67	65	68	66	
10-08-2013	65	41	53		99	48	65	62	65	63	
10-09-2013	72	43	57		94	37	66	62	66	63	
10-10-2013	73	42	57		100	38	65	61	65	62	
10-11-2013	76	46	61		98	41	66	62	66	62	
10-12-2013	78	47	62		100	45	67	62	66	63	
10-13-2013	76	48	62		100	56	66	63	66	63	
10-14-2013	71	49	60		98	58	67	63	66	64	
10-15-2013	72	56	64		99	65	66	64	67	65	
10-16-2013	64	55	59	0.17	98	90	66	65	66	66	
10-17-2013	54	44	49	0.26	99	77	65	62	66	63	
10-18-2013	63	40	51	0.01	100	46	62	59	63	60	
10-19-2013	50	39	44	0.20	97	84	60	58	61	59	
10-20-2013	59	36	47		99	47	58	56	59	57	
10-21-2013	64	40	52		88	40	58	55	59	56	
10-22-2013	55	37	46	0.06	99	35	58	56	59	57	
10-23-2013	46	37	41	0.03	95	66	57	54	58	56	
10-24-2013	44	33	38	0.01	92	61	54	53	55	54	
10-25-2013	46	26	36		97	42	53	50	54	52	
10-26-2013	52	30	41		83	43	51	49	52	50	
10-27-2013	59	33	46		98	41	52	49	54	50	
10-28-2013	61	40	50		100	66	54	51	54	52	
10-29-2013	58	35	46	0.11	100	86	54	51	55	52	
10-30-2013	65	54	59	1.07	100	84	57	54	59	55	
10-31-2013	67	54	60	0.04	97	71	59	57	61	59	

Summary for the period 10-1-2013 through 10-31-2013:

AIR TEMP			TOTAL	RH		SOIL TEMP				TOTAL	
MX	MN	AV	PRECIP	MX	MN	GRASS	MN	BARE	MX	MN	EVAP
65	45	55	7.02	97	58	63	60	63	61		
(Deviation from normal)	-2	+0	-1	+4.45							

NOVEMBER CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MX	
11-01-2013	62	48	55	0.80	96	49	59	57	61	59	
11-02-2013	55	41	48		92	57	57	55	59	57	
11-03-2013	55	33	44		99	46	55	52	56	54	
11-04-2013	60	36	48		90	47	54	52	55	53	
11-05-2013	63	47	55		74	36	55	53	56	54	
11-06-2013	71	51	61	0.08	93	54	60	58	60	58	
11-07-2013	48	34	41	0.60	97	46	56	53	58	54	
11-08-2013	51	30	40		92	40	52	50	54	51	
11-09-2013	61	34	47		76	50	59	52	0100		
11-10-2013	53	33	43		84	33	51	49	52	51	
11-11-2013	60	30	45		87	24	50	47	51	49	
11-12-2013	43	23	33		98	50	50	46	51	47	
11-13-2013	39	19	29		98	43	45	43	47	45	
11-14-2013	52	26	39		78	25	45	42	46	44	
11-15-2013	52	34	43		96	45	46	43	48	45	
11-16-2013	59	42	50		100	81	50	46	52	48	
11-17-2013	64	50	57	0.87	99	65	54	50	56	52	
11-18-2013	53	36	44	T	91	43	54	50	56	52	
11-19-2013	42	29	35		89	58	50	47	52	49	
11-20-2013	53	25	39		91	46	47	45	49	47	
11-21-2013	58	39	48		84	60	49	46	51	48	
11-22-2013	55	38	46	0.45	100	81	51	49	53	51	
11-23-2013	42	21	31		90	40	50	45	52	48	
11-24-2013	30	15	22		83	40	45	41	47	43	
11-25-2013	40	19	29		97	35	42	40	44	42	
11-26-2013	34	30	32	0.22	100	94	42	42	44	44	
11-27-2013	30	18	24	0.04	94	75	42	39	44	42	
11-28-2013	35	15	25		89	54	39	38	41	40	
11-29-2013	44	21	32		85	49	39	37	41	39	
11-30-2013	52	25	38		86	41	40	37	42	39	

Summary for the period 11-1-2013 through 11-30-2013:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MX	
	51	31	41	3.06	91	50	50	47	49	50	
(Deviation from normal)	-5	-2	-4	-0.33							

MARCH-NOVEMBER SUMMARY

Spindletop Monthly Climate Data(03-2013 to 11-2013)

----- AIR TEMPERATURE -----											-- SOD --	
		AVERAGE			EXTREME		AVG DEPART	NO. OF DAYS		4" TEMP		
YEAR	MONTH	MAX	MIN	AVG	MAX	MIN	FROM NORM	>=90	<=32	MAX	MIN	
2013	Mar	47	30	39	70	18	-5	0	21	43	39	
2013	Apr	66	44	55	81	26	+0	0	3	56	52	
2013	May	74	56	65	85	39	+1	0	0	68	63	
2013	Jun	81	62	72	92	52	-0	1	0	77	71	
2013	Jul	80	64	72	92	53	-4	2	0	78	74	
2013	Aug	81	63	72	87	49	-3	0	0	76	73	
2013	Sep	77	57	67	88	45	-1	0	0	73	70	
2013	Oct	65	45	55	81	26	-2	0	2	63	60	
2013	Nov	51	31	41	71	15	-4	0	15	50	47	

----- PRECIPITATION -----									
		DEPARTURE			CUMULATIVE		GREATEST	% RAIN	NO. DAYS
YEAR	MONTH	TOTAL	FROM	TOTAL	DEPARTURE	24 HOUR	TOTAL	DAYS	>= .01
2013	Mar	5.47	+1.07	5.47	+1.07	1.93	42	13	
2013	Apr	4.46	+0.58	9.93	+1.65	0.94	20	6	
2013	May	5.23	+0.76	15.16	+2.41	1.69	55	17	
2013	Jun	7.32	+3.66	22.48	+6.07	1.93	40	12	
2013	Jul	9.33	+4.33	31.81	+10.40	2.36	48	15	
2013	Aug	3.68	-0.25	35.49	+10.15	1.86	39	12	
2013	Sep	2.21	-0.99	37.70	+9.16	1.45	33	10	
2013	Oct	7.02	+4.45	44.72	+13.61	3.21	42	13	
2013	Nov	3.06	-0.33	47.78	+13.28	0.87	23	7	

Plant and Soil Science, U of KY
Weed Science Research

NO TILL CORN

Trial ID: C13001 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: VALENT-CORNEPP Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: JOHN CRANMER

Pest Type	W Weed	W Weed	W Weed
Pest Code	STEME	LAMAM	SETFA
Pest Scientific Name	Stellaria media	Lamium amplexi>	Setaria faberi
Pest Name	Common chickwe>	Henbit	Giant foxtail
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description	AT PLANTING	AT PLANTING	AFTER EMERG
Part Rated			AFTER EMERG
Rating Date	5/2/2013	5/2/2013	5/16/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			2 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
1 CHECK UNTREATED			0	0	0	0
2 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	99	99	0	99
WEEDONE LV4	2 PT/A	-7 DAY				
FIERCE	3 OZ/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP				
AMS	3.7 % V/V	42 DAP				
3 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	99	99	0	99
WEEDONE LV4	2 PT/A	-7 DAY				
FIERCE	3 OZ/A	-7 DAY				
AATREX	1 QT/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP				
AMS	3.7 % V/V	42 DAP				
4 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	99	99	0	99
WEEDONE LV4	2 PT/A	-7 DAY				
LEXAR EZ	3 QT/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP				
AMS	3.7 % V/V	42 DAP				
5 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	99	99	0	99
WEEDONE LV4	2 PT/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
STALWART XTRA	2 QT/A	-7 DAY				
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP				
AMS	3.7 % V/V	42 DAP				
6 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	99	99	0	99
WEEDONE LV4	2 PT/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
STALWART XTRA LITE	2.1 QT/A	-7 DAY				
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP				
AMS	3.7 % V/V	42 DAP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	STEME	LAMAM	SETFA
Pest Scientific Name	Stellaria media	Lamium amplexi>	Setaria faberi
Pest Name	Common chickwe>	Henbit	Giant foxtail
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description	AT PLANTING	AT PLANTING	AFTER EMERG
Part Rated			AFTER EMERG
Rating Date	5/2/2013	5/2/2013	5/16/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			2 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
7 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	99	99	0	99
WEEDONE LV4	2 PT/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
CHECK						
LSD (P=.05)			0.0	0.0	0.0	0.0
Standard Deviation			0.0	0.0	0.0	0.0
CV			0.0	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed		
Pest Code	AMBTR	IPOSS	SETFA			
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.	Setaria faberi			
Pest Name	Giant ragweed	Morning glory	Giant foxtail			
Crop Code			ZEAMX			
BBCH Scale			BCOR			
Crop Scientific Name			Zea mays			
Crop Name			Corn			
Crop Variety						
Description	AFTER EMERG	AFTER EMERG				
Part Rated						
Rating Date	5/16/2013	5/16/2013	5/30/2013	5/30/2013		
Rating Type	CONTROL	CONTROL	INJURY	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT		
Rating Timing	2 WEEK	2 WEEK	4 WEEK	4 WEEK		
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	5	6	7	8
1 CHECK UNTREATED			0	0	0	0
2 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	99	99	0	99
WEEDONE LV4	2 PT/A	-7 DAY				
FIERCE	3 OZ/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP				
AMS	3.7 % V/V	42 DAP				
3 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	99	99	0	99
WEEDONE LV4	2 PT/A	-7 DAY				
FIERCE	3 OZ/A	-7 DAY				
AATREX	1 QT/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP				
AMS	3.7 % V/V	42 DAP				
4 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	99	99	0	96
WEEDONE LV4	2 PT/A	-7 DAY				
LEXAR EZ	3 QT/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP				
AMS	3.7 % V/V	42 DAP				
5 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	99	99	0	96
WEEDONE LV4	2 PT/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
STALWART XTRA	2 QT/A	-7 DAY				
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP				
AMS	3.7 % V/V	42 DAP				
6 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	99	99	0	95
WEEDONE LV4	2 PT/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
STALWART XTRA LITE	2.1 QT/A	-7 DAY				
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP				
AMS	3.7 % V/V	42 DAP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	SETFA
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.	Setaria faberi
Pest Name	Giant ragweed	Morning glory	Giant foxtail
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description	AFTER EMERG	AFTER EMERG	
Part Rated			
Rating Date	5/16/2013	5/16/2013	5/30/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	4 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	5	6	7	8
7 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	99	99	0	0
WEEDONE LV4	2 PT/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
CHECK						
LSD (P=.05)			0.0	0.0	0.0	4.4
Standard Deviation			0.0	0.0	0.0	2.5
CV			0.0	0.0	0.0	3.6

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	SETFA
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	Setaria faberi
Pest Name	Giant ragweed	Morning glory	Giant foxtail
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description			42 DAP
Part Rated			
Rating Date	5/30/2013	5/30/2013	6/4/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	6 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	9	10	11	12
1 CHECK UNTREATED			0	0	0	0
2 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	83	95	0	89
WEEDONE LV4	2 PT/A	-7 DAY				
FIERCE	3 OZ/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP				
AMS	3.7 % V/V	42 DAP				
3 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	80	96	0	88
WEEDONE LV4	2 PT/A	-7 DAY				
FIERCE	3 OZ/A	-7 DAY				
AATREX	1 QT/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP				
AMS	3.7 % V/V	42 DAP				
4 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	86	95	0	87
WEEDONE LV4	2 PT/A	-7 DAY				
LEXAR EZ	3 QT/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP				
AMS	3.7 % V/V	42 DAP				
5 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	86	93	0	87
WEEDONE LV4	2 PT/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
STALWART XTRA	2 QT/A	-7 DAY				
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP				
AMS	3.7 % V/V	42 DAP				
6 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	82	96	0	83
WEEDONE LV4	2 PT/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
STALWART XTRA LITE	2.1 QT/A	-7 DAY				
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP				
AMS	3.7 % V/V	42 DAP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	SETFA
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.	Setaria faberi
Pest Name	Giant ragweed	Morning glory	Giant foxtail
Crop Code			ZEAMX
BCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description			42 DAP
Part Rated			
Rating Date	5/30/2013	5/30/2013	6/4/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	6 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	9	10	11	12
7 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	0	0	0	0
WEEDONE LV4	2 PT/A	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
CHECK						
LSD (P=.05)			14.4	5.4	0.0	8.3
Standard Deviation			8.1	3.0	0.0	4.6
CV			13.58	4.48	0.0	7.5

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.	
Pest Name	Giant ragweed	Morning glory	
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description			
Part Rated			
Rating Date	6/4/2013	6/4/2013	10/1/2013
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
Rating Timing	6 WEEK	6 WEEK	

Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	13	14	18
1 CHECK UNTREATED			0	0	53
2 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	84	95	249
WEEDONE LV4	2 PT/A	-7 DAY			
FIERCE	3 OZ/A	-7 DAY			
AMS	3.7 % V/V	-7 DAY			
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP			
AMS	3.7 % V/V	42 DAP			
3 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	85	92	237
WEEDONE LV4	2 PT/A	-7 DAY			
FIERCE	3 OZ/A	-7 DAY			
AATREX	1 QT/A	-7 DAY			
AMS	3.7 % V/V	-7 DAY			
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP			
AMS	3.7 % V/V	42 DAP			
4 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	80	90	228
WEEDONE LV4	2 PT/A	-7 DAY			
LEXAR EZ	3 QT/A	-7 DAY			
AMS	3.7 % V/V	-7 DAY			
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP			
AMS	3.7 % V/V	42 DAP			
5 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	78	93	240
WEEDONE LV4	2 PT/A	-7 DAY			
AMS	3.7 % V/V	-7 DAY			
STALWART XTRA	2 QT/A	-7 DAY			
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP			
AMS	3.7 % V/V	42 DAP			
6 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY	83	90	238
WEEDONE LV4	2 PT/A	-7 DAY			
AMS	3.7 % V/V	-7 DAY			
STALWART XTRA LITE	2.1 QT/A	-7 DAY			
ROUNDUP POWERMAX	22 FL OZ/A	42 DAP			
AMS	3.7 % V/V	42 DAP			

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.	
Pest Name	Giant ragweed	Morning glory	
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description			
Part Rated			
Rating Date	6/4/2013	6/4/2013	10/1/2013
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
Rating Timing	6 WEEK	6 WEEK	

Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	13	14	18
7 ROUNDUP POWERMAX	22 FL OZ/A	-7 DAY			
WEEDONE LV4	2 PT/A	-7 DAY	0	0	81
AMS	3.7 % V/V	-7 DAY			
CHECK					
LSD (P=.05)			10.3	8.5	37.3
Standard Deviation			5.8	4.8	21.0
CV			9.81	7.32	11.07

Plant and Soil Science, U of KY
Weed Science Research

NO TILL CORN

Trial ID: C13001	Location: LEXINGTON, KY	Trial Year: 2013
Protocol ID: VALENT-CORNEPP	Investigator: Charles H Slack	
Project ID:	Study Director: CHARLES SLACK	
	Sponsor Contact: JOHN CRANMER	

Pest Type

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

Pest Code

STEME, Stellaria media, = US
 LAMAM, Lamium amplexicaule, = US
 SETFA, Setaria faberi, = US
 AMBTR, Ambrosia trifida, = US
 IPOSS, Ipomoea sp., = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent
 BU = bushel

ARM Action Codes

TY1 = 5.032291*[16]

Plant and Soil Science, U of KY
Weed Science Research

NO TILL CORN

Trial ID: C13001 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: VALENT-CORNEPP Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: JOHN CRANMER

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 4/23/2013
Completion Date: 10/1/2013

Trial Location

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

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: 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

Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC61-89RIB

Planting Rate, Unit: 30000 S/A	Planting Date: 5/2/2013
Depth, Unit: 1.5 IN	Planting Method: PLANTD planted
Row Spacing, Unit: 30 IN	Planting Equipment: PP Plot Planter
Spacing Within Row, Unit: 7 IN	Emergence Date: 5/8/2013
Soil Temperature, Unit: 60 F	Harvest Date: 10/1/2013
Soil Moisture: EXCELL excellent	Harvested Width, Unit: 5 FT
Seed Bed: MEDIUM medium	Harvested Length, Unit: 30 FT
	Harvest Equipment: COMBINE
	% Standard Moisture: 15.5

Pest Description

- Pest 1 Type:** W **Code:** STEME *Stellaria media*
Common Name: Common chickweed
- Pest 2 Type:** W **Code:** LAMAM *Lamium amplexicaule*
Common Name: Henbit
- Pest 3 Type:** W **Code:** SETFA *Setaria faberi*
Common Name: Giant foxtail
- Pest 4 Type:** W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed
- Pest 5 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
Replications: 3	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: WET wet
Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

	A		B
Application Date:	4/23/2013	6/12/2013	
Appl. Start Time:	10:00 AM		
Appl. Stop Time:	10:15 AM		
Application Method:	SPRAY	SPRAY	
Application Timing:	-7DAY	42 DAP	
Application Placement:	BROFOL	BROFOL	
Applied By:	C H SLACK SARA LAWSON		
Air Temperature, Unit:	55 F	76 F	
% Relative Humidity:	50	60	
Wind Velocity, Unit:	6 MPH	4 MPH	
Wind Direction:	SW		
Soil Temperature, Unit:	54 F	76 F	
Soil Moisture:	GOOD	GOOD	
% Cloud Cover:	20	20	
Next Moisture Occurred On:	4/24/2013	6/13/2013	

Crop Stage At Each Application

	A		B	
Crop 1 Code, BBCH Scale:	ZEAMX	BCOR	ZEAMX	BCOR
Height, Unit:		18		IN

Pest Stage At Each Application

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

Plant and Soil Science, U of KY
Weed Science Research

Application Equipment

	A		B	
Appl. Equipment:	ATV		BACKPACK	
Equipment Type:	ALTEVE		BELSPR	
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	

Plant and Soil Science, U of KY
Weed Science Research

NO TILL CORN EARLY PREPLANT II

Trial ID: C13002
Protocol ID: CHEM-HZEAMXRIMTHI1301
Project ID: HZEAMXRIMTHI1301

Location: LEXINGTON, KY Trial Year: 2013
Investigator: Charles H Slack
Study Director: CHARLES SLACK
Sponsor Contact: BRENT JACOBSON

Pest Type	W Weed	W Weed	W Weed
Pest Code	STEME	LAMAM	SETFA
Pest Scientific Name	Stellaria media	Lamium amplexi>	Setaria faberi
Pest Name	Common chickwe>	Henbit	Giant foxtail
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description	AT PLANTING	AT PLANTING	AFTER EMERG
Part Rated			AFTER EMERG
Rating Date	5/2/2013	5/2/2013	5/16/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			2 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
1 CHECK UNTREATED			0	0	0	0
2 CRUSHER	0.75 OZ/A	-7 DAY	99	99	0	99
GLYFOS X-TRA	32 FL OZ/A	-7 DAY				
NIS	0.25 % V/V	-7 DAY				
3 CRUSHER	1 OZ/A	-7 DAY	99	99	0	99
GLYFOS X-TRA	32 FL OZ/A	-7 DAY				
NIS	0.25 % V/V	-7 DAY				
4 CRUSHER	2 OZ/A	-7 DAY	99	99	0	99
GLYFOS X-TRA	32 FL OZ/A	-7 DAY				
NIS	0.25 % V/V	-7 DAY				
5 LEADOFF	1.5 OZ/A	-7 DAY	99	99	0	99
GLYFOS X-TRA	32 FL OZ/A	-7 DAY				
NIS	0.25 % V/V	-7 DAY				
6 GLYFOS X-TRA	32 FL OZ/A	-7 DAY	99	99	0	99
NIS	0.25 % V/V	-7 DAY				
7 CHECK UNTREATED			0	0	0	0
LSD (P=.05)			0.0	0.0	0.0	0.0
Standard Deviation			0.0	0.0	0.0	0.0
CV			0.0	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	5	6	7	8
1 CHECK UNTREATED			0	0	0	0
2 CRUSHER	0.75 OZ/A	-7 DAY	99	99	0	93
GLYFOS X-TRA	32 FL OZ/A	-7 DAY				
NIS	0.25 % V/V	-7 DAY				
3 CRUSHER	1 OZ/A	-7 DAY	99	99	0	96
GLYFOS X-TRA	32 FL OZ/A	-7 DAY				
NIS	0.25 % V/V	-7 DAY				
4 CRUSHER	2 OZ/A	-7 DAY	99	99	0	99
GLYFOS X-TRA	32 FL OZ/A	-7 DAY				
NIS	0.25 % V/V	-7 DAY				
5 LEADOFF	1.5 OZ/A	-7 DAY	99	99	0	98
GLYFOS X-TRA	32 FL OZ/A	-7 DAY				
NIS	0.25 % V/V	-7 DAY				
6 GLYFOS X-TRA	32 FL OZ/A	-7 DAY	99	99	0	70
NIS	0.25 % V/V	-7 DAY				
7 CHECK UNTREATED			0	0	0	0
LSD (P=.05)			0.0	0.0	0.0	3.1
Standard Deviation			0.0	0.0	0.0	1.8
CV			0.0	0.0	0.0	2.68

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	SETFA
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.	Setaria faberi
Pest Name	Giant ragweed	Morning glory	Giant foxtail
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description	AFTER EMERG	AFTER EMERG	
Part Rated			
Rating Date	5/16/2013	5/16/2013	5/30/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	4 WEEK

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	SETFA
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.	Setaria faberi
Pest Name	Giant ragweed	Morning glory	Giant foxtail
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description			
Part Rated			
Rating Date	5/30/2013	5/30/2013	6/27/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	8 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	9	10	11	12
1 CHECK UNTREATED			0	0	0	0
2 CRUSHER	0.75 OZ/A	-7 DAY	95	95	0	77
GLYFOS X-TRA	32 FL OZ/A	-7 DAY				
NIS	0.25 % V/V	-7 DAY				
3 CRUSHER	1 OZ/A	-7 DAY	92	96	0	86
GLYFOS X-TRA	32 FL OZ/A	-7 DAY				
NIS	0.25 % V/V	-7 DAY				
4 CRUSHER	2 OZ/A	-7 DAY	99	98	0	95
GLYFOS X-TRA	32 FL OZ/A	-7 DAY				
NIS	0.25 % V/V	-7 DAY				
5 LEADOFF	1.5 OZ/A	-7 DAY	96	98	0	91
GLYFOS X-TRA	32 FL OZ/A	-7 DAY				
NIS	0.25 % V/V	-7 DAY				
6 GLYFOS X-TRA	32 FL OZ/A	-7 DAY	88	89	0	50
NIS	0.25 % V/V	-7 DAY				
7 CHECK UNTREATED			0	0	0	0
LSD (P=.05)			7.1	3.8	0.0	30.7
Standard Deviation			4.0	2.1	0.0	17.2
CV			5.98	3.1	0.0	30.26

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.	
Pest Name	Giant ragweed	Morning glory	
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description			
Part Rated			
Rating Date	6/27/2013	6/27/2013	10/1/2013
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
Rating Timing	8 WEEK	8 WEEK	

Trt No.	Treatment	Rate	Growth			
No.	Name	Rate Unit	Stage	13	14	18
1	CHECK UNTREATED			0	0	59
2	CRUSHER	0.75 OZ/A	-7 DAY	86	90	156
	GLYFOS X-TRA	32 FL OZ/A	-7 DAY			
	NIS	0.25 % V/V	-7 DAY			
3	CRUSHER	1 OZ/A	-7 DAY	90	93	177
	GLYFOS X-TRA	32 FL OZ/A	-7 DAY			
	NIS	0.25 % V/V	-7 DAY			
4	CRUSHER	2 OZ/A	-7 DAY	92	95	204
	GLYFOS X-TRA	32 FL OZ/A	-7 DAY			
	NIS	0.25 % V/V	-7 DAY			
5	LEADOFF	1.5 OZ/A	-7 DAY	89	95	189
	GLYFOS X-TRA	32 FL OZ/A	-7 DAY			
	NIS	0.25 % V/V	-7 DAY			
6	GLYFOS X-TRA	32 FL OZ/A	-7 DAY	53	82	68
	NIS	0.25 % V/V	-7 DAY			
7	CHECK UNTREATED			0	0	54
	LSD (P=.05)			6.4	2.6	27.3
	Standard Deviation			3.6	1.5	15.3
	CV			6.12	2.27	11.83

Plant and Soil Science, U of KY
Weed Science Research

NO TILL CORN EARLY PREPLANT II

Trial ID: C13002	Location: LEXINGTON, KY	Trial Year: 2013
Protocol ID: CHEM-HZEAMXRIMTHI1301	Investigator: Charles H Slack	
Project ID: HZEAMXRIMTHI1301	Study Director: CHARLES SLACK	
	Sponsor Contact: BRENT JACOBSON	

Pest Type

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

Pest Code

STEME, Stellaria media, = US
 LAMAM, Lamium amplexicaule, = US
 SETFA, Setaria faberi, = US
 AMBTR, Ambrosia trifida, = US
 IPOSS, Ipomoea sp., = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent
 BU = bushel

ARM Action Codes

TY1 = 3.972861*[16]

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC61-89RIB **BBCH Scale:** BCOR

Planting Rate, Unit: 30000 S/A	Planting Date: 5/2/2013
Depth, Unit: 1.5 IN	Planting Method: PLANTD planted
Row Spacing, Unit: 30 IN	Planting Equipment: PP Plot Planter
Spacing Within Row, Unit: 7 IN	Emergence Date: 5/8/2013
	Harvest Date: 10/1/2013
Soil Temperature, Unit: 63 F	Harvested Width, Unit: 5 FT
Soil Moisture: EXCELL	Harvested Length, Unit: 30 FT
Seed Bed: MEDIUM	Harvest Equipment: COMBINE
	% Standard Moisture: 15.5

Pest Description

- Pest 1 Type:** W **Code:** STEME *Stellaria media*
Common Name: Common chickweed
- Pest 2 Type:** W **Code:** LAMAM *Lamium amplexicaule*
Common Name: Henbit
- Pest 3 Type:** W **Code:** SETFA *Setaria faberi*
Common Name: Giant foxtail
- Pest 4 Type:** W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed
- Pest 5 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
Replications: 3	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: WET wet
Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

A

Application Date: 4/22/2013
Appl. Start Time: 10:15 AM
Application Method: SPRAY
Application Timing: -7DAY
Application Placement: BROFOL
Applied By: C H SLACK
Air Temperature, Unit: 55 F
% Relative Humidity: 50
Wind Velocity, Unit: 6 MPH
Wind Direction: SW
Soil Temperature, Unit: 53 F
Soil Moisture: GOOD
% Cloud Cover: 20
Next Moisture Occurred On: 4/24/2013

Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: ZEAMX BCOR

Pest Stage At Each Application

A

Pest 1 Code, Type, Scale: STEME W
Height, Unit: 2 IN
Pest 2 Code, Type, Scale: LAMAM W
Height, Unit: 3 IN
Pest 3 Code, Type, Scale: SETFA W
Pest 4 Code, Type, Scale: AMBTR W
Pest 5 Code, Type, Scale: IPOSS W

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 liters
Propellant: CO2

Plant and Soil Science, U of KY
Weed Science Research

CORN POSTEMERGENCE

Trial ID: C13010 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: AMVAC-CORN Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: BOB HERRICK

Pest Type W Weed W Weed W Weed
Pest Code SETFA AMBTR CHEAL
Pest Scientific Name Setaria faberi Ambrosia trifi> Chenopodium al>
Pest Name Giant foxtail Giant ragweed Common lambsqu>
Crop Code ZEAMX
BBCH Scale BCOR
Crop Scientific Name Zea mays
Crop Name Corn
Crop Variety
Description AFTER POST AFTER POST AFTER POST AFTER POST
Part Rated
Rating Date
Rating Type INJURY CONTROL CONTROL CONTROL
Rating Unit PERCENT PERCENT PERCENT PERCENT
Rating Timing 2 WEEK 2 WEEK 2 WEEK 2 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
1 CHECK UNTREATED			0	0	0	0
2 BICEP II MAGNUM	1.5 PT/A	PRE	0	99	86	99
IMPACT	1 FL OZ/A	MP-V4				
AATREX	1 PT/A	MP-V4				
MSO	1 % V/V	MP-V4				
UAN-28%	2.5 % V/V	MP-V4				
3 BICEP II MAGNUM	1.5 PT/A	PRE	0	99	85	99
IMPACT	0.86 FL OZ/A	MP-V4				
STATUS	2.5 OZ/A	MP-V4				
AATREX	1 PT/A	MP-V4				
MSO	1 % V/V	MP-V4				
UAN-28%	2.5 % V/V	MP-V4				
4 BICEP II MAGNUM	1.5 PT/A	PRE	0	99	80	99
ROUNDUP POWERMAX	22 FL OZ/A	MP-V4				
N-PAK AMS LIQUID	2.5 % V/V	MP-V4				
5 BICEP II MAGNUM	1.5 PT/A	PRE	0	99	87	99
ROUNDUP POWERMAX	22 FL OZ/A	MP-V4				
IMPACT	0.75 FL OZ/A	MP-V4				
AATREX	1 PT/A	MP-V4				
MSO	1 % V/V	MP-V4				
UAN-28%	2.5 % V/V	MP-V4				
6 BICEP II MAGNUM	1.5 PT/A	PRE	0	99	96	99
ROUNDUP POWERMAX	22 FL OZ/A	MP-V4				
LAUDIS	3 FL OZ/A	MP-V4				
AATREX	1 PT/A	MP-V4				
MSO	1 % V/V	MP-V4				
UAN-28%	2.5 % V/V	MP-V4				
7 WARRANT	3 PT/A	EP-V2	0	99	99	99
ROUNDUP POWERMAX	32 FL OZ/A	EP-V2				
IMPACT	0.75 FL OZ/A	EP-V2				
AATREX	2 PT/A	EP-V2				
MSO	1 % V/V	EP-V2				
N-PAK AMS LIQUID	2.5 % V/V	EP-V2				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	CHEAL
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>
Crop Code	ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Crop Variety				
Description	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Part Rated				
Rating Date				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
8 HALEX GT	3.6 PT/A	EP-V2	0	99	99	99
AATREX	2 PT/A	EP-V2				
NIS	0.25 % V/V	EP-V2				
N-PAK AMS LIQUID	2.5 % V/V	EP-V2				
LSD (P=.05)			0.0	0.0	2.2	0.0
Standard Deviation			0.0	0.0	1.2	0.0
CV			0.0	0.0	1.56	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	SETFA	AMBTR
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>
Pest Name	Morning glory	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Crop Variety			
Description	AFTER POST		
Part Rated			
Rating Date		6/14/2013	6/14/2013
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK		

Trt Treatment	Rate	Growth	6/14/2013		6/14/2013	
No. Name	Rate Unit	Stage	5	6	7	8
1 CHECK UNTREATED			0	0	0	0
2 BICEP II MAGNUM	1.5 PT/A	PRE	95	0	98	96
IMPACT	1 FL OZ/A	MP-V4				
AATREX	1 PT/A	MP-V4				
MSO	1 % V/V	MP-V4				
UAN-28%	2.5 % V/V	MP-V4				
3 BICEP II MAGNUM	1.5 PT/A	PRE	90	0	99	98
IMPACT	0.86 FL OZ/A	MP-V4				
STATUS	2.5 OZ/A	MP-V4				
AATREX	1 PT/A	MP-V4				
MSO	1 % V/V	MP-V4				
UAN-28%	2.5 % V/V	MP-V4				
4 BICEP II MAGNUM	1.5 PT/A	PRE	83	0	99	99
ROUNDUP POWERMAX	22 FL OZ/A	MP-V4				
N-PAK AMS LIQUID	2.5 % V/V	MP-V4				
5 BICEP II MAGNUM	1.5 PT/A	PRE	92	0	99	99
ROUNDUP POWERMAX	22 FL OZ/A	MP-V4				
IMPACT	0.75 FL OZ/A	MP-V4				
AATREX	1 PT/A	MP-V4				
MSO	1 % V/V	MP-V4				
UAN-28%	2.5 % V/V	MP-V4				
6 BICEP II MAGNUM	1.5 PT/A	PRE	99	0	99	99
ROUNDUP POWERMAX	22 FL OZ/A	MP-V4				
LAUDIS	3 FL OZ/A	MP-V4				
AATREX	1 PT/A	MP-V4				
MSO	1 % V/V	MP-V4				
UAN-28%	2.5 % V/V	MP-V4				
7 WARRANT	3 PT/A	EP-V2	99	0	98	99
ROUNDUP POWERMAX	32 FL OZ/A	EP-V2				
IMPACT	0.75 FL OZ/A	EP-V2				
AATREX	2 PT/A	EP-V2				
MSO	1 % V/V	EP-V2				
N-PAK AMS LIQUID	2.5 % V/V	EP-V2				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	SETFA	AMBTR
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>
Pest Name	Morning glory	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Crop Variety			
Description	AFTER POST		
Part Rated			
Rating Date		6/14/2013	6/14/2013
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK		

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	5	6	7	8
8 HALEX GT	3.6 PT/A	EP-V2	99	0	99	99
AATREX	2 PT/A	EP-V2				
NIS	0.25 % V/V	EP-V2				
N-PAK AMS LIQUID	2.5 % V/V	EP-V2				
LSD (P=.05)			3.8	0.0	2.1	1.9
Standard Deviation			2.1	0.0	1.2	1.1
CV			2.62	0.0	1.39	1.29

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	IPOSS	SETFA
Pest Scientific Name	Chenopodium al>	Ipomoea sp.	Setaria faberi
Pest Name	Common lambsqu>	Morning glory	Giant foxtail
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description			
Part Rated			
Rating Date	6/14/2013	6/14/2013	6/28/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	9	10	11	12
1 CHECK UNTREATED			0	0	0	0
2 BICEP II MAGNUM	1.5 PT/A	PRE	99	93	0	98
IMPACT	1 FL OZ/A	MP-V4				
AATREX	1 PT/A	MP-V4				
MSO	1 % V/V	MP-V4				
UAN-28%	2.5 % V/V	MP-V4				
3 BICEP II MAGNUM	1.5 PT/A	PRE	99	93	0	99
IMPACT	0.86 FL OZ/A	MP-V4				
STATUS	2.5 OZ/A	MP-V4				
AATREX	1 PT/A	MP-V4				
MSO	1 % V/V	MP-V4				
UAN-28%	2.5 % V/V	MP-V4				
4 BICEP II MAGNUM	1.5 PT/A	PRE	99	92	0	99
ROUNDUP POWERMAX	22 FL OZ/A	MP-V4				
N-PAK AMS LIQUID	2.5 % V/V	MP-V4				
5 BICEP II MAGNUM	1.5 PT/A	PRE	99	93	0	99
ROUNDUP POWERMAX	22 FL OZ/A	MP-V4				
IMPACT	0.75 FL OZ/A	MP-V4				
AATREX	1 PT/A	MP-V4				
MSO	1 % V/V	MP-V4				
UAN-28%	2.5 % V/V	MP-V4				
6 BICEP II MAGNUM	1.5 PT/A	PRE	99	90	0	99
ROUNDUP POWERMAX	22 FL OZ/A	MP-V4				
LAUDIS	3 FL OZ/A	MP-V4				
AATREX	1 PT/A	MP-V4				
MSO	1 % V/V	MP-V4				
UAN-28%	2.5 % V/V	MP-V4				
7 WARRANT	3 PT/A	EP-V2	99	98	0	98
ROUNDUP POWERMAX	32 FL OZ/A	EP-V2				
IMPACT	0.75 FL OZ/A	EP-V2				
AATREX	2 PT/A	EP-V2				
MSO	1 % V/V	EP-V2				
N-PAK AMS LIQUID	2.5 % V/V	EP-V2				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	IPOSS	SETFA
Pest Scientific Name	Chenopodium al>	Ipomoea sp.	Setaria faberi
Pest Name	Common lambsqu>	Morning glory	Giant foxtail
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description			
Part Rated			
Rating Date	6/14/2013	6/14/2013	6/28/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	9	10	11	12
8 HALEX GT	3.6 PT/A	EP-V2	99	96	0	99
AATREX	2 PT/A	EP-V2				
NIS	0.25 % V/V	EP-V2				
N-PAK AMS LIQUID	2.5 % V/V	EP-V2				
LSD (P=.05)			0.0	3.4	0.0	2.1
Standard Deviation			0.0	1.9	0.0	1.2
CV			0.0	2.35	0.0	1.39

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	AMBTR	CHEAL	IPOSS	
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	
Pest Name	Giant ragweed	Common lambsqu>	Morning glory	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Crop Variety				
Description				
Part Rated				
Rating Date	6/28/2013	6/28/2013	6/28/2013	9/24/2013
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
Rating Timing				
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	13	14
			15	19
1 CHECK UNTREATED			0	0
2 BICEP II MAGNUM	1.5 PT/A	PRE	99	95
IMPACT	1 FL OZ/A	MP-V4		217
AATREX	1 PT/A	MP-V4		
MSO	1 % V/V	MP-V4		
UAN-28%	2.5 % V/V	MP-V4		
3 BICEP II MAGNUM	1.5 PT/A	PRE	99	93
IMPACT	0.86 FL OZ/A	MP-V4		217
STATUS	2.5 OZ/A	MP-V4		
AATREX	1 PT/A	MP-V4		
MSO	1 % V/V	MP-V4		
UAN-28%	2.5 % V/V	MP-V4		
4 BICEP II MAGNUM	1.5 PT/A	PRE	99	92
ROUNDUP POWERMAX	22 FL OZ/A	MP-V4		217
N-PAK AMS LIQUID	2.5 % V/V	MP-V4		
5 BICEP II MAGNUM	1.5 PT/A	PRE	99	93
ROUNDUP POWERMAX	22 FL OZ/A	MP-V4		212
IMPACT	0.75 FL OZ/A	MP-V4		
AATREX	1 PT/A	MP-V4		
MSO	1 % V/V	MP-V4		
UAN-28%	2.5 % V/V	MP-V4		
6 BICEP II MAGNUM	1.5 PT/A	PRE	99	93
ROUNDUP POWERMAX	22 FL OZ/A	MP-V4		211
LAUDIS	3 FL OZ/A	MP-V4		
AATREX	1 PT/A	MP-V4		
MSO	1 % V/V	MP-V4		
UAN-28%	2.5 % V/V	MP-V4		
7 WARRANT	3 PT/A	EP-V2	99	96
ROUNDUP POWERMAX	32 FL OZ/A	EP-V2		213
IMPACT	0.75 FL OZ/A	EP-V2		
AATREX	2 PT/A	EP-V2		
MSO	1 % V/V	EP-V2		
N-PAK AMS LIQUID	2.5 % V/V	EP-V2		

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	CHEAL	IPOSS
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.
Pest Name	Giant ragweed	Common lambsqu>	Morning glory
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description			
Part Rated			
Rating Date	6/28/2013	6/28/2013	6/28/2013 9/24/2013
Rating Type	CONTROL	CONTROL	CONTROL YIELD
Rating Unit	PERCENT	PERCENT	PERCENT BU
Rating Timing			

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	13	14	15	19
8 HALEX GT	3.6 PT/A	EP-V2	99	99	96	220
AATREX	2 PT/A	EP-V2				
NIS	0.25 % V/V	EP-V2				
N-PAK AMS LIQUID	2.5 % V/V	EP-V2				
LSD (P=.05)			0.0	0.0	4.6	12.7
Standard Deviation			0.0	0.0	2.6	7.3
CV			0.0	0.0	3.17	3.85

Plant and Soil Science, U of KY
Weed Science Research

CORN POSTEMERGENCE

Trial ID: C13010 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: AMVAC-CORN Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: BOB HERRICK

Pest Type

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

Pest Code

SETFA, Setaria faberi, = US
AMBTR, Ambrosia trifida, = US
CHEAL, Chenopodium album, = US
IPOSS, Ipomoea sp., = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent
BU = bushel

ARM Action Codes

TY1 = 3.779063*[17]

Plant and Soil Science, U of KY
Weed Science Research

CORN POSTEMERGENCE

Trial ID: C13010 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: AMVAC-CORN Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: BOB HERRICK

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/1/2013
Completion Date: 10/1/2013

Trial Location

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

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: 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

Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC61-89RIB

Planting Rate, Unit: 30000 S/A	Planting Date: 5/1/2013
Depth, Unit: 1.5 IN	Planting Method: PLANTD planted
Row Spacing, Unit: 30 IN	Planting Equipment: PP Plot Planter
Spacing Within Row, Unit: 7 IN	Emergence Date: 5/7/2013
Soil Temperature, Unit: 60 F	Harvest Date: 9/24/2013
Soil Moisture: EXCELL excellent	Harvested Width, Unit: 5 FT
Seed Bed: MEDIUM medium	Harvested Length, Unit: 38 FT
	Harvest Equipment: COMBINE
	% 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:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Pest 4 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 FT ²	Treatments: 8
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: WET wet

Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

	A	B	C
Application Date:	5/1/2013	5/20/2013	5/29/2013
Appl. Start Time:		5:15 PM	
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	V2	MP-V4
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	81 F	85 F	78 F
% Relative Humidity:	40	57	49
Wind Velocity, Unit:	8 MPH	7 MPH	9 MPH
Wind Direction:	SE	SSW	SW
Soil Temperature, Unit:	60 F	69 F	68 F
Soil Moisture:	EXCELL	EXCELL	GOOD
% Cloud Cover:	10	10	10
Next Moisture Occurred On:	5/4/2013	5/21/2013	5/31/2013

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		V2	V4

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	5 IN
Pest 3 Code, Type, Scale:	CHEAL W	CHEAL W	CHEAL W
Height, Unit:		2 IN	3 IN
Pest 4 Code, Type, Scale:	IPOSS W	IPOSS W	IPOSS W
Height, Unit:		1.5 IN	2 IN

Plant and Soil Science, U of KY
Weed Science Research

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	

Plant and Soil Science, U of KY
Weed Science Research

CORN PREEMERGENCE

Trial ID: C13011 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: SYN-CORN Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: SCOTT CULLY

Pest Type W Weed W Weed W Weed
Pest Code SETFA AMBTR CHEAL
Pest Scientific Name Setaria faberi Ambrosia trifida Chenopodium albidum
Pest Name Giant foxtail Giant ragweed Common lambsquarters
Crop Code ZEAMX
BBCH Scale BCOR
Crop Scientific Name Zea mays
Crop Name Corn
Crop Variety
Description BEFORE POST BEFORE POST BEFORE POST BEFORE POST
Part Rated
Rating Date 6/2/2013 6/2/2013 6/2/2013 6/2/2013
Rating Type INJURY CONTROL CONTROL CONTROL
Rating Unit PERCENT PERCENT PERCENT PERCENT
Rating Timing

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4
1	LEXAR EZ	3	QT/A	PRE	0	99	90	99
2	LEXAR EZ	3	QT/A	PRE	0	99	99	99
	PRINCEP	1	QT/A	PRE				
3	LEXAR EZ	1.5	QT/A	PRE	0	99	95	99
	HALEX GT	1.3	PT/A	MP				
	AATREX	1	QT/A	MP				
	AMS	1	% W/V	MP				
	NIS	0.25	% V/V	MP				
4	CORVUS HERBICIDE	5.6	OZ/A	PRE	0	99	99	99
	ATRAZINE	1	QT/A	PRE				
	ROUNDUP POWERMAX	22	OZ/A	MP				
	AMS	3.7	% V/V	MP				
5	ZIDUA	2.5	OZ WT/A	PRE	0	99	93	99
	ATRAZINE	1	QT/A	PRE				
	ROUNDUP POWERMAX	22	OZ/A	MP				
	AMS	3.7	% V/V	MP				
6	ANTHEM ATZ	2.25	PT/A	PRE	0	99	93	99
	ROUNDUP POWERMAX	22	OZ/A	MP				
	AMS	3.7	% V/V	MP				
7	INSTIGATE	6	OZ/A	PRE	0	99	95	99
	AATREX	1	QT/A	PRE				
	ABUNDIT EXTRA	32	FL OZ/A	MP				
	AMS	3.7	% V/V	MP				
8	CHECK UNTREATED				0	0	0	0
	LSD (P=.05)				0.0	0.0	3.9	0.0
	Standard Deviation				0.0	0.0	2.2	0.0
	CV				0.0	0.0	2.68	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	SETFA	AMBTR
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>
Pest Name	Morning glory	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Crop Variety			
Description	BEFORE POST		
Part Rated			
Rating Date	6/2/2013	6/17/2013	6/17/2013
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt No.	Treatment Name	Rate	Growth Stage	5	6	7	8
1	LEXAR EZ	3 QT/A	PRE	93	0	99	89
2	LEXAR EZ	3 QT/A	PRE	93	0	99	96
	PRINCEP	1 QT/A	PRE				
3	LEXAR EZ	1.5 QT/A	PRE	99	0	99	99
	HALEX GT	1.3 PT/A	MP				
	AATREX	1 QT/A	MP				
	AMS	1 % W/V	MP				
	NIS	0.25 % V/V	MP				
4	CORVUS HERBICIDE	5.6 OZ/A	PRE	99	0	98	99
	ATRAZINE	1 QT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	MP				
	AMS	3.7 % V/V	MP				
5	ZIDUA	2.5 OZ WT/A	PRE	99	0	99	98
	ATRAZINE	1 QT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	MP				
	AMS	3.7 % V/V	MP				
6	ANTHEM ATZ	2.25 PT/A	PRE	99	0	99	99
	ROUNDUP POWERMAX	22 OZ/A	MP				
	AMS	3.7 % V/V	MP				
7	INSTIGATE	6 OZ/A	PRE	95	0	99	96
	AATREX	1 QT/A	PRE				
	ABUNDIT EXTRA	32 FL OZ/A	MP				
	AMS	3.7 % V/V	MP				
8	CHECK UNTREATED			0	0	0	0
	LSD (P=.05)			2.3	0.0	1.4	3.4
	Standard Deviation			1.3	0.0	0.8	1.9
	CV			1.58	0.0	0.94	2.3

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	IPOSS	SETFA
Pest Scientific Name	Chenopodium al>	Ipomoea sp.	Setaria faberi
Pest Name	Common lambsqu>	Morning glory	Giant foxtail
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description			
Part Rated			
Rating Date	6/17/2013	6/17/2013	7/1/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	9	10	11	12
1 LEXAR EZ	3 QT/A	PRE	99	93	0	99
2 LEXAR EZ	3 QT/A	PRE	99	92	0	99
PRINCEP	1 QT/A	PRE				
3 LEXAR EZ	1.5 QT/A	PRE	99	98	0	99
HALEX GT	1.3 PT/A	MP				
AATREX	1 QT/A	MP				
AMS	1 % W/V	MP				
NIS	0.25 % V/V	MP				
4 CORVUS HERBICIDE	5.6 OZ/A	PRE	99	99	0	98
ATRAZINE	1 QT/A	PRE				
ROUNDUP POWERMAX	22 OZ/A	MP				
AMS	3.7 % V/V	MP				
5 ZIDUA	2.5 OZ WT/A	PRE	99	95	0	99
ATRAZINE	1 QT/A	PRE				
ROUNDUP POWERMAX	22 OZ/A	MP				
AMS	3.7 % V/V	MP				
6 ANTHEM ATZ	2.25 PT/A	PRE	99	95	0	99
ROUNDUP POWERMAX	22 OZ/A	MP				
AMS	3.7 % V/V	MP				
7 INSTIGATE	6 OZ/A	PRE	99	95	0	99
AATREX	1 QT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	3.7 % V/V	MP				
8 CHECK UNTREATED			0	0	0	0
LSD (P=.05)			0.0	3.5	0.0	1.4
Standard Deviation			0.0	2.0	0.0	0.8
CV			0.0	2.39	0.0	0.94

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed			
Pest Code	AMBTR	CHEAL	IPOSS			
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.			
Pest Name	Giant ragweed	Common lambsqu>	Morning glory			
Crop Code				ZEAMX		
BBCH Scale				BCOR		
Crop Scientific Name				Zea mays		
Crop Name				Corn		
Crop Variety						
Description						
Part Rated						
Rating Date	7/1/2013	7/1/2013	7/1/2013	9/24/2013		
Rating Type	CONTROL	CONTROL	CONTROL	YIELD		
Rating Unit	PERCENT	PERCENT	PERCENT	BU		
Rating Timing						
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	13	14		
			15	19		
1 LEXAR EZ	3 QT/A	PRE	88	99	93	213
2 LEXAR EZ	3 QT/A	PRE	93	99	92	220
PRINCEP	1 QT/A	PRE				
3 LEXAR EZ	1.5 QT/A	PRE	99	99	98	218
HALEX GT	1.3 PT/A	MP				
AATREX	1 QT/A	MP				
AMS	1 % W/V	MP				
NIS	0.25 % V/V	MP				
4 CORVUS HERBICIDE	5.6 OZ/A	PRE	99	99	98	217
ATRAZINE	1 QT/A	PRE				
ROUNDUP POWERMAX	22 OZ/A	MP				
AMS	3.7 % V/V	MP				
5 ZIDUA	2.5 OZ WT/A	PRE	98	99	95	212
ATRAZINE	1 QT/A	PRE				
ROUNDUP POWERMAX	22 OZ/A	MP				
AMS	3.7 % V/V	MP				
6 ANTHEM ATZ	2.25 PT/A	PRE	99	99	95	190
ROUNDUP POWERMAX	22 OZ/A	MP				
AMS	3.7 % V/V	MP				
7 INSTIGATE	6 OZ/A	PRE	98	99	95	196
AATREX	1 QT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	3.7 % V/V	MP				
8 CHECK UNTREATED			0	0	0	11
LSD (P=.05)			4.1	0.0	3.8	9.8
Standard Deviation			2.3	0.0	2.2	5.6
CV			2.75	0.0	2.64	3.02

Plant and Soil Science, U of KY
Weed Science Research

CORN PREEMERGENCE

Trial ID: C13011 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: SYN-CORN Investigator: Charles H Slack
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, = US
AMBTR, Ambrosia trifida, = US
CHEAL, Chenopodium album, = US
IPOSS, Ipomoea sp., = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent
BU = bushel

ARM Action Codes

TY1 = 3.779063*[17]

Plant and Soil Science, U of KY
Weed Science Research

CORN PREEMERGENCE

Trial ID: C13011 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: SYN-CORN Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: SCOTT CULLY

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/1/2013
Completion Date: 9/24/2013

Trial Location

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

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: 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

Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC61-89RIB **BBCH Scale:** BCOR

Planting Rate, Unit: 30000 S/A	Planting Date: 5/1/2013
Depth, Unit: 1.5 IN	Planting Method: PLANTD planted
Row Spacing, Unit: 30 IN	Planting Equipment: PP Plot Planter
Spacing Within Row, Unit: 7 IN	Emergence Date: 5/7/2013
	Harvest Date: 9/24/2013
Soil Temperature, Unit: 60 F	Harvested Width, Unit: 5 FT
Soil Moisture: EXCELL	Harvested Length, Unit: 38 FT
Seed Bed: MEDIUM	Harvest Equipment: COMBINE
	% 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:** CHEAL *Chenopodium album*
Common Name: Common lambsquarters

Pest 4 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 FT ²	Treatments: 8
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: WET wet

Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

	A	B
Application Date:	5/1/2013	6/3/2013
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	MP
Application Placement:	BROSOI	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	81 F	73 F
% Relative Humidity:	40	50
Wind Velocity, Unit:	8 MPH	8 MPH
Wind Direction:	SE	NW
Soil Temperature, Unit:	60 F	69 F
Soil Moisture:	EXCELL	GOOD
% Cloud Cover:	10	10
Next Moisture Occurred On:	5/4/2013	6/6/2013

Crop Stage At Each Application

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

Pest Stage At Each Application

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

Plant and Soil Science, U of KY
Weed Science Research

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	

Plant and Soil Science, U of KY
Weed Science Research

CORN POSTEMERGENCE II

Trial ID: C13012
Protocol ID: DUPONT-006-13-01
Project ID:

Location: LEXINGTON, KY Trial Year: 2013
Investigator: Charles H Slack
Study Director: CHARLES SLACK
Sponsor Contact: KELLY BARNETT

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	CHEAL
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>
Crop Code		ZEAMX		
BBCH Scale		BCOR		
Crop Scientific Name		Zea mays		
Crop Name		Corn		
Crop Variety				
Description		BEFORE POST	BEFORE POST	BEFORE POST
Part Rated				
Rating Date		5/29/2013	5/29/2013	5/29/2013
Rating Type		INJURY	CONTROL	CONTROL
Rating Unit		PERCENT	PERCENT	PERCENT
Rating Timing				

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4
1	INSTIGATE	6 OZ/A	PRE	0	95	89	99
	REALM Q	4 OZ/A	28 DAP				
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
2	INSTIGATE	6 OZ/A	PRE	0	90	90	99
	AATREX	1 LB AI/A	PRE				
	REALM Q	4 OZ/A	28 DAP				
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
3	INSTIGATE	6 OZ/A	PRE	0	99	89	99
	CINCH ATZ	1.5 PT/A	PRE				
	REALM Q	4 OZ/A	28 DAP				
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
4	INSTIGATE	6 OZ/A	PRE	0	99	89	98
	RESOLVE Q	1.2 OZ/A	28 DAP				
	AATREX	2 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
5	INSTIGATE	6 OZ/A	PRE	0	99	96	98
	AATREX	1.5 LB AI/A	PRE				
	RESOLVE Q	1.2 OZ/A	28 DAP				
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
6	INSTIGATE	6 OZ/A	PRE	0	99	99	99
	CINCH ATZ	1.5 PT/A	PRE				
	RESOLVE Q	1.2 OZ/A	28 DAP				
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	CHEAL
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>
Crop Code	ZEAMX			
B BCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Crop Variety				
Description	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Part Rated				
Rating Date	5/29/2013	5/29/2013	5/29/2013	5/29/2013
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing				

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
7 INSTIGATE	6 OZ/A	PRE	0	96	89	98
ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
AMS	2 LB/A	28 DAP				
8 REALM Q	4 OZ/A	28 DAP	0	0	0	0
AATREX	1.5 LB AI/A	28 DAP				
ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
AMS	2 LB/A	28 DAP				
9 RESOLVE Q	1.25 OZ/A	28 DAP	0	0	0	0
AATREX	1.5 LB AI/A	28 DAP				
ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
AMS	2 LB/A	28 DAP				
10 LUMAX	3 QT/A	PRE	0	99	96	99
ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
AMS	2 LB/A	28 DAP				
11 HALEX GT	4 PT/A	28 DAP	0	0	0	0
AATREX	1.5 LB AI/A	28 DAP				
NIS	0.25 PT/A	28 DAP				
AMS	2 LB/A	28 DAP				
12 CAPRENO HERBICIDE	3 OZ/A	28 DAP	0	0	0	0
AATREX	1.5 LB AI/A	28 DAP				
ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
AMS	2 LB/A	28 DAP				
13 CHECK UNTREATED			0	0	0	0
14 CHECK UNTREATED			0	0	0	0
LSD (P=.05)			0.0	2.3	2.7	1.7
Standard Deviation			0.0	1.4	1.6	1.0
CV			0.0	2.51	3.05	1.75

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	SETFA	AMBTR
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>
Pest Name	Morning glory	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Crop Variety			
Description	BEFORE POST		
Part Rated			
Rating Date	5/29/2013	6/12/2013	6/12/2013
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt No.	Treatment Name	Rate	Growth Stage	5	6	7	8
1	INSTIGATE	6 OZ/A	PRE	92	0	99	99
	REALM Q	4 OZ/A	28 DAP				
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
2	INSTIGATE	6 OZ/A	PRE	92	0	99	99
	AATREX	1 LB AI/A	PRE				
	REALM Q	4 OZ/A	28 DAP				
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
3	INSTIGATE	6 OZ/A	PRE	89	0	99	99
	CINCH ATZ	1.5 PT/A	PRE				
	REALM Q	4 OZ/A	28 DAP				
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
4	INSTIGATE	6 OZ/A	PRE	89	0	99	99
	RESOLVE Q	1.2 OZ/A	28 DAP				
	AATREX	2 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
5	INSTIGATE	6 OZ/A	PRE	96	0	99	99
	AATREX	1.5 LB AI/A	PRE				
	RESOLVE Q	1.2 OZ/A	28 DAP				
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
6	INSTIGATE	6 OZ/A	PRE	90	0	99	99
	CINCH ATZ	1.5 PT/A	PRE				
	RESOLVE Q	1.2 OZ/A	28 DAP				
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	SETFA	AMBTR
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>
Pest Name	Morning glory	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Crop Variety			
Description	BEFORE POST		
Part Rated			
Rating Date	5/29/2013	6/12/2013	6/12/2013
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt No.	Treatment Name	Rate	Unit	Growth Stage	5	6	7	8
7	INSTIGATE	6 OZ/A		PRE	90	0	99	99
	ABUNDIT EXTRA	32 FL OZ/A		28 DAP				
	AMS	2 LB/A		28 DAP				
8	REALM Q	4 OZ/A		28 DAP	0	0	99	99
	AATREX	1.5 LB AI/A		28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A		28 DAP				
	AMS	2 LB/A		28 DAP				
9	RESOLVE Q	1.25 OZ/A		28 DAP	0	0	98	99
	AATREX	1.5 LB AI/A		28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A		28 DAP				
	AMS	2 LB/A		28 DAP				
10	LUMAX	3 QT/A		PRE	96	0	99	99
	ABUNDIT EXTRA	32 FL OZ/A		28 DAP				
	AMS	2 LB/A		28 DAP				
11	HALEX GT	4 PT/A		28 DAP	0	0	98	99
	AATREX	1.5 LB AI/A		28 DAP				
	NIS	0.25 PT/A		28 DAP				
	AMS	2 LB/A		28 DAP				
12	CAPRENO HERBICIDE	3 OZ/A		28 DAP	0	0	99	99
	AATREX	1.5 LB AI/A		28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A		28 DAP				
	AMS	2 LB/A		28 DAP				
13	CHECK UNTREATED				0	0	0	0
14	CHECK UNTREATED				0	0	0	0
	LSD (P=.05)				3.3	0.0	1.4	0.0
	Standard Deviation				2.0	0.0	0.8	0.0
	CV				3.8	0.0	0.99	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	IPOSS	SETFA
Pest Scientific Name	Chenopodium al>	Ipomoea sp.	Setaria faberi
Pest Name	Common lambsqu>	Morning glory	Giant foxtail
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description			
Part Rated			
Rating Date	6/12/2013	6/12/2013	6/26/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			8/6/2013

Trt No.	Treatment Name	Rate	Growth Stage	9	10	11	12
1	INSTIGATE	6 OZ/A	PRE	99	95	0	99
	REALM Q	4 OZ/A	28 DAP				
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
2	INSTIGATE	6 OZ/A	PRE	99	93	0	99
	AATREX	1 LB AI/A	PRE				
	REALM Q	4 OZ/A	28 DAP				
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
3	INSTIGATE	6 OZ/A	PRE	99	95	0	99
	CINCH ATZ	1.5 PT/A	PRE				
	REALM Q	4 OZ/A	28 DAP				
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
4	INSTIGATE	6 OZ/A	PRE	99	96	0	99
	RESOLVE Q	1.2 OZ/A	28 DAP				
	AATREX	2 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
5	INSTIGATE	6 OZ/A	PRE	99	96	0	99
	AATREX	1.5 LB AI/A	PRE				
	RESOLVE Q	1.2 OZ/A	28 DAP				
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
6	INSTIGATE	6 OZ/A	PRE	99	93	0	99
	CINCH ATZ	1.5 PT/A	PRE				
	RESOLVE Q	1.2 OZ/A	28 DAP				
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	IPOSS	SETFA
Pest Scientific Name	Chenopodium al>	Ipomoea sp.	Setaria faberi
Pest Name	Common lambsqu>	Morning glory	Giant foxtail
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description			
Part Rated			
Rating Date	6/12/2013	6/12/2013	6/26/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt No.	Treatment	Rate	Growth	9	10	11	12
No.	Name	Rate Unit	Stage				
7	INSTIGATE	6 OZ/A	PRE	99		98	0
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				99
	AMS	2 LB/A	28 DAP				
8	REALM Q	4 OZ/A	28 DAP	99		96	0
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				99
	AMS	2 LB/A	28 DAP				
9	RESOLVE Q	1.25 OZ/A	28 DAP	99		98	0
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				98
	AMS	2 LB/A	28 DAP				
10	LUMAX	3 QT/A	PRE	99		96	0
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				99
	AMS	2 LB/A	28 DAP				
11	HALEX GT	4 PT/A	28 DAP	99		99	0
	AATREX	1.5 LB AI/A	28 DAP				
	NIS	0.25 PT/A	28 DAP				98
	AMS	2 LB/A	28 DAP				
12	CAPRENO HERBICIDE	3 OZ/A	28 DAP	99		98	0
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				99
	AMS	2 LB/A	28 DAP				
13	CHECK UNTREATED			0		0	0
14	CHECK UNTREATED			0		0	0
LSD (P=.05)				0.0		3.3	0.0
Standard Deviation				0.0		2.0	0.0
CV				0.0		2.41	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W	Weed	W	Weed	W	Weed
Pest Code		AMBTR		CHEAL		IPOSS
Pest Scientific Name	Ambrosia trifida		Chenopodium album		Ipomoea sp.	
Pest Name	Giant ragweed		Common lambsquarters		Morning glory	
Crop Code						ZEAMX
BBCH Scale						BCOR
Crop Scientific Name						Zea mays
Crop Name						Corn
Crop Variety						
Description						
Part Rated						
Rating Date		8/6/2013		8/6/2013		8/6/2013 9/24/2013
Rating Type		CONTROL		CONTROL		CONTROL YIELD
Rating Unit		PERCENT		PERCENT		PERCENT BU
Rating Timing						
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	13	14	15	19
1 INSTIGATE	6 OZ/A	PRE	99	99	95	211
REALM Q	4 OZ/A	28 DAP				
AATREX	1.5 LB AI/A	28 DAP				
ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
AMS	2 LB/A	28 DAP				
2 INSTIGATE	6 OZ/A	PRE	99	99	95	215
AATREX	1 LB AI/A	PRE				
REALM Q	4 OZ/A	28 DAP				
AATREX	1.5 LB AI/A	28 DAP				
ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
AMS	2 LB/A	28 DAP				
3 INSTIGATE	6 OZ/A	PRE	99	99	95	209
CINCH ATZ	1.5 PT/A	PRE				
REALM Q	4 OZ/A	28 DAP				
AATREX	1.5 LB AI/A	28 DAP				
ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
AMS	2 LB/A	28 DAP				
4 INSTIGATE	6 OZ/A	PRE	99	99	96	203
RESOLVE Q	1.2 OZ/A	28 DAP				
AATREX	2 LB AI/A	28 DAP				
ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
AMS	2 LB/A	28 DAP				
5 INSTIGATE	6 OZ/A	PRE	99	99	96	202
AATREX	1.5 LB AI/A	PRE				
RESOLVE Q	1.2 OZ/A	28 DAP				
AATREX	1.5 LB AI/A	28 DAP				
ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
AMS	2 LB/A	28 DAP				
6 INSTIGATE	6 OZ/A	PRE	99	99	93	212
CINCH ATZ	1.5 PT/A	PRE				
RESOLVE Q	1.2 OZ/A	28 DAP				
AATREX	1.5 LB AI/A	28 DAP				
ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
AMS	2 LB/A	28 DAP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	AMBTR	CHEAL	IPOSS	
Pest Scientific Name	Ambrosia trifida	Chenopodium albidum	Ipomoea sp.	
Pest Name	Giant ragweed	Common lambsquarters	Morning glory	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Crop Variety				
Description				
Part Rated				
Rating Date	8/6/2013	8/6/2013	8/6/2013	9/24/2013
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
Rating Timing				

Trt No.	Treatment	Rate	Growth	13	14	15	19
		Rate Unit	Stage				
7	INSTIGATE	6 OZ/A	PRE	99			202
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP			96	
	AMS	2 LB/A	28 DAP				
8	REALM Q	4 OZ/A	28 DAP	99		98	203
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
9	RESOLVE Q	1.25 OZ/A	28 DAP	99		98	205
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
10	LUMAX	3 QT/A	PRE	99		96	207
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
11	HALEX GT	4 PT/A	28 DAP	99		99	213
	AATREX	1.5 LB AI/A	28 DAP				
	NIS	0.25 PT/A	28 DAP				
	AMS	2 LB/A	28 DAP				
12	CAPRENO HERBICIDE	3 OZ/A	28 DAP	99		98	189
	AATREX	1.5 LB AI/A	28 DAP				
	ABUNDIT EXTRA	32 FL OZ/A	28 DAP				
	AMS	2 LB/A	28 DAP				
13	CHECK UNTREATED			0	0	0	20
14	CHECK UNTREATED			0	0	0	27
LSD (P=.05)				0.0	0.0	3.1	10.1
Standard Deviation				0.0	0.0	1.9	6.0
CV				0.0	0.0	2.27	3.35

Plant and Soil Science, U of KY
Weed Science Research

CORN POSTEMERGENCE II

Trial ID: C13012	Location: LEXINGTON, KY	Trial Year: 2013
Protocol ID: DUPONT-006-13-01	Investigator: Charles H Slack	
Project ID:	Study Director: CHARLES SLACK	
	Sponsor Contact: KELLY BARNETT	

Pest Type

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

Pest Code

SETFA, Setaria faberi, = US
 AMBTR, Ambrosia trifida, = US
 CHEAL, Chenopodium album, = US
 IPOSS, Ipomoea sp., = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent
 BU = bushel

ARM Action Codes

TY1 = 3.779063*[17]

Plant and Soil Science, U of KY
Weed Science Research

CORN POSTEMERGENCE II

Trial ID: C13012 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: DUPONT-006-13-01 Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: KELLY BARNETT

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/1/2013
Completion Date: 9/24/2013

Trial Location

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

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: 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

Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC61-89RIB **BBCH Scale:** BCOR

Planting Rate, Unit: 30000 S/A	Planting Date: 5/1/2013
Depth, Unit: 1.5 IN	Planting Method: PLANTD planted
Row Spacing, Unit: 30 IN	Planting Equipment: PP Plot Planter
Spacing Within Row, Unit: 7 IN	Emergence Date: 5/7/2013
Soil Temperature, Unit: 60 F	Harvest Date: 9/24/2013
Soil Moisture: EXCELL	Harvested Width, Unit: 5 FT
Seed Bed: MEDIUM	Harvested Length, Unit: 38 FT
	Harvest Equipment: COMBINE
	% 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:** CHEAL *Chenopodium album*
Common Name: Common lambsquarters

Pest 4 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 FT ²	Treatments: 14
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: WET wet

Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

	A	B
Application Date:	5/1/2013	5/29/2013
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	28DAP
Application Placement:	BROSOI	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	81 F	78 F
% Relative Humidity:	40	49
Wind Velocity, Unit:	8 MPH	9 MPH
Wind Direction:	SE	SW
Soil Temperature, Unit:	60 F	69 F
Soil Moisture:	EXCELL	GOOD
% Cloud Cover:	10	10
Next Moisture Occurred On:	5/4/2013	5/31/2013

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:	V4	95

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA WSETFA	W
Height, Unit:	2	IN
Pest 2 Code, Type, Scale:	AMBTR WAMBTR	W
Height, Unit:	4	IN
Pest 3 Code, Type, Scale:	CHEAL WCHEAL	W
Height, Unit:	3	IN
Pest 4 Code, Type, Scale:	IPOSS WIPOSS	W
Height, Unit:	2	IN

Plant and Soil Science, U of KY
Weed Science Research

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	

Plant and Soil Science, U of KY
Weed Science Research

CORN POSTEMERGENCE III

Trial ID: C13014 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: DOW CORN Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: JONATHAN HUFF

Pest Type W Weed W Weed
Pest Code SETFA AMBTR
Pest Scientific Name Setaria faberi Ambrosia trifida
Pest Name Giant foxtail Giant ragweed
Crop Code ZEAMX
BBCH Scale BCOR
Crop Scientific Name Zea mays
Crop Name Corn
Crop Variety
Description BEFORE POST BEFORE POST BEFORE POST
Part Rated
Rating Date 5/20/2013 5/20/2013 5/20/2013
Rating Type INJURY CONTROL CONTROL
Rating Unit PERCENT PERCENT PERCENT
Rating Timing

Trt Treatment No. Name	Rate	Growth Stage	1	2	3
1 KEYSTONE NXT (GF-3151)	2.4 QT/A	PRE	0	99	93
HORNET	3 OZ/A	PRE			
2 SURESTART	2 PT/A	PRE	0	98	85
DURANGO DMA	1.5 PT/A	MP			
AMS	3.7 % V/V	MP			
3 SURESTART	2.5 PT/A	PRE	0	99	92
DURANGO DMA	1.5 PT/A	MP			
AMS	3.7 % V/V	MP			
4 SURESTART	2.5 PT/A	PRE	0	99	92
AATREX	1 QT/A	PRE			
DURANGO DMA	1.5 PT/A	MP			
AMS	3.7 % V/V	MP			
5 SURESTART	2 PT/A	EP	0	0	0
DURANGO DMA	1.5 PT/A	EP			
AMS	3.7 % V/V	EP			
6 STALWART XTRA	2 QT/A	PRE	0	99	89
ROUNDUP POWERMAX	22 OZ/A	MP			
AMS	3.7 % V/V	MP			
7 STALWART XTRA LITE	2.1 QT/A	PRE	0	99	93
ROUNDUP POWERMAX	22 OZ/A	MP			
AMS	3.7 % V/V	MP			
8 CHECK UNTREATED			0	0	0
LSD (P=.05)			0.0	1.4	4.2
Standard Deviation			0.0	0.8	2.4
CV			0.0	1.1	3.48

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed			
Pest Code	CHEAL	IPOSS	SETFA			
Pest Scientific Name	Chenopodium al>	Ipomoea sp.	Setaria faberi			
Pest Name	Common lambsqu>	Morning glory	Giant foxtail			
Crop Code			ZEAMX			
BBCH Scale			BCOR			
Crop Scientific Name			Zea mays			
Crop Name			Corn			
Crop Variety						
Description	BEFORE POST	BEFORE POST				
Part Rated						
Rating Date	5/20/2013	5/20/2013	6/14/2013			
Rating Type	CONTROL	CONTROL	INJURY			
Rating Unit	PERCENT	PERCENT	PERCENT			
Rating Timing			2 WEEK			
Trt Treatment	Rate	Growth				
No. Name	RateUnit	Stage	4	5	6	7
1 KEYSTONE NXT (GF-3151)	2.4 QT/A	PRE	99	95	0	99
HORNET	3 OZ/A	PRE				
2 SURESTART	2 PT/A	PRE	99	93	0	93
DURANGO DMA	1.5 PT/A	MP				
AMS	3.7 % V/V	MP				
3 SURESTART	2.5 PT/A	PRE	99	95	0	95
DURANGO DMA	1.5 PT/A	MP				
AMS	3.7 % V/V	MP				
4 SURESTART	2.5 PT/A	PRE	99	98	0	99
AATREX	1 QT/A	PRE				
DURANGO DMA	1.5 PT/A	MP				
AMS	3.7 % V/V	MP				
5 SURESTART	2 PT/A	EP	0	0	0	99
DURANGO DMA	1.5 PT/A	EP				
AMS	3.7 % V/V	EP				
6 STALWART XTRA	2 QT/A	PRE	99	92	0	99
ROUNDUP POWERMAX	22 OZ/A	MP				
AMS	3.7 % V/V	MP				
7 STALWART XTRA LITE	2.1 QT/A	PRE	99	96	0	99
ROUNDUP POWERMAX	22 OZ/A	MP				
AMS	3.7 % V/V	MP				
8 CHECK UNTREATED			0	0	0	0
LSD (P=.05)			0.0	3.5	0.0	4.0
Standard Deviation			0.0	2.0	0.0	2.3
CV			0.0	2.78	0.0	2.68

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	AMBTR	CHEAL	IPOSS	
Pest Scientific Name	Ambrosia trifi>Chenopodium al> Ipomoea sp.			
Pest Name	Giant ragweedCommon lambsqu>Morning glory			
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Crop Variety				
Description				
Part Rated				
Rating Date	6/14/2013	6/14/2013	6/14/2013	6/28/2013
Rating Type	CONTROL	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	2 WEEK	4 WEEK
Trt Treatment	Rate	Growth		
No. Name	RateUnit	Stage	8	9
			10	11
1 KEYSTONE NXT (GF-3151)	2.4 QT/A	PRE	93	99
HORNET	3 OZ/A	PRE		
2 SURESTART	2 PT/A	PRE	99	99
DURANGO DMA	1.5 PT/A	MP		
AMS	3.7 % V/V	MP		
3 SURESTART	2.5 PT/A	PRE	99	99
DURANGO DMA	1.5 PT/A	MP		
AMS	3.7 % V/V	MP		
4 SURESTART	2.5 PT/A	PRE	99	99
AATREX	1 QT/A	PRE		
DURANGO DMA	1.5 PT/A	MP		
AMS	3.7 % V/V	MP		
5 SURESTART	2 PT/A	EP	99	99
DURANGO DMA	1.5 PT/A	EP		
AMS	3.7 % V/V	EP		
6 STALWART XTRA	2 QT/A	PRE	99	99
ROUNDUP POWERMAX	22 OZ/A	MP		
AMS	3.7 % V/V	MP		
7 STALWART XTRA LITE	2.1 QT/A	PRE	98	99
ROUNDUP POWERMAX	22 OZ/A	MP		
AMS	3.7 % V/V	MP		
8 CHECK UNTREATED			0	0
LSD (P=.05)			2.7	0.0
Standard Deviation			1.5	0.0
CV			1.8	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed		
Pest Code	SETFA	AMBTR	CHEAL		
Pest Scientific Name	Setaria faberi	Ambrosia trifi	Chenopodium al		
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu		
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Crop Variety					
Description					
Part Rated					
Rating Date	6/28/2013	6/28/2013	6/28/2013		
Rating Type	CONTROL	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT		
Rating Timing	4 WEEK	4 WEEK	4 WEEK		
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	12	13	14
1 KEYSTONE NXT (GF-3151)	2.4 QT/A	PRE	99	92	99
HORNET	3 OZ/A	PRE			
2 SURESTART	2 PT/A	PRE	93	99	99
DURANGO DMA	1.5 PT/A	MP			
AMS	3.7 % V/V	MP			
3 SURESTART	2.5 PT/A	PRE	95	99	99
DURANGO DMA	1.5 PT/A	MP			
AMS	3.7 % V/V	MP			
4 SURESTART	2.5 PT/A	PRE	99	99	99
AATREX	1 QT/A	PRE			
DURANGO DMA	1.5 PT/A	MP			
AMS	3.7 % V/V	MP			
5 SURESTART	2 PT/A	EP	99	99	99
DURANGO DMA	1.5 PT/A	EP			
AMS	3.7 % V/V	EP			
6 STALWART XTRA	2 QT/A	PRE	99	99	99
ROUNDUP POWERMAX	22 OZ/A	MP			
AMS	3.7 % V/V	MP			
7 STALWART XTRA LITE	2.1 QT/A	PRE	99	98	99
ROUNDUP POWERMAX	22 OZ/A	MP			
AMS	3.7 % V/V	MP			
8 CHECK UNTREATED			0	0	0
LSD (P=.05)			4.0	3.7	0.0
Standard Deviation			2.3	2.1	0.0
CV			2.68	2.44	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	SETFA	AMBTR
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>
Pest Name	Morning glory	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Crop Variety			
Description			
Part Rated			
Rating Date	6/28/2013	7/26/2013	7/26/2013
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	8 WEEK	8 WEEK

Trt Treatment No. Name	Rate	Growth Stage	15	16	17	18
1 KEYSTONE NXT (GF-3151)	2.4 QT/A	PRE	92	0	99	92
HORNET	3 OZ/A	PRE				
2 SURESTART	2 PT/A	PRE	95	0	93	99
DURANGO DMA	1.5 PT/A	MP				
AMS	3.7 % V/V	MP				
3 SURESTART	2.5 PT/A	PRE	95	0	95	99
DURANGO DMA	1.5 PT/A	MP				
AMS	3.7 % V/V	MP				
4 SURESTART	2.5 PT/A	PRE	95	0	99	99
AATREX	1 QT/A	PRE				
DURANGO DMA	1.5 PT/A	MP				
AMS	3.7 % V/V	MP				
5 SURESTART	2 PT/A	EP	98	0	99	99
DURANGO DMA	1.5 PT/A	EP				
AMS	3.7 % V/V	EP				
6 STALWART XTRA	2 QT/A	PRE	92	0	99	99
ROUNDUP POWERMAX	22 OZ/A	MP				
AMS	3.7 % V/V	MP				
7 STALWART XTRA LITE	2.1 QT/A	PRE	95	0	99	98
ROUNDUP POWERMAX	22 OZ/A	MP				
AMS	3.7 % V/V	MP				
8 CHECK UNTREATED			0	0	0	0
LSD (P=.05)			3.7	0.0	4.0	3.7
Standard Deviation			2.1	0.0	2.3	2.1
CV			2.53	0.0	2.68	2.44

Plant and Soil Science, U of KY
Weed Science Research

Trt	Treatment	Rate	Growth	7/26/2013	7/26/2013	9/24/2013
No.	Name	Rate Unit	Stage	19	20	24
1	KEYSTONE NXT (GF-3151)	2.4 QT/A	PRE	99	92	197
	HORNET	3 OZ/A	PRE			
2	SURESTART	2 PT/A	PRE	99	95	205
	DURANGO DMA	1.5 PT/A	MP			
	AMS	3.7 % V/V	MP			
3	SURESTART	2.5 PT/A	PRE	99	95	207
	DURANGO DMA	1.5 PT/A	MP			
	AMS	3.7 % V/V	MP			
4	SURESTART	2.5 PT/A	PRE	99	95	200
	AATREX	1 QT/A	PRE			
	DURANGO DMA	1.5 PT/A	MP			
	AMS	3.7 % V/V	MP			
5	SURESTART	2 PT/A	EP	99	98	212
	DURANGO DMA	1.5 PT/A	EP			
	AMS	3.7 % V/V	EP			
6	STALWART XTRA	2 QT/A	PRE	99	92	208
	ROUNDUP POWERMAX	22 OZ/A	MP			
	AMS	3.7 % V/V	MP			
7	STALWART XTRA LITE	2.1 QT/A	PRE	99	95	200
	ROUNDUP POWERMAX	22 OZ/A	MP			
	AMS	3.7 % V/V	MP			
8	CHECK UNTREATED			0	0	9
	LSD (P=.05)			0.0	3.7	6.6
	Standard Deviation			0.0	2.1	3.8
	CV			0.0	2.53	2.11

Pest Type W Weed W Weed
Pest Code CHEAL IPOSS
Pest Scientific Name Chenopodium al> Ipomoea sp.
Pest Name Common lambsqu>Morning glory
Crop Code ZEAMX
BBCH Scale BCOR
Crop Scientific Name Zea mays
Crop Name Corn
Crop Variety
Description
Part Rated

Rating Date 7/26/2013 7/26/2013 9/24/2013
Rating Type CONTROL CONTROL YIELD
Rating Unit PERCENT PERCENT BU
Rating Timing 8 WEEK 8 WEEK

Plant and Soil Science, U of KY
Weed Science Research

CORN POSTEMERGENCE III

Trial ID: C13014 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: DOW CORN Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: JONATHAN HUFF

Pest Type

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

Pest Code

SETFA, Setaria faberi, = US
AMBTR, Ambrosia trifida, = US
CHEAL, Chenopodium album, = US
IPOSS, Ipomoea sp., = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent
BU = bushel

ARM Action Codes

TY1 = 3.779063*[22]

Plant and Soil Science, U of KY
Weed Science Research

CORN POSTEMERGENCE III

Trial ID: C13014 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: DOW CORN Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: JONATHAN HUFF

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/1/2013
Completion Date: 9/24/2013

Trial Location

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

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: 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

Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC 61-89RIB **BBCH Scale:** BCOR

Planting Rate, Unit: 30000 S/A	Planting Date: 5/1/2013
Depth, Unit: 1.5 IN	Planting Method: PLANTD planted
Row Spacing, Unit: 30 IN	Planting Equipment: PP Plot Planter
Spacing Within Row, Unit: 7 IN	Emergence Date: 5/7/2013
	Harvest Date: 9/24/2013
Soil Temperature, Unit: 60 F	Harvested Width, Unit: 5 FT
Soil Moisture: EXCELL	Harvested Length, Unit: 38 FT
Seed Bed: MEDIUM	Harvest Equipment: COMBINE
	% 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:** CHEAL *Chenopodium album*
Common Name: Common lambsquarters

Pest 4 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 FT ²	Treatments: 8
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: WET wet

Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

	A	B	C
Application Date:	5/1/2013	5/20/2013	5/29/2013
Appl. Start Time:		5:15 PM	
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:	81 F	85 F	78 F
% Relative Humidity:	40	57	49
Wind Velocity, Unit:	8 MPH	7 MPH	9 MPH
Wind Direction:	SE	SSW	SW
Soil Temperature, Unit:	60 F	68 F	69 F
Soil Moisture:	EXCELL	EXCELL	GOOD
% Cloud Cover:	10	10	10
Next Moisture Occurred On:	5/4/2013	5/21/2013	5/31/2013

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:			V4
Height, Unit:	3	IN 4	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:	CHEAL W	CHEAL W	CHEAL W
Height, Unit:	2	IN 3	IN
Pest 4 Code, Type, Scale:	IPOSS W	IPOSS W	IPOSS W
Height, Unit:	1	IN 2	IN

Plant and Soil Science, U of KY
Weed Science Research

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	

Plant and Soil Science, U of KY
Weed Science Research

CORN PREEMERGENCE II

Trial ID: C13016
Protocol ID: BASF-CORN PRE
Project ID:

Location: LEXINGTON, KY Trial Year: 2013
Investigator: Charles H Slack
Study Director: CHARLES SLACK
Sponsor Contact: GREG STAPLETON

Pest Type		W Weed	W Weed
Pest Code		SETFA	AMBTR
Pest Scientific Name		Setaria faberi	Ambrosia trifi>
Pest Name		Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Crop Variety			
Description	BEFORE POST	BEFORE POST	BEFORE POST
Part Rated			
Rating Date	5/20/2013	5/20/2013	5/20/2013
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	1	2	3
1 ZIDUA	2.5 OZ WT/A PRE		0	99	82
SHARPEN	2.2 FL OZ/A PRE				
ROUNDUP POWERMAX	22 FL OZ/A MP				
2 ZIDUA	2.5 OZ WT/A PRE		0	99	87
VERDICT	10 FL OZ/A PRE				
ROUNDUP POWERMAX	22 FL OZ/A MP				
3 ZIDUA	2.5 OZ WT/A PRE		3	99	92
VERDICT	10 FL OZ/A PRE				
AATREX	1 QT/A PRE				
ROUNDUP POWERMAX	22 FL OZ/A MP				
4 ZIDUA	2.5 OZ WT/A PRE		0	91	88
SHARPEN	2.5 FL OZ/A PRE				
AATREX	1 QT/A PRE				
ROUNDUP POWERMAX	22 FL OZ/A MP				
5 VERDICT	15 FL OZ/A PRE		0	99	85
ROUNDUP POWERMAX	22 FL OZ/A MP				
6 ANTHEM ATZ	2.25 PT/A PRE		0	99	89
ROUNDUP POWERMAX	22 FL OZ/A MP				
7 LEXAR	3.5 QT/A PRE		0	99	96
ROUNDUP POWERMAX	22 FL OZ/A MP				
8 SURESTART	2.5 PT/A PRE		0	99	89
ROUNDUP POWERMAX	22 FL OZ/A MP				
9 CORVUS HERBICIDE	5.6 FL OZ/A PRE		0	99	98
AATREX	1 QT/A PRE				
ROUNDUP POWERMAX	22 FL OZ/A MP				
10 BALANCE FLEXX HERBICIDE	5 FL OZ/A PRE		0	90	90
AATREX	1 QT/A PRE				
ROUNDUP POWERMAX	22 FL OZ/A MP				
11 CHECK			0	0	0
ROUNDUP POWERMAX	22 FL OZ/A MP				
12 CHECK UNTREATED			0	0	0
LSD (P=.05)			2.8	3.6	6.1
Standard Deviation			1.7	2.1	3.6
CV			600.0	2.63	4.86

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed		
Pest Code	CHEAL	IPOSS		SETFA		
Pest Scientific Name	Chenopodium al>	Ipomoea sp.		Setaria faberi		
Pest Name	Common lambsqu>	Morning glory		Giant foxtail		
Crop Code			ZEAMX			
BBCH Scale			BCOR			
Crop Scientific Name			Zea mays			
Crop Name			Corn			
Crop Variety						
Description	BEFORE POST	BEFORE POST				
Part Rated						
Rating Date	5/20/2013	5/20/2013	6/17/2013	6/17/2013		
Rating Type	CONTROL	CONTROL	INJURY	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT		
Rating Timing			2 WEEK	2 WEEK		
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	4	5	6	7
1 ZIDUA	2.5 OZ WT/A	PRE	99	98	0	99
SHARPEN	2.2 FL OZ/A	PRE				
ROUNDUP POWERMAX	22 FL OZ/A	MP				
2 ZIDUA	2.5 OZ WT/A	PRE	98	98	0	99
VERDICT	10 FL OZ/A	PRE				
ROUNDUP POWERMAX	22 FL OZ/A	MP				
3 ZIDUA	2.5 OZ WT/A	PRE	99	99	3	99
VERDICT	10 FL OZ/A	PRE				
AATREX	1 QT/A	PRE				
ROUNDUP POWERMAX	22 FL OZ/A	MP				
4 ZIDUA	2.5 OZ WT/A	PRE	96	90	0	94
SHARPEN	2.5 FL OZ/A	PRE				
AATREX	1 QT/A	PRE				
ROUNDUP POWERMAX	22 FL OZ/A	MP				
5 VERDICT	15 FL OZ/A	PRE	92	95	0	99
ROUNDUP POWERMAX	22 FL OZ/A	MP				
6 ANTHEM ATZ	2.25 PT/A	PRE	99	98	0	99
ROUNDUP POWERMAX	22 FL OZ/A	MP				
7 LEXAR	3.5 QT/A	PRE	99	98	0	99
ROUNDUP POWERMAX	22 FL OZ/A	MP				
8 SURESTART	2.5 PT/A	PRE	99	91	0	99
ROUNDUP POWERMAX	22 FL OZ/A	MP				
9 CORVUS HERBICIDE	5.6 FL OZ/A	PRE	99	98	0	99
AATREX	1 QT/A	PRE				
ROUNDUP POWERMAX	22 FL OZ/A	MP				
10 BALANCE FLEXX HERBICIDE	5 FL OZ/A	PRE	99	93	0	99
AATREX	1 QT/A	PRE				
ROUNDUP POWERMAX	22 FL OZ/A	MP				
11 CHECK			0	0	0	99
ROUNDUP POWERMAX	22 FL OZ/A	MP				
12 CHECK UNTREATED			0	0	0	0
LSD (P=.05)			3.2	4.0	2.8	4.0
Standard Deviation			1.9	2.3	1.7	2.3
CV			2.35	2.93	600.0	2.58

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed			
Pest Code	AMBTR	CHEAL	IPOSS			
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.			
Pest Name	Giant ragweed	Common lambsqu>	Morning glory			
Crop Code				ZEAMX		
BBCH Scale				BCOR		
Crop Scientific Name				Zea mays		
Crop Name				Corn		
Crop Variety						
Description						
Part Rated						
Rating Date	6/17/2013	6/17/2013	6/17/2013	7/1/2013		
Rating Type	CONTROL	CONTROL	CONTROL	INJURY		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT		
Rating Timing	2 WEEK	2 WEEK	2 WEEK	4 WEEK		
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	8	9	10	11
1 ZIDUA	2.5 OZ WT/A PRE		89	99	96	0
SHARPEN	2.2 FL OZ/A PRE					
ROUNDUP POWERMAX	22 FL OZ/A MP					
2 ZIDUA	2.5 OZ WT/A PRE		93	99	95	0
VERDICT	10 FL OZ/A PRE					
ROUNDUP POWERMAX	22 FL OZ/A MP					
3 ZIDUA	2.5 OZ WT/A PRE		96	99	96	3
VERDICT	10 FL OZ/A PRE					
AATREX	1 QT/A PRE					
ROUNDUP POWERMAX	22 FL OZ/A MP					
4 ZIDUA	2.5 OZ WT/A PRE		93	99	93	0
SHARPEN	2.5 FL OZ/A PRE					
AATREX	1 QT/A PRE					
ROUNDUP POWERMAX	22 FL OZ/A MP					
5 VERDICT	15 FL OZ/A PRE		91	96	93	0
ROUNDUP POWERMAX	22 FL OZ/A MP					
6 ANTHEM ATZ	2.25 PT/A PRE		95	99	95	0
ROUNDUP POWERMAX	22 FL OZ/A MP					
7 LEXAR	3.5 QT/A PRE		99	99	95	0
ROUNDUP POWERMAX	22 FL OZ/A MP					
8 SURESTART	2.5 PT/A PRE		93	99	92	0
ROUNDUP POWERMAX	22 FL OZ/A MP					
9 CORVUS HERBICIDE	5.6 FL OZ/A PRE		98	99	96	0
AATREX	1 QT/A PRE					
ROUNDUP POWERMAX	22 FL OZ/A MP					
10 BALANCE FLEXX HERBICIDE	5 FL OZ/A PRE		98	99	96	0
AATREX	1 QT/A PRE					
ROUNDUP POWERMAX	22 FL OZ/A MP					
11 CHECK			92	99	92	0
ROUNDUP POWERMAX	22 FL OZ/A MP					
12 CHECK UNTREATED			0	0	0	0
LSD (P=.05)			4.8	2.5	3.6	2.8
Standard Deviation			2.8	1.5	2.1	1.7
CV			3.26	1.66	2.48	600.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed		
Pest Code	SETFA	AMBTR	CHEAL		
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Chenopodium album		
Pest Name	Giant foxtail	Giant ragweed	Common lambsquarters		
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Crop Variety					
Description					
Part Rated					
Rating Date	7/1/2013	7/1/2013	7/1/2013		
Rating Type	CONTROL	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT		
Rating Timing	4 WEEK	4 WEEK	4 WEEK		
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	12	13	14
1 ZIDUA	2.5 OZ WT/A PRE		99	89	99
SHARPEN	2.2 FL OZ/A PRE				
ROUNDUP POWERMAX	22 FL OZ/A MP				
2 ZIDUA	2.5 OZ WT/A PRE		99	93	99
VERDICT	10 FL OZ/A PRE				
ROUNDUP POWERMAX	22 FL OZ/A MP				
3 ZIDUA	2.5 OZ WT/A PRE		99	96	99
VERDICT	10 FL OZ/A PRE				
AATREX	1 QT/A PRE				
ROUNDUP POWERMAX	22 FL OZ/A MP				
4 ZIDUA	2.5 OZ WT/A PRE		94	93	99
SHARPEN	2.5 FL OZ/A PRE				
AATREX	1 QT/A PRE				
ROUNDUP POWERMAX	22 FL OZ/A MP				
5 VERDICT	15 FL OZ/A PRE		99	91	96
ROUNDUP POWERMAX	22 FL OZ/A MP				
6 ANTHEM ATZ	2.25 PT/A PRE		99	95	99
ROUNDUP POWERMAX	22 FL OZ/A MP				
7 LEXAR	3.5 QT/A PRE		99	99	99
ROUNDUP POWERMAX	22 FL OZ/A MP				
8 SURESTART	2.5 PT/A PRE		99	93	99
ROUNDUP POWERMAX	22 FL OZ/A MP				
9 CORVUS HERBICIDE	5.6 FL OZ/A PRE		99	98	99
AATREX	1 QT/A PRE				
ROUNDUP POWERMAX	22 FL OZ/A MP				
10 BALANCE FLEXX HERBICIDE	5 FL OZ/A PRE		99	98	99
AATREX	1 QT/A PRE				
ROUNDUP POWERMAX	22 FL OZ/A MP				
11 CHECK			99	92	99
ROUNDUP POWERMAX	22 FL OZ/A MP				
12 CHECK UNTREATED			0	0	0
LSD (P=.05)			4.0	4.8	2.5
Standard Deviation			2.3	2.8	1.5
CV			2.58	3.26	1.66

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed
Pest Code	IPOSS
Pest Scientific Name	Ipomoea sp.
Pest Name	Morning glory
Crop Code	ZEAMX
BBCH Scale	BCOR
Crop Scientific Name	Zea mays
Crop Name	Corn
Crop Variety	
Description	
Part Rated	
Rating Date	7/1/2013 9/24/2013
Rating Type	CONTROL YIELD
Rating Unit	PERCENT BU
Rating Timing	4 WEEK

Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	15	19
1 ZIDUA	2.5 OZ WT/A PRE		96	206
SHARPEN	2.2 FL OZ/A PRE			
ROUNDUP POWERMAX	22 FL OZ/A MP			
2 ZIDUA	2.5 OZ WT/A PRE		95	211
VERDICT	10 FL OZ/A PRE			
ROUNDUP POWERMAX	22 FL OZ/A MP			
3 ZIDUA	2.5 OZ WT/A PRE		96	214
VERDICT	10 FL OZ/A PRE			
AATREX	1 QT/A PRE			
ROUNDUP POWERMAX	22 FL OZ/A MP			
4 ZIDUA	2.5 OZ WT/A PRE		93	208
SHARPEN	2.5 FL OZ/A PRE			
AATREX	1 QT/A PRE			
ROUNDUP POWERMAX	22 FL OZ/A MP			
5 VERDICT	15 FL OZ/A PRE		93	205
ROUNDUP POWERMAX	22 FL OZ/A MP			
6 ANTHEM ATZ	2.25 PT/A PRE		95	199
ROUNDUP POWERMAX	22 FL OZ/A MP			
7 LEXAR	3.5 QT/A PRE		95	192
ROUNDUP POWERMAX	22 FL OZ/A MP			
8 SURESTART	2.5 PT/A PRE		92	197
ROUNDUP POWERMAX	22 FL OZ/A MP			
9 CORVUS HERBICIDE	5.6 FL OZ/A PRE		96	192
AATREX	1 QT/A PRE			
ROUNDUP POWERMAX	22 FL OZ/A MP			
10 BALANCE FLEXX HERBICIDE	5 FL OZ/A PRE		96	203
AATREX	1 QT/A PRE			
ROUNDUP POWERMAX	22 FL OZ/A MP			
11 CHECK			92	195
ROUNDUP POWERMAX	22 FL OZ/A MP			
12 CHECK UNTREATED			0	2
LSD (P=.05)			3.6	8.1
Standard Deviation			2.1	4.8
CV			2.48	2.58

Plant and Soil Science, U of KY
Weed Science Research

CORN PREEMERGENCE II

Trial ID: C13016	Location: LEXINGTON, KY	Trial Year: 2013
Protocol ID: BASF-CORN PRE	Investigator: Charles H Slack	
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, = US
 AMBTR, Ambrosia trifida, = US
 CHEAL, Chenopodium album, = US
 IPOSS, Ipomoea sp., = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent
 BU = bushel

ARM Action Codes

TY1 = 3.779063*[17]

Plant and Soil Science, U of KY
Weed Science Research

CORN PREEMERGENCE II

Trial ID: C13016 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: BASF-CORN PRE Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: GREG STAPLETON

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/1/2013
Completion Date: 9/24/2013

Trial Location

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

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: 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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Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC61-89RIB **BBCH Scale:** BCOR

Planting Rate, Unit: 30000 S/A	Planting Date: 5/1/2013
Depth, Unit: 1.5 IN	Planting Method: PLANTD planted
Row Spacing, Unit: 30 IN	Planting Equipment: PP Plot Planter
Spacing Within Row, Unit: 7 IN	Emergence Date: 5/7/2013
Soil Temperature, Unit: 60 F	Harvest Date: 9/24/2013
Soil Moisture: EXCELL	Harvested Width, Unit: 5 FT
Seed Bed: MEDIUM	Harvested Length, Unit: 38 FT
	Harvest Equipment: COMBINE
	% 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:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Pest 4 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 FT ²	Treatments: 12
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: WET wet

Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

	A	B
Application Date:	5/1/2013	6/3/2013
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	MP
Application Placement:	BROSOI	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	81 F	73 F
% Relative Humidity:	40	50
Wind Velocity, Unit:	8 MPH	8 MPH
Wind Direction:	SE	NW
Soil Temperature, Unit:	60 F	70 F
Soil Moisture:	EXCELL	GOOD
% Cloud Cover:	10	20
Next Moisture Occurred On:	5/4/2013	6/6/2013

Crop Stage At Each Application

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

Pest Stage At Each Application

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

Plant and Soil Science, U of KY
Weed Science Research

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	

Plant and Soil Science, U of KY
Weed Science Research

CORN POSTEMERGENCE IV

Trial ID: C13017
Protocol ID: FMC-CORN-PRE-POST
Project ID:

Location: LEXINGTON, KY Trial Year: 2013
Investigator: Charles H Slack
Study Director: CHARLES SLACK
Sponsor Contact: RUSTY MITCHELL

Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL
Pest Scientific Name	Setaria faberi	Ambrosia trifi	Chenopodium al
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu
Crop Code	ZEAMX		
BBCH Scale	BCOR		
Crop Scientific Name	Zea mays		
Crop Name	Corn		
Crop Variety			
Description	BEFORE POST	BEFORE POST	BEFORE POST
Part Rated			
Rating Date	5/15/2013	5/15/2013	5/15/2013
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt No.	Treatment Name	Rate	Growth Unit	Stage	1	2	3	4
1	CHECK UNTREATED				0	0	0	0
2	ANTHEM	8 OZ/A	PRE		0	99	75	97
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
3	ANTHEM ATZ	2 PT/A	PRE		3	99	90	99
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
4	DUAL II MAGNUM	1.3 PT/A	PRE		0	99	67	93
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
5	BICEP II MAGNUM	1.6 QT/A	PRE		0	99	88	99
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
6	ANTHEM	8 OZ/A	PRE		0	99	78	99
	CADET	0.7 OZ/A	V4					
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
7	ANTHEM	8 OZ/A	PRE		0	99	73	99
	F9387	2.5 OZ/A	V4					
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
8	ANTHEM ATZ	2 PT/A	PRE		0	99	92	99
	F9387	2.5 OZ/A	V4					
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
9	ANTHEM	8 OZ/A	PRE		0	99	72	98
	ANTHEM ATZ	1.5 PT/A	V4					
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
10	ANTHEM ATZ	2 PT/A	V4		0	0	0	0
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
11	LEXAR	96 OZ/A	V4		0	0	0	0

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

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	CHEAL
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>
Crop Code	ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Crop Variety				
Description	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Part Rated				
Rating Date	5/15/2013	5/15/2013	5/15/2013	5/15/2013
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing				

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
12 HALEX GT	3.6 PT/A	V4	0	0	0	0
LSD (P=.05)			2.8	0.0	9.9	8.3t
Standard Deviation			1.7	0.0	5.9	4.9t
CV			600.0	0.0	11.11	8.95

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	SETFA	AMBTR
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>
Pest Name	Morning glory	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Crop Variety			
Description	BEFORE POST	AFTER POST	AFTER POST
Part Rated			
Rating Date	5/15/2013	6/14/2013	6/14/2013
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing		2 WEEK	2 WEEK

Trt No.	Treatment Name	Rate	Growth Unit	Stage	5	6	7	8
1	CHECK UNTREATED					0	0	0
2	ANTHEM	8 OZ/A	PRE		93	0	99	92
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
3	ANTHEM ATZ	2 PT/A	PRE		96	3	99	99
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
4	DUAL II MAGNUM	1.3 PT/A	PRE		85	0	99	98
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
5	BICEP II MAGNUM	1.6 QT/A	PRE		92	0	99	99
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
6	ANTHEM	8 OZ/A	PRE		91	0	99	81
	CADET	0.7 OZ/A	V4					
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
7	ANTHEM	8 OZ/A	PRE		92	0	99	92
	F9387	2.5 OZ/A	V4					
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
8	ANTHEM ATZ	2 PT/A	PRE		96	0	99	99
	F9387	2.5 OZ/A	V4					
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
9	ANTHEM	8 OZ/A	PRE		93	0	99	82
	ANTHEM ATZ	1.5 PT/A	V4					
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
10	ANTHEM ATZ	2 PT/A	V4		0	0	99	85
	ROUNDUP POWERMAX	22 OZ/A	V4					
	COC	1 %	V/VV4					
11	LEXAR	96 OZ/A	V4		0	0	57	99

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	SETFA	AMBTR
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>
Pest Name	Morning glory	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Crop Variety			
Description	BEFORE POST	AFTER POST	AFTER POST
Part Rated			
Rating Date	5/15/2013	6/14/2013	6/14/2013
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing		2 WEEK	2 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	5	6	7	8
12 HALEX GT	3.6 PT/A	V4		0	0	98
LSD (P=.05)				7.9	2.8	5.9
Standard Deviation				4.7	1.7	3.5
CV				7.63	600.0	3.97

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	IPOSS	SETFA
Pest Scientific Name	Chenopodium al>	Ipomoea sp.	Setaria faberi
Pest Name	Common lambsqu>	Morning glory	Giant foxtail
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Crop Variety			
Description	AFTER POST	AFTER POST	AFTER POST
Part Rated			
Rating Date	6/14/2013	6/14/2013	6/28/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	4 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	9	10	11	12
1	CHECK UNTREATED			0	0	0	0
2	ANTHEM	8 OZ/A	PRE	95	93	0	99
	ROUNDUP POWERMAX	22 OZ/A	V4				
	COC	1 % V/V	V4				
3	ANTHEM ATZ	2 PT/A	PRE	99	92	3	99
	ROUNDUP POWERMAX	22 OZ/A	V4				
	COC	1 % V/V	V4				
4	DUAL II MAGNUM	1.3 PT/A	PRE	83	93	0	99
	ROUNDUP POWERMAX	22 OZ/A	V4				
	COC	1 % V/V	V4				
5	BICEP II MAGNUM	1.6 QT/A	PRE	99	92	0	99
	ROUNDUP POWERMAX	22 OZ/A	V4				
	COC	1 % V/V	V4				
6	ANTHEM	8 OZ/A	PRE	98	92	0	99
	CADET	0.7 OZ/A	V4				
	ROUNDUP POWERMAX	22 OZ/A	V4				
	COC	1 % V/V	V4				
7	ANTHEM	8 OZ/A	PRE	99	93	0	99
	F9387	2.5 OZ/A	V4				
	ROUNDUP POWERMAX	22 OZ/A	V4				
	COC	1 % V/V	V4				
8	ANTHEM ATZ	2 PT/A	PRE	99	95	0	99
	F9387	2.5 OZ/A	V4				
	ROUNDUP POWERMAX	22 OZ/A	V4				
	COC	1 % V/V	V4				
9	ANTHEM	8 OZ/A	PRE	99	93	0	99
	ANTHEM ATZ	1.5 PT/A	V4				
	ROUNDUP POWERMAX	22 OZ/A	V4				
	COC	1 % V/V	V4				
10	ANTHEM ATZ	2 PT/A	V4	98	95	0	99
	ROUNDUP POWERMAX	22 OZ/A	V4				
	COC	1 % V/V	V4				
11	LEXAR	96 OZ/A	V4	99	99	0	37

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	CHEAL	IPOSS		SETFA
Pest Scientific Name	Chenopodium al>	Ipomoea sp.		Setaria faberi
Pest Name	Common lambsqu>	Morning glory		Giant foxtail
Crop Code			ZEAMX	
BBCH Scale			BCOR	
Crop Scientific Name			Zea mays	
Crop Name			Corn	
Crop Variety				
Description	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Part Rated				
Rating Date	6/14/2013	6/14/2013	6/28/2013	6/28/2013
Rating Type	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	4 WEEK	4 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	9	10	11	12
12 HALEX GT	3.6 PT/A	V4	98	95	0	98
LSD (P=.05)			7.3	3.4	2.8	14.3
Standard Deviation			4.3	2.0	1.7	8.4
CV			4.85	2.32	600.0	9.85

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed			
Pest Code	AMBTR	CHEAL	IPOSS			
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.			
Pest Name	Giant ragweed	Common lambsqu>	Morning glory			
Crop Code						
BBCH Scale						
Crop Scientific Name						
Crop Name						
Crop Variety						
Description	AFTER POST	AFTER POST	AFTER POST			
Part Rated						
Rating Date	6/28/2013	6/28/2013	6/28/2013			
Rating Type	CONTROL	CONTROL	CONTROL	moicon		
Rating Unit	PERCENT	PERCENT	PERCENT	percent		
Rating Timing	4 WEEK	4 WEEK	4 WEEK			
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	13	14	15	19
1 CHECK UNTREATED			0	0	0	9.4942636
2 ANTHEM	8 OZ/A	PRE	95	95	93	23.9578031
ROUNDUP POWERMAX	22 OZ/A	V4				
COC	1 % V/VV4					
3 ANTHEM ATZ	2 PT/A	PRE	98	99	90	23.4482693
ROUNDUP POWERMAX	22 OZ/A	V4				
COC	1 % V/VV4					
4 DUAL II MAGNUM	1.3 PT/A	PRE	94	83	92	23.5512027
ROUNDUP POWERMAX	22 OZ/A	V4				
COC	1 % V/VV4					
5 BICEP II MAGNUM	1.6 QT/A	PRE	99	99	92	23.0962036
ROUNDUP POWERMAX	22 OZ/A	V4				
COC	1 % V/VV4					
6 ANTHEM	8 OZ/A	PRE	77	96	88	22.9486023
CADET	0.7 OZ/A	V4				
ROUNDUP POWERMAX	22 OZ/A	V4				
COC	1 % V/VV4					
7 ANTHEM	8 OZ/A	PRE	93	99	93	24.0436014
F9387	2.5 OZ/A	V4				
ROUNDUP POWERMAX	22 OZ/A	V4				
COC	1 % V/VV4					
8 ANTHEM ATZ	2 PT/A	PRE	99	99	95	23.9803357
F9387	2.5 OZ/A	V4				
ROUNDUP POWERMAX	22 OZ/A	V4				
COC	1 % V/VV4					
9 ANTHEM	8 OZ/A	PRE	70	99	93	22.9004506
ANTHEM ATZ	1.5 PT/A	V4				
ROUNDUP POWERMAX	22 OZ/A	V4				
COC	1 % V/VV4					
10 ANTHEM ATZ	2 PT/A	V4	73	98	95	22.9447356
ROUNDUP POWERMAX	22 OZ/A	V4				
COC	1 % V/VV4					
11 LEXAR	96 OZ/A	V4	99	99	99	24.2183358

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	AMBTR	CHEAL	IPOSS	
Pest Scientific Name	Ambrosia trifidi>	Chenopodium al>	Ipomoea sp.	
Pest Name	Giant ragweed	Common lambsqu>	Morning glory	
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Crop Variety				
Description	AFTER POST	AFTER POST	AFTER POST	
Part Rated				
Rating Date	6/28/2013	6/28/2013	6/28/2013	
Rating Type	CONTROL	CONTROL	CONTROL	moicon
Rating Unit	PERCENT	PERCENT	PERCENT	percent
Rating Timing	4 WEEK	4 WEEK	4 WEEK	

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	13	14	15	19
12 HALEX GT	3.6 PT/A	V4	95	96	95	23.5039357
LSD (P=.05)			13.7	7.8	3.5	2.71009084
Standard Deviation			8.1	4.6	2.1	1.60037129
CV			9.78	5.17	2.42	7.16

Plant and Soil Science, U of KY
Weed Science Research

CORN POSTEMERGENCE IV

Trial ID: C13017	Location: LEXINGTON, KY	Trial Year: 2013
Protocol ID: FMC-CORN-PRE-POST	Investigator: Charles H Slack	
Project ID:	Study Director: CHARLES SLACK	
	Sponsor Contact: RUSTY MITCHELL	

Pest Type

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

Pest Code

SETFA, *Setaria faberi*, = US
AMBTR, *Ambrosia trifida*, = US
CHEAL, *Chenopodium album*, = US
IPOSS, *Ipomoea sp.*, = US

Crop Code

ZEAMX, BCOR, *Zea mays*, = US

Rating Type

moicon = moisture content

Rating Unit

PERCENT = percent

Plant and Soil Science, U of KY
Weed Science Research

CORN POSTEMERGENCE IV

Trial ID: C13017 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: FMC-CORN-PRE-POST Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: RUSTY MITCHELL

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/1/2013
Completion Date: 9/24/2013

Trial Location

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

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: 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

Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC61-89RIB **BBCH Scale:** BCOR

Planting Rate, Unit: 30000 S/A	Planting Date: 5/1/2013
Depth, Unit: 1.5 IN	Planting Method: PLANTD planted
Row Spacing, Unit: 30 IN	Planting Equipment: PP Plot Planter
Spacing Within Row, Unit: 7 IN	Emergence Date: 5/7/2013
Soil Temperature, Unit: 60 F	Harvest Date: 9/24/2013
Soil Moisture: EXCELL	Harvested Width, Unit: 5 FT
Seed Bed: MEDIUM	Harvested Length, Unit: 38 FT
	Harvest Equipment: COMBINE
	% 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:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Pest 4 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 FT ²	Treatments: 12
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: WET wet

Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

	A	B
Application Date:	5/1/2013	5/29/2013
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	V4
Application Placement:	BROSOI	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	81 F	78 F
% Relative Humidity:	40	49
Wind Velocity, Unit:	8 MPH	9 MPH
Wind Direction:	SE	SW
Soil Temperature, Unit:	60 F	69 F
Soil Moisture:	EXCELL	GOOD
% Cloud Cover:	10	10
Next Moisture Occurred On:	5/4/2013	5/31/2013

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:	V4	95

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA WSETFA	W
Height, Unit:	2	IN
Pest 2 Code, Type, Scale:	AMBTR WAMBTR	W
Height, Unit:	4	IN
Pest 3 Code, Type, Scale:	CHEAL WCHEAL	W
Height, Unit:	2	IN
Pest 4 Code, Type, Scale:	IPOSS WIPOSS	W
Height, Unit:	2	IN

Plant and Soil Science, U of KY
Weed Science Research

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	

Plant and Soil Science, U of KY
Weed Science Research

CORN POSTEMERGENCE V

Trial ID: C13020 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: BASF-CORN-YIELD Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: GREG STAPLETON

Pest Type W Weed W Weed W Weed
Pest Code SETFA AMACH IPOSS
Pest Scientific Name Setaria faberi Amaranthus hyb> Ipomoea sp.
Pest Name Giant foxtail Smooth pigweed Morning glory
Crop Code ZEAMX
BBCH Scale BCOR
Crop Scientific Name Zea mays
Crop Name Corn
Crop Variety
Description
Part Rated
Rating Date
Rating Type INJURY CONTROL CONTROL CONTROL
Rating Unit PERCENT PERCENT PERCENT PERCENT
Rating Timing 2 WEEK 2 WEEK 2 WEEK 2 WEEK

Trt No.	Treatment	Rate	Growth	1	2	3	4
No.	Name	Rate Unit	Stage				
1	ROUNDUP POWERMAX	22 FL OZ/A	V5	0	99	99	99
	NIS	0.25 % V/V	V5				
	AMS	3.7 % V/V	V5				
2	GUARDSMAN MAX	48 FL OZ/A	PRE	0	99	99	99
	ROUNDUP POWERMAX	22 FL OZ/A	V5				
	NIS	0.25 % V/V	V5				
	AMS	3.7 % V/V	V5				
3	VERDICT	15 FL OZ/A	PRE	0	99	99	99
	ROUNDUP POWERMAX	22 FL OZ/A	V5				
	NIS	0.25 % V/V	V5				
	AMS	3.7 % V/V	V5				
4	VERDICT	15 FL OZ/A	PRE	0	99	99	99
	ROUNDUP POWERMAX	22 FL OZ/A	V5				
	NIS	0.25 % V/V	V5				
	AMS	3.7 % V/V	V5				
	HEADLINE AMP	10 FL OZ/A	R1				
	NIS	0.25 % V/V	R1				
5	VERDICT	15 FL OZ/A	PRE	0	99	99	99
	STATUS	5 FL OZ/A	V5				
	PRIAXOR	4 FL OZ/A	V5				
	ROUNDUP POWERMAX	22 FL OZ/A	V5				
	NIS	0.25 % V/V	V5				
	AMS	3.7 % V/V	V5				
	HEADLINE AMP	10 FL OZ/A	R1				
	NIS	0.25 % V/V	R1				
6	VERDICT	15 FL OZ/A	PRE	0	99	99	99
	ROUNDUP POWERMAX	22 FL OZ/A	V3				
	ARMEZON	0.75 FL OZ/A	V3				
	ATRAZINE	16 FL OZ/A	V3				
	MSO	1 % V/V	V3				
	AMS	3.7 % V/V	V3				
	HEADLINE AMP	10 FL OZ/A	R1				
	NIS	0.25 % V/V	R1				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMACH	IPOSS
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Ipomoea sp.
Pest Name		Giant foxtail	Smooth pigweed	Morning glory
Crop Code	ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Crop Variety				
Description				
Part Rated				
Rating Date				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4
7	VERDICT	15	FL OZ/A	PRE	0	99	99	99
	ROUNDUP POWERMAX	22	FL OZ/A	V3				
	ARMEZON	0.75	FL OZ/A	V3				
	ATRAZINE	16	FL OZ/A	V3				
	MISO	1	% V/V	V3				
	AMS	3.7	% V/V	V3				
	PRIAXOR	4	FL OZ/A	V10				
	HEADLINE AMP	10	FL OZ/A	R1				
	NIS	0.25	% V/V	R1				
	LSD (P=.05)				0.0	0.0	0.0	0.0
	Standard Deviation				0.0	0.0	0.0	0.0
	CV				0.0	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed		W Weed		W Weed
Pest Code		CHEAL		SETFA		AMACH
Pest Scientific Name		Chenopodium al>		Setaria faberi		Amaranthus hyb>
Pest Name		Common lambsqu>		Giant foxtail		Smooth pigweed
Crop Code				ZEAMX		
BBCH Scale				BCOR		
Crop Scientific Name				Zea mays		
Crop Name				Corn		
Crop Variety						
Description						
Part Rated						
Rating Date						
Rating Type		CONTROL	INJURY	CONTROL		CONTROL
Rating Unit		PERCENT	PERCENT	PERCENT		PERCENT
Rating Timing		2 WEEK	4 WEEK	4 WEEK		4 WEEK
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	5	6	7	8
1 ROUNDUP POWERMAX	22 FL OZ/AV5		99	0	99	99
NIS	0.25 % V/V	V5				
AMS	3.7 % V/V	V5				
2 GUARDSMAN MAX	48 FL OZ/A PRE		99	0	99	99
ROUNDUP POWERMAX	22 FL OZ/AV5					
NIS	0.25 % V/V	V5				
AMS	3.7 % V/V	V5				
3 VERDICT	15 FL OZ/A PRE		99	0	99	99
ROUNDUP POWERMAX	22 FL OZ/AV5					
NIS	0.25 % V/V	V5				
AMS	3.7 % V/V	V5				
4 VERDICT	15 FL OZ/A PRE		99	0	99	99
ROUNDUP POWERMAX	22 FL OZ/AV5					
NIS	0.25 % V/V	V5				
AMS	3.7 % V/V	V5				
HEADLINE AMP	10 FL OZ/A R1					
NIS	0.25 % V/V	R1				
5 VERDICT	15 FL OZ/A PRE		99	0	99	99
STATUS	5 FL OZ/AV5					
PRIAXOR	4 FL OZ/AV5					
ROUNDUP POWERMAX	22 FL OZ/AV5					
NIS	0.25 % V/V	V5				
AMS	3.7 % V/V	V5				
HEADLINE AMP	10 FL OZ/A R1					
NIS	0.25 % V/V	R1				
6 VERDICT	15 FL OZ/A PRE		99	0	99	99
ROUNDUP POWERMAX	22 FL OZ/AV3					
ARMEZON	0.75 FL OZ/AV3					
ATRAZINE	16 FL OZ/AV3					
MSO	1 % V/V	V3				
AMS	3.7 % V/V	V3				
HEADLINE AMP	10 FL OZ/A R1					
NIS	0.25 % V/V	R1				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	SETFA	AMACH
Pest Scientific Name	Chenopodium al>	Setaria faberi	Amaranthus hyb>
Pest Name	Common lambsqu>	Giant foxtail	Smooth pigweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Crop Variety			
Description			
Part Rated			
Rating Date			
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	4 WEEK	4 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	5	6	7	8
7 VERDICT	15 FL OZ/A PRE		99	0	99	99
ROUNDUP POWERMAX	22 FL OZ/AV3					
ARMEZON	0.75 FL OZ/AV3					
ATRAZINE	16 FL OZ/AV3					
MSO	1 % V/V V3					
AMS	3.7 % V/V V3					
PRIAXOR	4 FL OZ/AV10					
HEADLINE AMP	10 FL OZ/AR1					
NIS	0.25 % V/V R1					
LSD (P=.05)			0.0	0.0	0.0	0.0
Standard Deviation			0.0	0.0	0.0	0.0
CV			0.0	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed			
Pest Code	IPOSS	CHEAL	SETFA			
Pest Scientific Name	Ipomoea sp.Chenopodium al>		Setaria faberi			
Pest Name	Morning gloryCommon lambsqu>		Giant foxtail			
Crop Code			ZEAMX			
BBCH Scale			BCOR			
Crop Scientific Name			Zea mays			
Crop Name			Corn			
Crop Variety						
Description						
Part Rated						
Rating Date						
Rating Type	CONTROL	CONTROL	INJURY			
Rating Unit	PERCENT	PERCENT	PERCENT			
Rating Timing	4 WEEK	4 WEEK	8 WEEK			
Trt Treatment	Rate	Growth	9	10	11	12
No. Name	Rate Unit	Stage				
1 ROUNDUP POWERMAX	22 FL OZ/AV5		99	99	0	99
NIS	0.25 % V/V V5					
AMS	3.7 % V/V V5					
2 GUARDSMAN MAX	48 FL OZ/A PRE		99	99	0	99
ROUNDUP POWERMAX	22 FL OZ/AV5					
NIS	0.25 % V/V V5					
AMS	3.7 % V/V V5					
3 VERDICT	15 FL OZ/A PRE		99	99	0	99
ROUNDUP POWERMAX	22 FL OZ/AV5					
NIS	0.25 % V/V V5					
AMS	3.7 % V/V V5					
4 VERDICT	15 FL OZ/A PRE		99	99	0	99
ROUNDUP POWERMAX	22 FL OZ/AV5					
NIS	0.25 % V/V V5					
AMS	3.7 % V/V V5					
HEADLINE AMP	10 FL OZ/AR1					
NIS	0.25 % V/V R1					
5 VERDICT	15 FL OZ/A PRE		99	99	0	99
STATUS	5 FL OZ/AV5					
PRIAXOR	4 FL OZ/AV5					
ROUNDUP POWERMAX	22 FL OZ/AV5					
NIS	0.25 % V/V V5					
AMS	3.7 % V/V V5					
HEADLINE AMP	10 FL OZ/AR1					
NIS	0.25 % V/V R1					
6 VERDICT	15 FL OZ/A PRE		99	99	0	99
ROUNDUP POWERMAX	22 FL OZ/AV3					
ARMEZON	0.75 FL OZ/AV3					
ATRAZINE	16 FL OZ/AV3					
MSO	1 % V/V V3					
AMS	3.7 % V/V V3					
HEADLINE AMP	10 FL OZ/AR1					
NIS	0.25 % V/V R1					

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	IPOSS	CHEAL		SETFA
Pest Scientific Name	Ipomoea sp.	Chenopodium al>		Setaria faberi
Pest Name	Morning glory	Common lambsqu>		Giant foxtail
Crop Code			ZEAMX	
BBCH Scale			BCOR	
Crop Scientific Name			Zea mays	
Crop Name			Corn	
Crop Variety				
Description				
Part Rated				
Rating Date				
Rating Type	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK

Trt No.	Treatment Name	Rate	Unit	Growth Stage	9	10	11	12
7	VERDICT	15	FL OZ/A	PRE	99	99	0	99
	ROUNDUP POWERMAX	22	FL OZ/A	V3				
	ARMEZON	0.75	FL OZ/A	V3				
	ATRAZINE	16	FL OZ/A	V3				
	MISO	1	% V/V	V3				
	AMS	3.7	% V/V	V3				
	PRIAXOR	4	FL OZ/A	V10				
	HEADLINE AMP	10	FL OZ/A	R1				
	NIS	0.25	% V/V	R1				
	LSD (P=.05)				0.0	0.0	0.0	0.0
	Standard Deviation				0.0	0.0	0.0	0.0
	CV				0.0	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	AMACH	IPOSS	CHEAL	
Pest Scientific Name	Amaranthus hyb>	Ipomoea sp.	Chenopodium al>	
Pest Name	Smooth pigweed	Morning glory	Common lambsqu>	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Crop Variety				
Description				
Part Rated				
Rating Date				10/1/2013
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
Rating Timing	8 WEEK	8 WEEK	8 WEEK	
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	13	14
			15	20
1 ROUNDUP POWERMAX	22 FL OZ/AV5		99	99
NIS	0.25 % V/V V5			
AMS	3.7 % V/V V5			
2 GUARDSMAN MAX	48 FL OZ/A PRE		99	99
ROUNDUP POWERMAX	22 FL OZ/AV5			
NIS	0.25 % V/V V5			
AMS	3.7 % V/V V5			
3 VERDICT	15 FL OZ/A PRE		99	99
ROUNDUP POWERMAX	22 FL OZ/AV5			
NIS	0.25 % V/V V5			
AMS	3.7 % V/V V5			
4 VERDICT	15 FL OZ/A PRE		99	99
ROUNDUP POWERMAX	22 FL OZ/AV5			
NIS	0.25 % V/V V5			
AMS	3.7 % V/V V5			
HEADLINE AMP	10 FL OZ/AR1			
NIS	0.25 % V/V R1			
5 VERDICT	15 FL OZ/A PRE		99	99
STATUS	5 FL OZ/AV5			
PRIAXOR	4 FL OZ/AV5			
ROUNDUP POWERMAX	22 FL OZ/AV5			
NIS	0.25 % V/V V5			
AMS	3.7 % V/V V5			
HEADLINE AMP	10 FL OZ/AR1			
NIS	0.25 % V/V R1			
6 VERDICT	15 FL OZ/A PRE		99	99
ROUNDUP POWERMAX	22 FL OZ/AV3			
ARMEZON	0.75 FL OZ/AV3			
ATRAZINE	16 FL OZ/AV3			
MSO	1 % V/V V3			
AMS	3.7 % V/V V3			
HEADLINE AMP	10 FL OZ/AR1			
NIS	0.25 % V/V R1			

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMACH	IPOSS	CHEAL
Pest Scientific Name	Amaranthus hyb>	Ipomoea sp.	Chenopodium al>
Pest Name	Smooth pigweed	Morning glory	Common lambsqu>
Crop Code			
BBCH Scale			
Crop Scientific Name			ZeamX
Crop Name			BCOR
Crop Variety			Zea mays
Description			Corn
Part Rated			
Rating Date			10/1/2013
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	8 WEEK	8 WEEK	8 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	13	14	15	20
7 VERDICT	15 FL OZ/A PRE					
ROUNDUP POWERMAX	22 FL OZ/AV3		99	99	99	210
ARMEZON	0.75 FL OZ/AV3					
ATRAZINE	16 FL OZ/AV3					
MSO	1 % V/V	V3				
AMS	3.7 % V/V	V3				
PRIAXOR	4 FL OZ/AV10					
HEADLINE AMP	10 FL OZ/AR1					
NIS	0.25 % V/V	R1				
LSD (P=.05)			0.0	0.0	0.0	8.4
Standard Deviation			0.0	0.0	0.0	7.2
CV			0.0	0.0	0.0	3.46

Plant and Soil Science, U of KY
Weed Science Research

CORN POSTEMERGENCE V

Trial ID: C13020	Location: LEXINGTON, KY	Trial Year: 2013
Protocol ID: BASF-CORN-YIELD	Investigator: Charles H Slack	
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, = US
 AMACH, Amaranthus hybridus, = US
 IPOSS, Ipomoea sp., = US
 CHEAL, Chenopodium album, = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent
 BU = bushel

ARM Action Codes

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

Plant and Soil Science, U of KY
Weed Science Research

CORN POSTEMERGENCE V

Trial ID: C13020 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: BASF-CORN-YIELD Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: GREG STAPLETON

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/2/2013
Completion Date: 10/1/2013

Trial Location

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

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: 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

Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC61-89RIB

Planting Rate, Unit: 30000 S/A	Planting Date: 5/2/2013
Depth, Unit: 1.5 IN	Planting Method: PLANTD planted
Row Spacing, Unit: 30 IN	Planting Equipment: PP Plot Planter
Spacing Within Row, Unit: 7 IN	Emergence Date: 5/9/2013
Soil Temperature, Unit: 63 F	Harvest Date: 10/1/2013
Soil Moisture: EXCELL excellent	Harvested Width, Unit: 5 FT
Seed Bed: MEDIUM medium	Harvested Length, Unit: 38 FT
	Harvest Equipment: COMBINE
	% 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

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

Site and Design

Treated Plot Width: 10 FT	Site Type: FIELD field
Treated Plot Length: 44 FT	
Treated Plot Area: 440 FT2	Treatments: 7
Replications: 6	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

Analyzed By:

Moisture and Weather Conditions

Overall Moisture Conditions: WET wet

Closest Weather Station: SPINDLETOP **Distance, Unit:** 2.5 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

	A		B		C		D		E	
Application Date:	5/2/2013	5/29/2013	6/3/2013	7/3/2013	7/25/2013					
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY					
Application Timing:	PRE	V3	V5	V10	R1					
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL					
Applied By:	C H SLACK	C H SLACK	C H SLACK	SARA LAWSON	SARA LAWSON					
Air Temperature, Unit:	78 F	78 F	73 F	72 F	72 F					
% Relative Humidity:	40	49	50							
Wind Velocity, Unit:	6 MPH	9 MPH	8 MPH	6 MPH	4 MPH					
Wind Direction:	SW	SW	NW	SW	SE					
Soil Temperature, Unit:	61 F	71 F	72 F	75 F	76 F					
Soil Moisture:	EXCELL	GOOD	GOOD	WET	WET					
% Cloud Cover:	20	10	10	30	10					
Next Moisture Occurred On:	5/4/2013	5/31/2013	6/6/2013	7/4/2013	7/27/2013					

Crop Stage At Each Application

	A		B		C		D		E	
Crop 1 Code, BBCH Scale:	ZEAMX	BCOR	ZEAMX	BCOR	ZEAMX	BCOR	ZEAMX	BCOR	ZEAMX	BCOR
Stage Scale Used:		BBCH		BBCH		BBCH		BBCH		BBCH
Stage Majority, Percent:		V3		95 V5		98 V10		100 R1		100

Pest Stage At Each Application

	A		B		C		D		E	
Pest 1 Code, Type, Scale:	SETFA	WSETFA	W	SETFA	W	SETFA	W	SETFA	W	
Height, Unit:		2		IN 3		IN 6		IN 10		IN
Pest 2 Code, Type, Scale:	AMBTR	WAMBTR	W	AMBTR	W	AMBTR	W	AMBTR	W	
Height, Unit:		3		IN 4		IN 8		IN 14		IN
Pest 3 Code, Type, Scale:	IPOSS	WIPOSS	W	IPOSS	W	IPOSS	W	IPOSS	W	
Height, Unit:		1		IN 3		IN 5		IN 8		IN
Pest 4 Code, Type, Scale:	CHEAL	WCHEAL	W	CHEAL	W	CHEAL	W	CHEAL	W	
Height, Unit:		2		IN 3		IN 5		IN 9		IN

Plant and Soil Science, U of KY
Weed Science Research

Application Equipment

	A		B		C		D		E	
Appl. Equipment:	ATV		ATV		ATV		BACKPACK		BACKPACK	
Equipment Type:	ALTEVE		ALTEVE		ALTEVE		BELSPR		BELSPR	
Operation Pressure, Unit:	30	PSI	30	PSI	30	PSI	30	PSI	30	PSI
Nozzle Type:	FLAT	FAN	FLAT	FAN	FLAT	FAN	FLAT	FAN	FLAT	FAN
Nozzle Size:	8004	DG	8004	DG	8004	DG	8004	DG	8004	DG
Nozzle Spacing, Unit:	20	IN	20	IN	20	IN	20	IN	20	IN
Boom Length, Unit:	10	FT	10	FT	10	FT	10	FT	10	FT
Boom Height, Unit:	30	IN	30	IN	30	IN	30	IN	30	IN
Ground Speed, Unit:	4	MPH	4	MPH	4	MPH	4	MPH	4	MPH
Carrier:	WATER		WATER		WATER		WATER		WATER	
Spray Volume, Unit:	24	GPA	24	GPA	24	GPA	24	GPA	24	GPA
Mix Size, Unit:	6	liters	6	liters	6	liters	6	liters	6	liters
Propellant:	CO2		CO2		CO2		CO2		CO2	

Plant and Soil Science, U of KY
Weed Science Research

CORN VARIETY TEST

Trial ID: C13021 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: CORN VAR Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: MATT LIVESAY/MITCH BLAIR

Pest Type
Pest Code
Pest Scientific Name
Pest Name
Crop Code ZEAMX ZEAMX ZEAMX ZEAMX
BBCH Scale BCOR BCOR BCOR BCOR
Crop Scientific Name Zea mays Zea mays Zea mays Zea mays
Crop Name Corn Corn Corn Corn
Crop Variety
Description
Part Rated
Rating Date
Rating Type
Rating Unit CROP CROP CROP YIELD
Rating Timing 2 WEEK 4 WEEK 8 WEEK BU

Trt No.	Treatment	Rate	Growth	1	2	3	6
No.	Name	Rate Unit	Stage				
1	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	208
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	DKC 69-29						
2	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	208
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	DKC 69-29						
3	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	210
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	DKC 67-58						
4	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	210
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	DKC 67-58						

Plant and Soil Science, U of KY
Weed Science Research

Pest Type
Pest Code
Pest Scientific Name
Pest Name
Crop Code ZEAMX ZEAMX ZEAMX ZEAMX
BBCH Scale BCOR BCOR BCOR BCOR
Crop Scientific Name Zea mays Zea mays Zea mays Zea mays
Crop Name Corn Corn Corn Corn
Crop Variety
Description
Part Rated
Rating Date
Rating Type CROP CROP CROP YIELD
Rating Unit INJURY INJURY INJURY BU
Rating Timing 2 WEEK 4 WEEK 8 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	6
5	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	214
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 %	V/VV5				
	DKC 66-97						
6	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	209
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 %	V/VV5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	DKC 66-97						
7	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	211
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 %	V/VV5				
	DKC 66-40						
8	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	209
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 %	V/VV5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	DKC 66-40						
9	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	213
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 %	V/VV5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	HEADLINE AMP	10 OZ/A	VT				
	FRANCHISE	4 OZ/A	VT				
	DKC 66-40						

Plant and Soil Science, U of KY
Weed Science Research

Pest Type
Pest Code
Pest Scientific Name
Pest Name
Crop Code ZEAMX ZEAMX ZEAMX ZEAMX
BBCH Scale BCOR BCOR BCOR BCOR
Crop Scientific Name Zea mays Zea mays Zea mays Zea mays
Crop Name Corn Corn Corn Corn
Crop Variety
Description
Part Rated
Rating Date
Rating Type CROP CROP CROP YIELD
Rating Unit INJURY INJURY INJURY BU
Rating Timing 2 WEEK 4 WEEK 8 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	6
10	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	221
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 %	V/VV5				
	DKC 65-19						
11	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	224
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 %	V/VV5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	DKC 65-19						
12	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	215
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 %	V/VV5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	HEADLINE AMP	10 OZ/A	VT				
	FRANCHISE	4 OZ/A	VT				
	DKC 65-19						
13	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	202
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 %	V/VV5				
	DKC 64-87						
14	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	205
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 %	V/VV5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	DKC 64-87						

Plant and Soil Science, U of KY
Weed Science Research

Pest Type
Pest Code
Pest Scientific Name
Pest Name
Crop Code ZEAMX ZEAMX ZEAMX ZEAMX
BBCH Scale BCOR BCOR BCOR BCOR
Crop Scientific Name Zea mays Zea mays Zea mays Zea mays
Crop Name Corn Corn Corn Corn
Crop Variety
Description
Part Rated
Rating Date
Rating Type CROP CROP CROP YIELD
Rating Unit INJURY INJURY INJURY BU
Rating Timing 2 WEEK 4 WEEK 8 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	6
15	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	212
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	HEADLINE AMP	10 OZ/A	VT				
	FRANCHISE	4 OZ/A	VT				
	DKC 64-87						
16	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	232
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	P 1498						
17	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	234
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	P 1498						
18	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	204
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	DKC 64-99						
19	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	213
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	DKC 64-99						

Plant and Soil Science, U of KY
Weed Science Research

Pest Type
Pest Code
Pest Scientific Name
Pest Name
Crop Code ZEAMX ZEAMX ZEAMX ZEAMX
BBCH Scale BCOR BCOR BCOR BCOR
Crop Scientific Name Zea mays Zea mays Zea mays Zea mays
Crop Name Corn Corn Corn Corn
Crop Variety
Description
Part Rated
Rating Date
Rating Type CROP CROP CROP YIELD
Rating Unit INJURY INJURY INJURY BU
Rating Timing 2 WEEK 4 WEEK 8 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	6
20	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	200
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 %	V/VV5				
	DKC 63-33						
21	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	209
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 %	V/VV5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	DKC 63-33						
22	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	219
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 %	V/VV5				
	P 1319						
23	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	230
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 %	V/VV5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	P1319						
24	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	215
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 %	V/VV5				
	DKC 63-25						

Plant and Soil Science, U of KY
Weed Science Research

Pest Type
Pest Code
Pest Scientific Name
Pest Name
Crop Code ZEAMX ZEAMX ZEAMX ZEAMX
BBCH Scale BCOR BCOR BCOR BCOR
Crop Scientific Name Zea mays Zea mays Zea mays Zea mays
Crop Name Corn Corn Corn Corn
Crop Variety
Description
Part Rated
Rating Date
Rating Type CROP CROP CROP YIELD
Rating Unit INJURY INJURY INJURY BU
Rating Timing 2 WEEK 4 WEEK 8 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	6
25	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	210
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	DKC 63-25						
26	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	214
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	HEADLINE AMP	10 OZ/A	VT				
	FRANCHISE	4 OZ/A	VT				
	DKC 63-25						
27	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	223
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	DKC 62-98						
28	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	223
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	DKC 62-98						
29	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	212
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	DKC 62-08						

Plant and Soil Science, U of KY
Weed Science Research

Pest Type
 Pest Code
 Pest Scientific Name
 Pest Name
 Crop Code ZEAMX ZEAMX ZEAMX ZEAMX
 BBCH Scale BCOR BCOR BCOR BCOR
 Crop Scientific Name Zea mays Zea mays Zea mays Zea mays
 Crop Name Corn Corn Corn Corn
 Crop Variety
 Description
 Part Rated
 Rating Date
 Rating Type CROP CROP CROP YIELD
 Rating Unit INJURY INJURY INJURY BU
 Rating Timing 2 WEEK 4 WEEK 8 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	6
30	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	235
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	DKC 62-08						
31	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	226
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	HEADLINE AMP	10 OZ/A	VT				
	FRANCHISE	4 OZ/A	VT				
	DKC 62-08						
32	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	218
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	DKC 61-89						
33	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	206
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	DKC 61-89						

Plant and Soil Science, U of KY
Weed Science Research

Pest Type
 Pest Code
 Pest Scientific Name
 Pest Name
 Crop Code ZEAMX ZEAMX ZEAMX ZEAMX
 BBCH Scale BCOR BCOR BCOR BCOR
 Crop Scientific Name Zea mays Zea mays Zea mays Zea mays
 Crop Name Corn Corn Corn Corn
 Crop Variety
 Description
 Part Rated
 Rating Date
 Rating Type CROP CROP CROP YIELD
 Rating Unit INJURY INJURY INJURY BU
 Rating Timing 2 WEEK 4 WEEK 8 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	6
34	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	219
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	HEADLINE AMP	10 OZ/A	VT				
	FRANCHISE	4 OZ/A	VT				
	DKC 61-89						
35	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	192
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	DKC 61-78						
36	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	206
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	DKC 61-78						
37	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	203
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	P 0912						
38	GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	209
	ZIDUA	2.5 OZ/A	PRE				
	VERDICT	15 OZ/A	PRE				
	MSO	1 PT/A	PRE				
	ROUNDUP POWERMAX	22 OZ/A	V5				
	AMS	3.7 % V/V	V5				
	PRIAXOR	4 OZ/A	V5				
	FRANCHISE	4 OZ/A	V5				
	P 0912						

Plant and Soil Science, U of KY
Weed Science Research

Pest Type
Pest Code
Pest Scientific Name
Pest Name
Crop Code ZEAMX ZEAMX ZEAMX ZEAMX
BBCH Scale BCOR BCOR BCOR BCOR
Crop Scientific Name Zea mays Zea mays Zea mays Zea mays
Crop Name Corn Corn Corn Corn
Crop Variety
Description
Part Rated
Rating Date
Rating Type CROP CROP CROP YIELD
Rating Unit INJURY INJURY INJURY BU
Rating Timing 2 WEEK 4 WEEK 8 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	6
39 GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	177
ZIDUA	2.5 OZ/A	PRE				
VERDICT	15 OZ/A	PRE				
MSO	1 PT/A	PRE				
ROUNDUP POWERMAX	22 OZ/A	V5				
AMS	3.7 %	V/VV5				
DKC 60-67						
40 GRAMOXONE INTEON	3 PT/A	PRE	0	0	0	208
ZIDUA	2.5 OZ/A	PRE				
VERDICT	15 OZ/A	PRE				
MSO	1 PT/A	PRE				
ROUNDUP POWERMAX	22 OZ/A	V5				
AMS	3.7 %	V/VV5				
PRIAXOR	4 OZ/A	V5				
FRANCHISE	4 OZ/A	V5				
DKC 60-67						
LSD (P=.05)			0.0	0.0	0.0	18.1
Standard Deviation			0.0	0.0	0.0	12.9
CV			0.0	0.0	0.0	6.07

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

BU = bushel

ARM Action Codes

TY1 = 6.222857*[C4]*(100-[C5])/84.5

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Weed Science Research

CORN VARIETY TEST

Trial ID: C13021 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: CORN VAR Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: MATT LIVESAY/MITCH BLAIR

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: S varietal screening
Trial Status: F one-year/final
Initiation Date: 5/15/2013
Completion Date: 10/14/2013

Trial Location

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

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: 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

Other Contacts

Name **Role** **Other**
SARA LAWSON RESEARCH ANALYST sara.carter@uky.edu

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC 69-29
Planting Rate, Unit: 30000 S/A **Planting Date:** 5/15/2013
Planting Method: PLANT planted
Depth, Unit: 1.5 IN **Planting Equipment:** PP Plot Planter
Row Spacing, Unit: 30 IN **Emergence Date:** 5/21/2013

Plant and Soil Science, U of KY
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Harvest Date: 10/21/2013
Harvested Width, Unit: 5 FT
Soil Temperature, Unit: 66 F **Harvested Length, Unit:** 25 FT
Soil Moisture: WET wet **Harvest Equipment:** COMBINE
Seed Bed: MEDIUMmedium % **Standard Moisture:** 15.5

Crop 2: ZEAMX Zea mays Corn
Variety: DKC 67-58

Planting Rate, Unit: 30000 S/A **Planting Date:** 5/15/2013
Planting Method: PLANT planted
 D
Depth, Unit: 1.5 IN **Planting Equipment:** PP Plot Planter
Row Spacing, Unit: 30 IN **Emergence Date:** 5/21/2013
Harvest Date: 10/21/2013

Soil Temperature, Unit: 66 F **Harvested Width, Unit:** 5 FT
Harvested Length, Unit: 25 FT
Soil Moisture: WET wet **Harvest Equipment:** COMBINE
Seed Bed: MEDIUMmedium % **Standard Moisture:** 15.5

Crop 3: ZEAMX Zea mays Corn
Variety: DKC 66--97

Planting Rate, Unit: 30000 S/A **Planting Date:** 5/15/2013
Planting Method: PLANT planted
 D
Depth, Unit: 1.5 IN **Planting Equipment:** PP Plot Planter
Row Spacing, Unit: 30 IN **Emergence Date:** 5/21/2013
Harvest Date: 10/21/2013

Soil Temperature, Unit: 66 F **Harvested Width, Unit:** 5 FT
Harvested Length, Unit: 25 FT
Soil Moisture: WET wet **Harvest Equipment:** COMBINE
Seed Bed: MEDIUMmedium % **Standard Moisture:** 15.5

Crop 4: ZEAMX Zea mays Corn
Variety: DKC 66-40

Planting Rate, Unit: 30000 S/A **Planting Date:** 5/15/2013
Planting Method: PLANT planted
 D
Depth, Unit: 1.5 IN **Planting Equipment:** PP Plot Planter
Row Spacing, Unit: 30 IN **Emergence Date:** 5/21/2013
Harvest Date: 10/21/2013

Soil Temperature, Unit: 66 F **Harvested Width, Unit:** 5 FT
Harvested Length, Unit: 25 FT
Soil Moisture: WET wet **Harvest Equipment:** COMBINE
Seed Bed: MEDIUMmedium % **Standard Moisture:** 15.5

Crop 5: ZEAMX Zea mays Corn

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Variety: DKC 65-19

Planting Date: 5/15/2013

Planting Rate, Unit: 30000 S/A

Planting Method: PLANT planted
D

Depth, Unit: 1.5 IN

Planting Equipment: PP Plot Planter

Row Spacing, Unit: 30 IN

Emergence Date: 5/21/2013

Harvest Date: 10/21/2013

Harvested Width, Unit: 5 FT

Soil Temperature, Unit: 66 F

Harvested Length, Unit: 25 FT

Soil Moisture: WET wet

Harvest Equipment: COMBINE

Seed Bed: MEDIUMmedium % **Standard Moisture:** 15.5

Crop 6: ZEAMX Zea mays Corn

Variety: DKC 64-87

Planting Date: 5/15/2013

Planting Rate, Unit: 30000 S/A

Planting Method: PLANT planted
D

Depth, Unit: 1.5 IN

Planting Equipment: PP Plot Planter

Row Spacing, Unit: 30 IN

Emergence Date: 5/21/2013

Harvest Date: 10/21/2013

Harvested Width, Unit: 5 FT

Soil Temperature, Unit: 66 F

Harvested Length, Unit: 25 FT

Soil Moisture: WET wet

Harvest Equipment: COMBINE

Seed Bed: MEDIUMmedium % **Standard Moisture:** 15.5

Crop 7: ZEAMX Zea mays Corn

Variety: P 1498

Planting Date: 5/15/2013

Planting Rate, Unit: 30000 S/A

Planting Method: PLANT planted
D

Depth, Unit: 1.5 IN

Planting Equipment: PP Plot Planter

Row Spacing, Unit: 30 IN

Emergence Date: 5/21/2013

Harvest Date: 10/21/2013

Harvested Width, Unit: 5 FT

Soil Temperature, Unit: 66 F

Harvested Length, Unit: 25 FT

Soil Moisture: WET wet

Harvest Equipment: COMBINE

Seed Bed: MEDIUMmedium % **Standard Moisture:** 15.5

Crop 8: ZEAMX Zea mays Corn

Variety: DKC 64-99

Planting Date: 5/15/2013

Planting Rate, Unit: 30000 S/A

Planting Method: PLANT planted
D

Depth, Unit: 1.5 IN

Planting Equipment: PP Plot Planter

Row Spacing, Unit: 30 IN

Emergence Date: 5/21/2013

Harvest Date: 10/21/2013

Plant and Soil Science, U of KY
Weed Science Research

Harvested Width, Unit: 5 FT
Soil Temperature, Unit: 66 F Harvested Length, Unit: 25 FT
Soil Moisture: WET wet Harvest Equipment: COMBINE
Seed Bed: MEDIUMmedium % Standard Moisture: 15.5

Crop 9: ZEAMX Zea mays Corn
Variety: DKC 63-33

Planting Rate, Unit: 30000 S/A Planting Date: 5/15/2013
Planting Method: PLANT planted
D
Depth, Unit: 1.5 IN Planting Equipment: PP Plot Planter
Row Spacing, Unit: 30 IN Emergence Date: 5/21/2013
Harvest Date: 10/21/2013

Harvested Width, Unit: 5 FT
Soil Temperature, Unit: 66 F Harvested Length, Unit: 25 FT
Soil Moisture: WET wet Harvest Equipment: COMBINE
Seed Bed: MEDIUMmedium % Standard Moisture: 15.5

Crop 10: ZEAMX Zea mays Corn
Variety: P 1319

Planting Rate, Unit: 30000 S/A Planting Date: 5/15/2013
Planting Method: PLANT planted
D
Depth, Unit: 1.5 IN Planting Equipment: PP Plot Planter
Row Spacing, Unit: 30 IN Emergence Date: 5/21/2013
Harvest Date: 10/21/2013

Harvested Width, Unit: 5 FT
Soil Temperature, Unit: 66 F Harvested Length, Unit: 25 FT
Soil Moisture: WET wet Harvest Equipment: COMBINE
Seed Bed: MEDIUMmedium % Standard Moisture: 15.5

Crop 11: ZEAMX Zea mays Corn
Variety: DKC 63-25

Planting Rate, Unit: 30000 S/A Planting Date: 5/15/2013
Planting Method: PLANT planted
D
Depth, Unit: 1.5 IN Planting Equipment: PP Plot Planter
Row Spacing, Unit: 30 IN Emergence Date: 5/21/2013
Harvest Date: 10/21/2013

Harvested Width, Unit: 5 FT
Soil Temperature, Unit: 66 F Harvested Length, Unit: 25 FT
Soil Moisture: WET wet Harvest Equipment: COMBINE
Seed Bed: MEDIUMmedium % Standard Moisture: 15.5

Crop 12: ZEAMX Zea mays Corn
Variety: DKC 62-98

Plant and Soil Science, U of KY
Weed Science Research

Soil Temperature, Unit: 66 F Harvested Length, Unit: 25 FT
Soil Moisture: WET wet Harvest Equipment: COMBINE
Seed Bed: MEDIUMmedium % Standard Moisture: 15.5

Crop 16: ZEAMX Zea mays Corn
Variety: P 0912

Planting Rate, Unit: 30000 S/A Planting Date: 5/15/2013
Planting Method: PLANT planted
D
Depth, Unit: 1.5 IN Planting Equipment: PP Plot Planter
Row Spacing, Unit: 30 IN Emergence Date: 5/21/2013
Harvest Date: 10/21/2013

Soil Temperature, Unit: 66 F Harvested Width, Unit: 5 FT
Harvested Length, Unit: 25 FT
Soil Moisture: WET wet Harvest Equipment: COMBINE
Seed Bed: MEDIUMmedium % Standard Moisture: 15.5

Crop 17: ZEAMX Zea mays Corn
Variety: DKC 60-67

Planting Rate, Unit: 30000 S/A Planting Date: 5/15/2013
Planting Method: PLANT planted
D
Depth, Unit: 1.5 IN Planting Equipment: PP Plot Planter
Row Spacing, Unit: 30 IN Emergence Date: 5/21/2013
Harvest Date: 10/21/2013

Soil Temperature, Unit: 66 F Harvested Width, Unit: 5 FT
Harvested Length, Unit: 25 FT
Soil Moisture: WET wet Harvest Equipment: COMBINE
Seed Bed: MEDIUMmedium % Standard Moisture: 15.5

Site and Design

Treated Plot Width: 10 FT Site Type: FIELD field
Treated Plot Length: 33 FT
Treated Plot Area: 330 FT2 Treatments: 40 Tillage Type: NOTILL no-till
Replications: 4 Study Design: SPLBLO Split-Block

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:

Plant and Soil Science, U of KY
Weed Science Research

Moisture and Weather Conditions

Overall Moisture Conditions: WET wet
Closest Weather Station: SPINDLETOP Distance, Unit: 1 MI

Application Description

	A	B	C
Application Date:	5/16/2013	6/12/2013	7/25/2013
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	V5	VT
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	SARA LAWSON
Air Temperature, Unit:	92 F	92 F	75 F
% Relative Humidity:	52	52	60
Wind Velocity, Unit:	8 MPH	8 MPH	5 MPH
Wind Direction:	SSW	SSW	WSW
Soil Temperature, Unit:	63 F	75 F	76 F
Soil Moisture:	GOOD	GOOD	GOOD
% Cloud Cover:	10	10	10
Next Moisture Occurred On:	5/18/2013	6/13/2013	7/27/2013

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:		V5	95 VT 95
Crop 2 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:		V5	95 VT 95
Crop 3 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:		V5	95 VT 95
Crop 4 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:		V5	95 VT 95
Crop 5 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:		V5	95 VT 95
Crop 6 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:		V5	95 VT 95
Crop 7 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:		V5	95 VT 95
Crop 8 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:		V5	95 VT 95

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Crop 9 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:	V5	95 VT	95
Crop10 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:	V5	95 VT	95
Crop11 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:	V5	95 VT	95
Crop12 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:	V5	95 VT	95
Crop13 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:	V5	95 VT	95
Crop14 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:	V5	95 VT	95
Crop15 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:	V5	95 VT	95
Crop16 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:	V5	95 VT	95
Crop17 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH	BBCH
Stage Majority, Percent:		V5	95 VT 95

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

Plant and Soil Science, U of KY
Weed Science Research

NO TILL SOYBEAN

Trial ID: S13021
Protocol ID: CHEM-HGLXMAFOMME1302
Project ID: HGLXMAFOMME1302

Location: USA Trial Year: 2013
Investigator: Charles H Slack
Study Director: CHARLES SLACK
Sponsor Contact: BRENT JACOBSON

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Crop Variety				
Description				
Part Rated				
Rating Date	6/14/2013	6/14/2013	6/14/2013	6/14/2013
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
1 STATEMENT	32 FL OZ/AMP		0	96	96	93
GLYFOS X-TRA	32 FL OZ/AMP					
2 STATEMENT	40 FL OZ/AMP		0	99	95	90
GLYFOS X-TRA	32 FL OZ/AMP					
3 RHYTHM	25.5 FL OZ/AMP		0	93	96	95
GLYFOS X-TRA	32 FL OZ/AMP					
4 DAWN	24 FL OZ/AMP		0	96	91	83
GLYFOS X-TRA	32 FL OZ/AMP					
5 PREFIX	32 FL OZ/AMP		0	98	95	85
GLYFOS X-TRA	32 FL OZ/AMP					
6 PREFIX	40 FL OZ/AMP		0	95	95	92
GLYFOS X-TRA	32 FL OZ/AMP					
7 GLYFOS X-TRA	32 FL OZ/AMP		0	96	93	90
8 CHECK UNTREATED			0	0	0	0
LSD (P=.05)			0.0	6.3	8.5	12.4
Standard Deviation			0.0	3.6	4.8	7.1
CV			0.0	4.3	5.87	9.01

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	ERICA	AMACH	SETFA	
Pest Scientific Name	Conyza canadensis>Amaranthus hybrid>		Setaria faberii	
Pest Name	Marestail	Smooth pigweed	Giant foxtail	
Crop Code			GLXMA	
BBCH Scale			BSOY	
Crop Scientific Name			Glycine max	
Crop Name			Soybean	
Crop Variety				
Description				
Part Rated				
Rating Date	6/14/2013	6/14/2013	6/28/2013	6/28/2013
Rating Type	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	4 WEEK	4 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	5	6	7	8
1 STATEMENT	32 FL OZ/AMP		96	99	0	96
GLYFOS X-TRA	32 FL OZ/AMP					
2 STATEMENT	40 FL OZ/AMP		99	99	0	99
GLYFOS X-TRA	32 FL OZ/AMP					
3 RHYTHM	25.5 FL OZ/AMP		96	99	0	93
GLYFOS X-TRA	32 FL OZ/AMP					
4 DAWN	24 FL OZ/AMP		99	99	0	96
GLYFOS X-TRA	32 FL OZ/AMP					
5 PREFIX	32 FL OZ/AMP		99	99	0	98
GLYFOS X-TRA	32 FL OZ/AMP					
6 PREFIX	40 FL OZ/AMP		99	99	0	95
GLYFOS X-TRA	32 FL OZ/AMP					
7 GLYFOS X-TRA	32 FL OZ/AMP		99	99	0	96
8 CHECK UNTREATED			0	33	0	0
LSD (P=.05)			4.2	35.4	0.0	6.3
Standard Deviation			2.4	20.2	0.0	3.6
CV			2.8	22.27	0.0	4.3

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	ERICA	AMACH
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	Conyza canadens>	Amaranthus hyb>
Pest Name	Giant ragweed	Morning glory	Marestail	Smooth pigweed
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Crop Variety				
Description				
Part Rated				
Rating Date	6/28/2013	6/28/2013	6/28/2013	6/28/2013
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	9	10	11	12
1 STATEMENT	32 FL OZ/AMP		90	88	96	99
GLYFOS X-TRA	32 FL OZ/AMP					
2 STATEMENT	40 FL OZ/AMP		93	88	99	99
GLYFOS X-TRA	32 FL OZ/AMP					
3 RHYTHM	25.5 FL OZ/AMP		91	91	96	99
GLYFOS X-TRA	32 FL OZ/AMP					
4 DAWN	24 FL OZ/AMP		87	78	99	99
GLYFOS X-TRA	32 FL OZ/AMP					
5 PREFIX	32 FL OZ/AMP		90	83	96	99
GLYFOS X-TRA	32 FL OZ/AMP					
6 PREFIX	40 FL OZ/AMP		87	90	99	99
GLYFOS X-TRA	32 FL OZ/AMP					
7 GLYFOS X-TRA	32 FL OZ/AMP		86	90	99	99
8 CHECK UNTREATED			0	0	0	0
LSD (P=.05)			8.7	11.0	4.7	0.0
Standard Deviation			5.0	6.3	2.7	0.0
CV			6.36	8.23	3.15	0.0

Plant and Soil Science, U of KY
Weed Science Research

NO TILL SOYBEAN

Trial ID: S13021	Location: USA	Trial Year: 2013
Protocol ID: CHEM-HGLXMAFOMME1302	Investigator: Charles H Slack	
Project ID: HGLXMAFOMME1302	Study Director: CHARLES SLACK	
	Sponsor Contact: BRENT JACOBSON	

Pest Type

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

Pest Code

SETFA, Setaria faberi, = US
AMBTR, Ambrosia trifida, = US
IPOSS, Ipomoea sp., = US
ERICA, Conyza canadensis, = US
AMACH, Amaranthus hybridus, = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Unit

PERCENT = percent

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3832 **BBCH Scale:** BSOY

Planting Date: 5/3/2013

Planting Rate, Unit: 210000 S/A

Planting Method: DRILLE drilled

Depth, Unit: 1.5 IN

Planting Equipment: SR Drilling Machine

Row Spacing, Unit: 7 IN

Emergence Date: 5/10/2013

Soil Temperature, Unit: 63 F

Soil Moisture: WET wet

Seed Bed: MEDIUM medium

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

Pest 4 Type: W **Code:** ERICA Conyza canadensis
Common Name: Marestalk

Pest 5 Type: W **Code:** AMACH Amaranthus hybridus
Common Name: Smooth pigweed

Site and Design

Treated Plot Width: 8.5 FT

Site Type: FIELD field

Treated Plot Length: 44 FT

Treated Plot Area: 374 FT² **Treatments:** 8 **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: WET wet

Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.75 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

A

Application Date: 5/31/2013
Application Method: SPRAY
Application Timing: MP
Application Placement: BROFOL
Applied By: C H SLACK
Air Temperature, Unit: 81 F
% Relative Humidity: 54
Wind Velocity, Unit: 8 MPH
Wind Direction: S
Soil Temperature, Unit: 71 F
Soil Moisture: EXCELL
% Cloud Cover: 70
Next Moisture Occurred On: 6/1/2013

Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: GLXMA BSOY
Stage Scale Used: 2 TR
Height, Unit: 5 IN

Pest Stage At Each Application

A

Pest 1 Code, Type, Scale: SETFA W
Height, Unit: 3 IN
Pest 2 Code, Type, Scale: AMBTR W
Height, Unit: 4 IN
Pest 3 Code, Type, Scale: IPOSS W
Height, Unit: 2 IN
Pest 4 Code, Type, Scale: ERICA W
Height, Unit: 3 IN
Pest 5 Code, Type, Scale: AMACH W
Height, Unit: 2 IN

Plant and Soil Science, U of KY
Weed Science Research

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: 8.5 FT
Boom Height, Unit: 30 IN
Ground Speed, Unit: 4 MPH
Carrier: WATER
Spray Volume, Unit: 24 GPA
Mix Size, Unit: 2.5 liters
Propellant: CO2

Plant and Soil Science, U of KY
Weed Science Research

NO TILL SOYBEAN II

Trial ID: S13022 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: DOW SB Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: JONATHAN HUFF

Pest Type W Weed W Weed W Weed
Pest Code SETFA AMBTR IPOSS
Pest Scientific Name Setaria faberi Ambrosia trifi> Ipomoea sp.
Pest Name Giant foxtail Giant ragweed Morning glory
Crop Code GLXMA
BBCH Scale BSOY
Crop Scientific Name Glycine max
Crop Name Soybean
Crop Variety
Description
Part Rated
Rating Date 6/18/2013 6/18/2013 6/18/2013 6/18/2013
Rating Type INJURY CONTROL CONTROL CONTROL
Rating Unit PERCENT PERCENT PERCENT PERCENT
Rating Timing 2 WEEK 2 WEEK 2 WEEK 2 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
1 SONIC	3 OZ/A	PRE	0	99	99	99
DURANGO DMA	24 FL OZ/A LP					
AMS	3.7 % V/V	LP				
2 SONIC	4.5 OZ/A	PRE	0	99	99	99
DURANGO DMA	24 FL OZ/A LP					
AMS	3.7 % V/V	LP				
3 SONIC	6 OZ/A	PRE	0	99	99	99
DURANGO DMA	24 FL OZ/A LP					
AMS	3.7 % V/V	LP				
LSD (P=.05)			0.0	0.0	0.0	0.0
Standard Deviation			0.0	0.0	0.0	0.0
CV			0.0	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		ERICA	AMACH	SETFA
Pest Scientific Name		Conyza canadensis>Amaranthus hybridus>		Setaria faberii
Pest Name		Marestail	Smooth pigweed	Giant foxtail
Crop Code				GLXMA
BBCH Scale				BSOY
Crop Scientific Name				Glycine max
Crop Name				Soybean
Crop Variety				
Description				
Part Rated				
Rating Date		6/18/2013	6/18/2013	7/2/2013
Rating Type		CONTROL	CONTROL	INJURY
Rating Unit		PERCENT	PERCENT	PERCENT
Rating Timing		2 WEEK	2 WEEK	4 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	5	6	7	8
1 SONIC	3 OZ/A	PRE	99	99	0	99
DURANGO DMA	24 FL OZ/A LP					
AMS	3.7 % V/V	LP				
2 SONIC	4.5 OZ/A	PRE	99	99	0	99
DURANGO DMA	24 FL OZ/A LP					
AMS	3.7 % V/V	LP				
3 SONIC	6 OZ/A	PRE	99	99	0	99
DURANGO DMA	24 FL OZ/A LP					
AMS	3.7 % V/V	LP				
LSD (P=.05)			0.0	0.0	0.0	0.0
Standard Deviation			0.0	0.0	0.0	0.0
CV			0.0	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

NO TILL SOYBEAN II

Trial ID: S13022 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: DOW SB Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: JONATHAN HUFF

Pest Type

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

Pest Code

SETFA, Setaria faberi, = US
AMBTR, Ambrosia trifida, = US
IPOSS, Ipomoea sp., = US
ERICA, Conyza canadensis, = US
AMACH, Amaranthus hybridus, = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Unit

PERCENT = percent

Plant and Soil Science, U of KY
Weed Science Research

NO TILL SOYBEAN II

Trial ID: S13022 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: DOW SB Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: JONATHAN HUFF

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/3/2013
Completion Date: 9/9/2013

Trial Location

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

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
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Investigator: 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

Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3832

Planting Rate, Unit: 210000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 7 IN
Soil Temperature, Unit: 63 F
Soil Moisture: WET wet
Seed Bed: MEDIUM medium

Planting Date: 5/3/2013
Planting Method: DRILLE drilled
Planting Equipment: PD Plot Drilling Machine
Emergence Date: 5/10/2013

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

Pest 4 Type: W **Code:** ERICA Conyza canadensis
Common Name: Marestail

Pest 5 Type: W **Code:** AMACH Amaranthus hybridus
Common Name: Smooth pigweed

Site and Design

Treated Plot Width: 8.5 FT
Treated Plot Length: 44 FT
Treated Plot Area: 374 FT²
Replications: 3

Site Type: FIELD field
Treatments: 3
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: WET wet
Closest Weather Station: SPINDLETOP
Distance, Unit: 2 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

	A	B
Application Date:	5/3/2013	6/4/2013
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	LP
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	74 F	74 F
% Relative Humidity:	43	50
Wind Velocity, Unit:	6 MPH	8 MPH
Wind Direction:	SE	S
Soil Temperature, Unit:	63 F	69 F
Soil Moisture:	EXCELL	NORMAL
% Cloud Cover:	70	10
Next Moisture Occurred On:	5/4/2013	6/6/2013

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 WSETFA	W
Height, Unit:	2	IN
Pest 2 Code, Type, Scale:	AMBTR WAMBTR	W
Height, Unit:	4	IN
Pest 3 Code, Type, Scale:	IPOSS WIPOSS	W
Height, Unit:	2	IN
Pest 4 Code, Type, Scale:	ERICA WERICA	W
Height, Unit:	4	IN
Pest 5 Code, Type, Scale:	AMACH WAMACH	W
Height, Unit:	3	IN

Plant and Soil Science, U of KY
Weed Science Research

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	8.5	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	2.5	liters
Propellant:	CO2		CO2	

Date	By	Notes
5/3/2013	SARA CARTER	ENTIRE TRIAL AREA OVERSPRAYED WITH GRAMOXONE

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN III

Trial ID: S13023 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: LOVELAND-SB Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: PHILIP LOGSDON

Pest Type W Weed W Weed W Weed
Pest Code SETFA AMBTR IPOSS
Pest Scientific Name Setaria faberi Ambrosia trifida Ipomoea sp.
Pest Name Giant foxtail Giant ragweed Morning glory
Crop Code GLXMA
BBCH Scale BSOY
Crop Scientific Name Glycine max
Crop Name Soybean
Crop Variety
Description BEFORE POST BEFORE POST BEFORE POST BEFORE POST
Part Rated
Rating Date 6/3/2013 6/3/2013 6/3/2013 6/3/2013
Rating Type INJURY CONTROL CONTROL CONTROL
Rating Unit PERCENT PERCENT PERCENT PERCENT
Rating Timing

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
1 INTIMIDATOR	3 PT/A	PRE	0	98	83	83
MAKAZE	32 OZ/A	V3				
WEATHER GARD COMPLETE	0.5 % V/V	V3				
2 INTIMIDATOR	2 PT/A	PRE	0	96	83	83
MAKAZE	32 OZ/A	V3				
WEATHER GARD COMPLETE	0.5 % V/V	V3				
3 MATADOR S	3 PT/A	PRE	0	99	92	92
MAKAZE	32 OZ/A	V3				
WEATHER GARD COMPLETE	0.5 % V/V	V3				
4 MATADOR S	2 PT/A	PRE	0	99	79	87
MAKAZE	32 OZ/A	V3				
WEATHER GARD COMPLETE	0.5 % V/V	V3				
5 MATADOR S	2 PT/A	PRE	0	93	79	89
MAKAZE YIELD PRO	32 OZ/A	V3				
WEATHER GARD COMPLETE	0.5 % V/V	V3				
6 BOUNDARY	1.75 PT/A	PRE	0	98	80	83
TOUCHDOWN TOTAL	24 OZ/A	V3				
AMS	3.7 % V/V	V3				
7 AUTHORITY MTZ	14 OZ/A	PRE	0	94	86	90
ROUNDUP POWERMAX	22 FL OZ/A	V3				
AMS	3.7 % V/V	V3				
LSD (P=.05)			0.0	7.9	10.0	10.0
Standard Deviation			0.0	4.4	5.6	5.6
CV			0.0	4.57	6.77	6.51

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	ERICA	AMACH	
Pest Scientific Name	Conyza canadensis>Amaranthus hybrid>		
Pest Name	Marestail	Smooth pigweed	
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Crop Variety			
Description	BEFORE POST	BEFORE POST	AFTER POST
Part Rated			
Rating Date	6/3/2013	6/3/2013	6/18/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	5	6	7
1 INTIMIDATOR	3 PT/A	PRE	99	93	0
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
2 INTIMIDATOR	2 PT/A	PRE	99	93	0
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
3 MATADOR S	3 PT/A	PRE	99	95	0
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
4 MATADOR S	2 PT/A	PRE	99	92	0
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
5 MATADOR S	2 PT/A	PRE	99	96	0
MAKAZE YIELD PRO	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
6 BOUNDARY	1.75 PT/A	PRE	99	93	0
TOUCHDOWN TOTAL	24 OZ/A	V3			
AMS	3.7 % V/V	V3			
7 AUTHORITY MTZ	14 OZ/A	PRE	99	90	0
ROUNDUP POWERMAX	22 FL OZ/A	V3			
AMS	3.7 % V/V	V3			
LSD (P=.05)			0.0	5.2	0.0
Standard Deviation			0.0	2.9	0.0
CV			0.0	3.13	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	IPOSS
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name	Giant foxtail	Giant ragweed	Morning glory
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Crop Variety			
Description	AFTER POST	AFTER POST	AFTER POST
Part Rated			
Rating Date	6/18/2013	6/18/2013	6/18/2013
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	8	9	10
1 INTIMIDATOR	3 PT/A	PRE	98	93	90
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
2 INTIMIDATOR	2 PT/A	PRE	96	95	95
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
3 MATADOR S	3 PT/A	PRE	99	96	96
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
4 MATADOR S	2 PT/A	PRE	99	95	95
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
5 MATADOR S	2 PT/A	PRE	99	96	95
MAKAZE YIELD PRO	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
6 BOUNDARY	1.75 PT/A	PRE	99	95	95
TOUCHDOWN TOTAL	24 OZ/A	V3			
AMS	3.7 % V/V	V3			
7 AUTHORITY MTZ	14 OZ/A	PRE	99	98	98
ROUNDUP POWERMAX	22 FL OZ/A	V3			
AMS	3.7 % V/V	V3			
LSD (P=.05)			3.6	2.9	5.9
Standard Deviation			2.0	1.6	3.3
CV			2.04	1.71	3.51

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	ERICA	AMACH	
Pest Scientific Name	Conyza canadensis>Amaranthus hybrid>		
Pest Name	Marestail	Smooth pigweed	
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Crop Variety			
Description	AFTER POST	AFTER POST	
Part Rated			
Rating Date	6/18/2013	6/18/2013	7/2/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	11	12	13
1 INTIMIDATOR	3 PT/A	PRE			
MAKAZE	32 OZ/A	V3	99	95	0
WEATHER GARD COMPLETE	0.5 % V/V	V3			
2 INTIMIDATOR	2 PT/A	PRE	99	95	0
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
3 MATADOR S	3 PT/A	PRE	99	95	0
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
4 MATADOR S	2 PT/A	PRE	99	92	0
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
5 MATADOR S	2 PT/A	PRE	99	96	0
MAKAZE YIELD PRO	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
6 BOUNDARY	1.75 PT/A	PRE	99	93	0
TOUCHDOWN TOTAL	24 OZ/A	V3			
AMS	3.7 % V/V	V3			
7 AUTHORITY MTZ	14 OZ/A	PRE	99	90	0
ROUNDUP POWERMAX	22 FL OZ/A	V3			
AMS	3.7 % V/V	V3			
LSD (P=.05)			0.0	5.6	0.0
Standard Deviation			0.0	3.1	0.0
CV			0.0	3.35	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	IPOSS
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name	Giant foxtail	Giant ragweed	Morning glory
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Crop Variety			
Description			
Part Rated			
Rating Date	7/2/2013	7/2/2013	7/2/2013
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	14	15	16
1 INTIMIDATOR	3 PT/A	PRE	98	96	95
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
2 INTIMIDATOR	2 PT/A	PRE	96	95	95
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
3 MATADOR S	3 PT/A	PRE	99	99	99
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
4 MATADOR S	2 PT/A	PRE	99	95	96
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
5 MATADOR S	2 PT/A	PRE	99	98	98
MAKAZE YIELD PRO	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
6 BOUNDARY	1.75 PT/A	PRE	99	96	96
TOUCHDOWN TOTAL	24 OZ/A	V3			
AMS	3.7 % V/V	V3			
7 AUTHORITY MTZ	14 OZ/A	PRE	99	98	98
ROUNDUP POWERMAX	22 FL OZ/A	V3			
AMS	3.7 % V/V	V3			
LSD (P=.05)			3.6	4.7	3.4
Standard Deviation			2.0	2.6	1.9
CV			2.04	2.72	1.95

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	ERICA	AMACH	
Pest Scientific Name	Conyza canadensis>Amaranthus hybrid>		
Pest Name	Marestail	Smooth pigweed	
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Crop Variety			
Description			
Part Rated			
Rating Date	7/2/2013	7/2/2013	11/4/2013
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
Rating Timing			

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	17	18	22
1 INTIMIDATOR	3 PT/A	PRE	99	95	55
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
2 INTIMIDATOR	2 PT/A	PRE	99	95	61
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
3 MATADOR S	3 PT/A	PRE	99	95	64
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
4 MATADOR S	2 PT/A	PRE	99	92	62
MAKAZE	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
5 MATADOR S	2 PT/A	PRE	99	96	53
MAKAZE YIELD PRO	32 OZ/A	V3			
WEATHER GARD COMPLETE	0.5 % V/V	V3			
6 BOUNDARY	1.75 PT/A	PRE	99	93	57
TOUCHDOWN TOTAL	24 OZ/A	V3			
AMS	3.7 % V/V	V3			
7 AUTHORITY MTZ	14 OZ/A	PRE	99	90	50
ROUNDUP POWERMAX	22 FL OZ/A	V3			
AMS	3.7 % V/V	V3			
LSD (P=.05)			0.0	5.6	6.9
Standard Deviation			0.0	3.1	3.9
CV			0.0	3.35	6.71

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN III

Trial ID: S13023 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: LOVELAND-SB Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: PHILIP LOGSDON

Pest Type

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

Pest Code

SETFA, Setaria faberi, = US
AMBTR, Ambrosia trifida, = US
IPOSS, Ipomoea sp., = US
ERICA, Conyza canadensis, = US
AMACH, Amaranthus hybridus, = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent
BU = bushel

ARM Action Codes

TY1 = $3.821053 * [20] * (100 - [21]) / 87$

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN III

Trial ID: S13023 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: LOVELAND-SB Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: PHILIP LOGSDON

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/3/2013
Completion Date: 11/4/2013

Trial Location

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

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: 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

Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3832

Planting Date: 5/3/2013

Planting Rate, Unit: 210000 S/A

Planting Method: DRILLE drilled

Depth, Unit: 1.25 IN

Planting Equipment: SR Drilling Machine

Row Spacing, Unit: 7.5 IN

Emergence Date: 5/10/2013

Harvest Date: 11/4/2013

Harvested Width, Unit: 5 FT

Soil Temperature, Unit: 63 F

Harvested Length, Unit: 38 FT

Soil Moisture: WET wet

Harvest Equipment: WINTERSTEIGER

Seed Bed: MEDIUM medium

% 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

Pest 4 Type: W **Code:** ERICA *Conyza canadensis*
Common Name: Marestalk

Pest 5 Type: W **Code:** AMACH *Amaranthus hybridus*
Common Name: Smooth pigweed

Site and Design

Treated Plot Width: 8.5 FT

Site Type: FIELD field

Treated Plot Length: 44 FT

Treated Plot Area: 374 FT2 **Treatments:** 7 **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: WET wet

Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.75 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

	A	B
Application Date:	5/3/2013	6/4/2013
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	V3
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	74 F	75 F
% Relative Humidity:	43	50
Wind Velocity, Unit:	6 MPH	6 MPH
Wind Direction:	SE	E
Soil Temperature, Unit:	63 F	70 F
Soil Moisture:	EXCELL	NORMAL
% Cloud Cover:	70	10
Next Moisture Occurred On:	5/4/2013	6/6/2013

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

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA WSETFA	W
Height, Unit:		3 IN
Pest 2 Code, Type, Scale:	AMBTR WAMBTR	W
Height, Unit:		4 IN
Pest 3 Code, Type, Scale:	IPOSS WIPOSS	W
Height, Unit:		2 IN
Pest 4 Code, Type, Scale:	ERICA WERICA	W
Height, Unit:		3 IN
Pest 5 Code, Type, Scale:	AMACH WAMACH	W
Height, Unit:		3 IN

Plant and Soil Science, U of KY
Weed Science Research

Application Equipment

	A		B	
Appl. Equipment:	ATV		BACKPACK	
Equipment Type:			BELSPR	
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:	8.5	FT	8.5	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:	2.5	liters	2.5	liters
Propellant:	CO2		CO2	

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN IV

Trial ID: S13024 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: VAL-SB-POST Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: JOHN CRANMER

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Crop Variety				
Description	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Part Rated				
Rating Date	5/28/2013	5/28/2013	5/28/2013	5/28/2013
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing				

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
1 CHECK UNTREATED			0	75	67	88
2 VALOR SX	1 OZ/A	PRE	0	95	92	98
IGNITE 280	36 FL OZ/A	PRE				
AMS	3.7 % V/V	PRE				
ROUNDUP POWERMAX	32 FL OZ/A	MP				
AMS	3.7 % V/V	MP				
3 VALOR SX	1 OZ/A	PRE	0	86	67	88
IGNITE 280	36 FL OZ/A	PRE				
AMS	3.7 % V/V	PRE				
PREFIX	1 QT/A	MP				
ROUNDUP POWERMAX	32 FL OZ/A	MP				
AMS	3.7 % V/V	MP				
COC	1 QT/A	MP				
4 VALOR SX	1 OZ/A	PRE	0	96	82	92
IGNITE 280	36 FL OZ/A	PRE				
AMS	3.7 % V/V	PRE				
COBRA	12.5 FL OZ/A	MP				
V-10206	1.5 OZ/A	MP				
ROUNDUP POWERMAX	32 FL OZ/A	MP				
AMS	3.7 % V/V	MP				
COC	1 QT/A	MP				
5 VALOR SX	1 OZ/A	PRE	0	86	67	83
IGNITE 280	36 FL OZ/A	PRE				
AMS	3.7 % V/V	PRE				
COBRA	12.5 FL OZ/A	MP				
V-10206	2 OZ/A	MP				
ROUNDUP POWERMAX	32 FL OZ/A	MP				
AMS	3.7 % V/V	MP				
COC	1 QT/A	MP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Crop Variety				
Description	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Part Rated				
Rating Date	5/28/2013	5/28/2013	5/28/2013	5/28/2013
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing				

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4
6	VALOR SX	1	OZ/A	PRE	0	93	75	92
	IGNITE 280	36	FL OZ/A	PRE				
	AMS	3.7	% V/V	PRE				
	COBRA	12.5	FL OZ/AMP					
	WARRANT	3	PT/A	MP				
	ROUNDUP POWERMAX	32	FL OZ/AMP					
	AMS	3.7	% V/V	MP				
	COC	1	QT/A	MP				
7	VALOR SX	1	OZ/A	PRE	0	85	80	93
	IGNITE 280	36	FL OZ/A	PRE				
	AMS	3.7	% V/V	PRE				
	COBRA	12.5	FL OZ/AMP					
	DUAL II MAGNUM	1.33	PT/A	MP				
	ROUNDUP POWERMAX	32	FL OZ/AMP					
	AMS	3.7	% V/V	MP				
	COC	1	QT/A	MP				
	LSD (P=.05)				0.0	15.7	22.7	9.0
	Standard Deviation				0.0	8.8	12.8	5.1
	CV				0.0	10.01	16.88	5.61

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	ERICA	AMACH	SETFA
Pest Scientific Name	Conyza canadensis	Amaranthus hybridus	Setaria faberii
Pest Name	Marestail	Smooth pigweed	Giant foxtail
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Crop Variety			
Description	BEFORE POST	BEFORE POST	AFTER POST
Part Rated			
Rating Date	5/28/2013	5/28/2013	6/14/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	5	6	7	8
1 CHECK UNTREATED			99	72	0	0
2 VALOR SX	1 OZ/A	PRE	99	98	0	99
IGNITE 280	36 FL OZ/A	PRE				
AMS	3.7 % V/V	PRE				
ROUNDUP POWERMAX	32 FL OZ/A	MP				
AMS	3.7 % V/V	MP				
3 VALOR SX	1 OZ/A	PRE	99	82	0	99
IGNITE 280	36 FL OZ/A	PRE				
AMS	3.7 % V/V	PRE				
PREFIX	1 QT/A	MP				
ROUNDUP POWERMAX	32 FL OZ/A	MP				
AMS	3.7 % V/V	MP				
COC	1 QT/A	MP				
4 VALOR SX	1 OZ/A	PRE	99	93	10	99
IGNITE 280	36 FL OZ/A	PRE				
AMS	3.7 % V/V	PRE				
COBRA	12.5 FL OZ/A	MP				
V-10206	1.5 OZ/A	MP				
ROUNDUP POWERMAX	32 FL OZ/A	MP				
AMS	3.7 % V/V	MP				
COC	1 QT/A	MP				
5 VALOR SX	1 OZ/A	PRE	99	82	10	99
IGNITE 280	36 FL OZ/A	PRE				
AMS	3.7 % V/V	PRE				
COBRA	12.5 FL OZ/A	MP				
V-10206	2 OZ/A	MP				
ROUNDUP POWERMAX	32 FL OZ/A	MP				
AMS	3.7 % V/V	MP				
COC	1 QT/A	MP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	ERICA	AMACH		SETFA
Pest Scientific Name	Conyza canadens>Amaranthus hyb>		Setaria faberi	
Pest Name	Marestail	Smooth pigweed	Giant foxtail	
Crop Code			GLXMA	
BBCH Scale			BSOY	
Crop Scientific Name			Glycine max	
Crop Name			Soybean	
Crop Variety				
Description	BEFORE POST	BEFORE POST	AFTER POST	AFTER POST
Part Rated				
Rating Date	5/28/2013	5/28/2013	6/14/2013	6/14/2013
Rating Type	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing				

Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	5	6	7	8	
6 VALOR SX	1 OZ/A	PRE					
IGNITE 280	36 FL OZ/A	PRE	99		92	10	99
AMS	3.7 % V/V	PRE					
COBRA	12.5 FL OZ/AMP						
WARRANT	3 PT/A	MP					
ROUNDUP POWERMAX	32 FL OZ/AMP						
AMS	3.7 % V/V	MP					
COC	1 QT/A	MP					
7 VALOR SX	1 OZ/A	PRE	99		92	13	99
IGNITE 280	36 FL OZ/A	PRE					
AMS	3.7 % V/V	PRE					
COBRA	12.5 FL OZ/AMP						
DUAL II MAGNUM	1.33 PT/A	MP					
ROUNDUP POWERMAX	32 FL OZ/AMP						
AMS	3.7 % V/V	MP					
COC	1 QT/A	MP					
LSD (P=.05)			0.0		16.7	7.8	0.0
Standard Deviation			0.0		9.4	4.4	0.0
CV			0.0		10.78	70.5	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	ERICA	AMACH
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	Conyza canaden>	Amaranthus hyb>
Pest Name	Giant ragweed	Morning glory	Marestail	Smooth pigweed
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Crop Variety				
Description	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Part Rated				
Rating Date	6/14/2013	6/14/2013	6/14/2013	6/14/2013
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing				

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	9	10	11	12
1 CHECK UNTREATED			0	0	0	0
2 VALOR SX	1 OZ/A	PRE	99	99	99	99
IGNITE 280	36 FL OZ/A	PRE				
AMS	3.7 % V/V	PRE				
ROUNDUP POWERMAX	32 FL OZ/A	MP				
AMS	3.7 % V/V	MP				
3 VALOR SX	1 OZ/A	PRE	99	99	99	99
IGNITE 280	36 FL OZ/A	PRE				
AMS	3.7 % V/V	PRE				
PREFIX	1 QT/A	MP				
ROUNDUP POWERMAX	32 FL OZ/A	MP				
AMS	3.7 % V/V	MP				
COC	1 QT/A	MP				
4 VALOR SX	1 OZ/A	PRE	99	99	99	99
IGNITE 280	36 FL OZ/A	PRE				
AMS	3.7 % V/V	PRE				
COBRA	12.5 FL OZ/A	MP				
V-10206	1.5 OZ/A	MP				
ROUNDUP POWERMAX	32 FL OZ/A	MP				
AMS	3.7 % V/V	MP				
COC	1 QT/A	MP				
5 VALOR SX	1 OZ/A	PRE	99	99	99	99
IGNITE 280	36 FL OZ/A	PRE				
AMS	3.7 % V/V	PRE				
COBRA	12.5 FL OZ/A	MP				
V-10206	2 OZ/A	MP				
ROUNDUP POWERMAX	32 FL OZ/A	MP				
AMS	3.7 % V/V	MP				
COC	1 QT/A	MP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	ERICA	AMACH
Pest Scientific Name	Ambrosia trifidi>	Ipomoea sp.	Conyza canaden>	Amaranthus hyb>
Pest Name	Giant ragweed	Morning glory	Marestail	Smooth pigweed
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Crop Variety				
Description	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Part Rated				
Rating Date	6/14/2013	6/14/2013	6/14/2013	6/14/2013
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing				

Trt Treatment	Rate	Growth	9		10		11		12	
No. Name	Rate Unit	Stage								
6 VALOR SX	1 OZ/A	PRE	99		99		99		99	
IGNITE 280	36 FL OZ/A	PRE								
AMS	3.7 % V/V	PRE								
COBRA	12.5 FL OZ/AMP									
WARRANT	3 PT/A	MP								
ROUNDUP POWERMAX	32 FL OZ/AMP									
AMS	3.7 % V/V	MP								
COC	1 QT/A	MP								
7 VALOR SX	1 OZ/A	PRE	99		99		99		99	
IGNITE 280	36 FL OZ/A	PRE								
AMS	3.7 % V/V	PRE								
COBRA	12.5 FL OZ/AMP									
DUAL II MAGNUM	1.33 PT/A	MP								
ROUNDUP POWERMAX	32 FL OZ/AMP									
AMS	3.7 % V/V	MP								
COC	1 QT/A	MP								
LSD (P=.05)			0.0		0.0		0.0		0.0	
Standard Deviation			0.0		0.0		0.0		0.0	
CV			0.0		0.0		0.0		0.0	

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Crop Variety				
Description				
Part Rated				
Rating Date	6/28/2013	6/28/2013	6/28/2013	6/28/2013
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing				

Trt No.	Treatment Name	Rate	Growth Stage	13	14	15	16
1	CHECK UNTREATED			0	0	0	0
2	VALOR SX	1 OZ/A	PRE	0	99	92	99
	IGNITE 280	36 FL OZ/A	PRE				
	AMS	3.7 % V/V	PRE				
	ROUNDUP POWERMAX	32 FL OZ/A	MP				
	AMS	3.7 % V/V	MP				
3	VALOR SX	1 OZ/A	PRE	0	99	89	99
	IGNITE 280	36 FL OZ/A	PRE				
	AMS	3.7 % V/V	PRE				
	PREFIX	1 QT/A	MP				
	ROUNDUP POWERMAX	32 FL OZ/A	MP				
	AMS	3.7 % V/V	MP				
	COC	1 QT/A	MP				
4	VALOR SX	1 OZ/A	PRE	10	99	92	99
	IGNITE 280	36 FL OZ/A	PRE				
	AMS	3.7 % V/V	PRE				
	COBRA	12.5 FL OZ/A	MP				
	V-10206	1.5 OZ/A	MP				
	ROUNDUP POWERMAX	32 FL OZ/A	MP				
	AMS	3.7 % V/V	MP				
	COC	1 QT/A	MP				
5	VALOR SX	1 OZ/A	PRE	10	99	92	99
	IGNITE 280	36 FL OZ/A	PRE				
	AMS	3.7 % V/V	PRE				
	COBRA	12.5 FL OZ/A	MP				
	V-10206	2 OZ/A	MP				
	ROUNDUP POWERMAX	32 FL OZ/A	MP				
	AMS	3.7 % V/V	MP				
	COC	1 QT/A	MP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Crop Variety				
Description				
Part Rated				
Rating Date	6/28/2013	6/28/2013	6/28/2013	6/28/2013
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing				

Trt No.	Treatment Name	Rate	Unit	Growth Stage	13	14	15	16
6	VALOR SX	1	OZ/A	PRE	10		99	90
	IGNITE 280	36	FL OZ/A	PRE				
	AMS	3.7	% V/V	PRE				
	COBRA	12.5	FL OZ/AMP					
	WARRANT	3	PT/A	MP				
	ROUNDUP POWERMAX	32	FL OZ/AMP					
	AMS	3.7	% V/V	MP				
	COC	1	QT/A	MP				
7	VALOR SX	1	OZ/A	PRE	13		99	87
	IGNITE 280	36	FL OZ/A	PRE				
	AMS	3.7	% V/V	PRE				
	COBRA	12.5	FL OZ/AMP					
	DUAL II MAGNUM	1.33	PT/A	MP				
	ROUNDUP POWERMAX	32	FL OZ/AMP					
	AMS	3.7	% V/V	MP				
	COC	1	QT/A	MP				
	LSD (P=.05)				7.8	0.0		6.4
	Standard Deviation				4.4	0.0		3.6
	CV				70.5	0.0		4.66

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed
Pest Code	ERICA	AMACH
Pest Scientific Name	Conyza canadensis>Amaranthus hybridus>	
Pest Name	Marestail	Smooth pigweed
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Crop Variety		
Description		
Part Rated		
Rating Date	6/28/2013	6/28/2013
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
Rating Timing		

Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	17	18
1 CHECK UNTREATED			0	0
2 VALOR SX	1 OZ/A	PRE	99	99
IGNITE 280	36 FL OZ/A	PRE		
AMS	3.7 % V/V	PRE		
ROUNDUP POWERMAX	32 FL OZ/A	MP		
AMS	3.7 % V/V	MP		
3 VALOR SX	1 OZ/A	PRE	99	99
IGNITE 280	36 FL OZ/A	PRE		
AMS	3.7 % V/V	PRE		
PREFIX	1 QT/A	MP		
ROUNDUP POWERMAX	32 FL OZ/A	MP		
AMS	3.7 % V/V	MP		
COC	1 QT/A	MP		
4 VALOR SX	1 OZ/A	PRE	96	99
IGNITE 280	36 FL OZ/A	PRE		
AMS	3.7 % V/V	PRE		
COBRA	12.5 FL OZ/A	MP		
V-10206	1.5 OZ/A	MP		
ROUNDUP POWERMAX	32 FL OZ/A	MP		
AMS	3.7 % V/V	MP		
COC	1 QT/A	MP		
5 VALOR SX	1 OZ/A	PRE	99	99
IGNITE 280	36 FL OZ/A	PRE		
AMS	3.7 % V/V	PRE		
COBRA	12.5 FL OZ/A	MP		
V-10206	2 OZ/A	MP		
ROUNDUP POWERMAX	32 FL OZ/A	MP		
AMS	3.7 % V/V	MP		
COC	1 QT/A	MP		

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed
Pest Code	ERICA	AMACH
Pest Scientific Name	Conyza canadensis>Amaranthus hybridus>	
Pest Name	Marestail	Smooth pigweed
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Crop Variety		
Description		
Part Rated		
Rating Date	6/28/2013	6/28/2013
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
Rating Timing		

Trt No.	Treatment Name	Rate	Unit	Growth Stage	17	18
6	VALOR SX	1	OZ/A	PRE	99	99
	IGNITE 280	36	FL OZ/A	PRE		
	AMS	3.7	% V/V	PRE		
	COBRA	12.5	FL OZ/AMP			
	WARRANT	3	PT/A	MP		
	ROUNDUP POWERMAX	32	FL OZ/AMP			
	AMS	3.7	% V/V	MP		
	COC	1	QT/A	MP		
7	VALOR SX	1	OZ/A	PRE	99	99
	IGNITE 280	36	FL OZ/A	PRE		
	AMS	3.7	% V/V	PRE		
	COBRA	12.5	FL OZ/AMP			
	DUAL II MAGNUM	1.33	PT/A	MP		
	ROUNDUP POWERMAX	32	FL OZ/AMP			
	AMS	3.7	% V/V	MP		
	COC	1	QT/A	MP		
	LSD (P=.05)				3.5	0.0
	Standard Deviation				2.0	0.0
	CV				2.33	0.0

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN IV

Trial ID: S13024	Location: LEXINGTON, KY	Trial Year: 2013
Protocol ID: VAL-SB-POST	Investigator: Charles H Slack	
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*, = US
 AMBTR, *Ambrosia trifida*, = US
 IPOSS, *Ipomoea sp.*, = US
 ERICA, *Conyza canadensis*, = US
 AMACH, *Amaranthus hybridus*, = US

Crop Code

GLXMA, BSOY, *Glycine max*, = US

Rating Unit

PERCENT = percent

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN IV

Trial ID: S13024 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: VAL-SB-POST Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: JOHN CRANMER

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/3/2013
Completion Date: 10/1/2013

Trial Location

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

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: 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

Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3832 **BBCH Scale:** BSOY

Planting Rate, Unit: 210000 S/A **Planting Date:** 5/3/2013
Depth, Unit: 1.5 IN **Planting Method:** DRILLE drilled
Row Spacing, Unit: 7 IN **Planting Equipment:** SR Drilling Machine
Soil Temperature, Unit: 63 F **Emergence Date:** 5/10/2013
Soil Moisture: GOOD good
Seed Bed: MEDIUM medium

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

Pest 4 Type: W **Code:** ERICA Conyza canadensis
Common Name: Marestail

Pest 5 Type: W **Code:** AMACH Amaranthus hybridus
Common Name: Smooth pigweed

Site and Design

Treated Plot Width: 8.5 FT **Site Type:** FIELD field
Treated Plot Length: 44 FT
Treated Plot Area: 374 FT² **Treatments:** 7 **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: WET wet
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

	A	B
Application Date:	5/3/2013	5/31/2013
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	MP
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	74 F	81 F
% Relative Humidity:	43	54
Wind Velocity, Unit:	6 MPH	8 MPH
Wind Direction:	SE	S
Soil Temperature, Unit:	63 F	71 F
Soil Moisture:	EXCELL	EXCELL
% Cloud Cover:	70	70
Next Moisture Occurred On:	5/4/2013	6/1/2013

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:		BBCH
Stage Majority, Percent:	2 TRI	95

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA WSETFA	W
Height, Unit:	3	IN
Pest 2 Code, Type, Scale:	AMBTR WAMBTR	W
Height, Unit:	4	IN
Pest 3 Code, Type, Scale:	IPOSS WIPOSS	W
Height, Unit:	2	IN
Pest 4 Code, Type, Scale:	ERICA WERICA	W
Height, Unit:	3	IN
Pest 5 Code, Type, Scale:	AMACH WAMACH	W
Height, Unit:	3	IN

Plant and Soil Science, U of KY
Weed Science Research

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:	8.5	FT	8.5	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:	2.5	Liters	2.5	liters
Propellant:	CO2		CO2	

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN V

Trial ID: S13025
Protocol ID: CHEM-HGLXMAFOMME1301
Project ID: HGLXMAFOMME1301

Location: LEXINGTON, KY Trial Year: 2013
Investigator: Charles H Slack
Study Director: CHARLES SLACK
Sponsor Contact: BRENT JACOBSON

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Crop Variety				
Description				
Part Rated				
Rating Date	5/17/2013	5/17/2013	5/17/2013	5/17/2013
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
1 STATEMENT	32 FL OZ/A PRE		0	99	99	99
LIBERTY 280	36 OZ/A PRE					
2 STATEMENT	40 FL OZ/A PRE		0	99	99	99
LIBERTY	36 OZ/A PRE					
3 PREFIX	32 FL OZ/A PRE		0	99	99	99
LIBERTY 280	36 OZ/A PRE					
4 PREFIX	40 FL OZ/A PRE		0	99	99	99
LIBERTY 280	36 OZ/A PRE					
5 CHECK UNTREATED			0	0	0	0
LIBERTY 280	36 OZ/A PRE					
LSD (P=.05)			0.0	0.0	0.0	0.0
Standard Deviation			0.0	0.0	0.0	0.0
CV			0.0	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		ERICA	AMACH	SETFA
Pest Scientific Name		Conyza canadensis	Amaranthus hybridus	Setaria faberii
Pest Name		Marestail	Smooth pigweed	Giant foxtail
Crop Code				GLXMA
BBCH Scale				BSOY
Crop Scientific Name				Glycine max
Crop Name				Soybean
Crop Variety				
Description				
Part Rated				
Rating Date		5/17/2013	5/17/2013	5/31/2013
Rating Type		CONTROL	CONTROL	INJURY
Rating Unit		PERCENT	PERCENT	PERCENT
Rating Timing		2 WEEK	2 WEEK	4 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	5	6	7	8
1 STATEMENT	32 FL OZ/A	PRE	99	99	0	77
LIBERTY 280	36 OZ/A	PRE				
2 STATEMENT	40 FL OZ/A	PRE	99	99	0	70
LIBERTY	36 OZ/A	PRE				
3 PREFIX	32 FL OZ/A	PRE	99	99	0	70
LIBERTY 280	36 OZ/A	PRE				
4 PREFIX	40 FL OZ/A	PRE	99	99	0	77
LIBERTY 280	36 OZ/A	PRE				
5 CHECK UNTREATED			0	0	0	0
LIBERTY 280	36 OZ/A	PRE				
LSD (P=.05)			0.0	0.0	0.0	10.3
Standard Deviation			0.0	0.0	0.0	5.5
CV			0.0	0.0	0.0	9.34

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed		
Pest Code	AMBTR	IPOSS	ERICA	AMACH		
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	Conyza canaden>	Amaranthus hyb>		
Pest Name	Giant ragweed	Morning glory	Marestail	Smooth pigweed		
Crop Code						
BBCH Scale						
Crop Scientific Name						
Crop Name						
Crop Variety						
Description						
Part Rated						
Rating Date	5/31/2013	5/31/2013	5/31/2013	5/31/2013		
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT		
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK		
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	9	10	11	12
1 STATEMENT	32 FL OZ/A PRE		70	70	90	90
LIBERTY 280	36 OZ/A PRE					
2 STATEMENT	40 FL OZ/A PRE		70	67	90	90
LIBERTY	36 OZ/A PRE					
3 PREFIX	32 FL OZ/A PRE		63	67	90	80
LIBERTY 280	36 OZ/A PRE					
4 PREFIX	40 FL OZ/A PRE		73	73	90	87
LIBERTY 280	36 OZ/A PRE					
5 CHECK UNTREATED			0	0	0	0
LIBERTY 280	36 OZ/A PRE					
LSD (P=.05)			18.4	17.2	0.0	14.2
Standard Deviation			9.7	9.1	0.0	7.5
CV			17.61	16.5	0.0	10.86

Plant and Soil Science, U of KY
Weed Science Research

Pest Type			W Weed	W Weed	W Weed
Pest Code			SETFA	AMBTR	IPOSS
Pest Scientific Name			Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name			Giant foxtail	Giant ragweed	Morning glory
Crop Code		GLXMA			
BBCH Scale		BSOY			
Crop Scientific Name		Glycine max			
Crop Name		Soybean			
Crop Variety					
Description					
Part Rated					
Rating Date		6/28/2013	6/28/2013	6/28/2013	6/28/2013
Rating Type		INJURY	CONTROL	CONTROL	CONTROL
Rating Unit		PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing		8 WEEK	8 WEEK	8 WEEK	8 WEEK
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	13	14	15
					16
1 STATEMENT	32 FL OZ/A PRE		0	67	37
LIBERTY 280	36 OZ/A PRE				37
2 STATEMENT	40 FL OZ/A PRE		0	70	57
LIBERTY	36 OZ/A PRE				60
3 PREFIX	32 FL OZ/A PRE		0	70	50
LIBERTY 280	36 OZ/A PRE				50
4 PREFIX	40 FL OZ/A PRE		0	73	60
LIBERTY 280	36 OZ/A PRE				60
5 CHECK UNTREATED			0	0	0
LIBERTY 280	36 OZ/A PRE				0
LSD (P=.05)			0.0	12.9	25.3
Standard Deviation			0.0	6.8	13.4
CV			0.0	12.2	32.99
					33.93

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed
Pest Code		ERICA	AMACH
Pest Scientific Name		Conyza canadensis>Amaranthus hybridus>	
Pest Name		Marestail	Smooth pigweed
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Crop Variety			
Description			
Part Rated			
Rating Date		6/28/2013	6/28/2013
Rating Type		CONTROL	CONTROL
Rating Unit		PERCENT	PERCENT
Rating Timing		8 WEEK	8 WEEK
Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	
			17
			18
1 STATEMENT	32 FL OZ/A PRE		93
LIBERTY 280	36 OZ/A PRE		
2 STATEMENT	40 FL OZ/A PRE		90
LIBERTY	36 OZ/A PRE		
3 PREFIX	32 FL OZ/A PRE		90
LIBERTY 280	36 OZ/A PRE		
4 PREFIX	40 FL OZ/A PRE		90
LIBERTY 280	36 OZ/A PRE		
5 CHECK UNTREATED			0
LIBERTY 280	36 OZ/A PRE		
LSD (P=.05)			4.4
Standard Deviation			2.3
CV			3.2

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3832 **BBCH Scale:** BSOY

Planting Rate, Unit: 210000 S/A **Planting Date:** 5/3/2013
Depth, Unit: 1.5 IN **Planting Method:** DRILLE drilled
Row Spacing, Unit: 7 IN **Planting Equipment:** SR Drilling Machine
Soil Temperature, Unit: 63 F **Emergence Date:** 5/10/2013
Soil Moisture: GOOD good
Seed Bed: MEDIUM medium

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

Pest 4 Type: W **Code:** ERICA Conyza canadensis
Common Name: Marestail

Pest 5 Type: W **Code:** AMACH Amaranthus hybridus
Common Name: Smooth pigweed

Site and Design

Treated Plot Width: 8.5 FT **Site Type:** FIELD field
Treated Plot Length: 44 FT
Treated Plot Area: 374 FT² **Treatments:** 5 **Tillage Type:** NOTILL no-till
Replications: 3 **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: WET wet
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

A

Application Date: 5/3/2013
Application Method: SPRAY
Application Timing: PRE
Application Placement: BROFOL
Applied By: C H SLACK
Air Temperature, Unit: 74 F
% Relative Humidity: 43
Wind Velocity, Unit: 6 MPH
Wind Direction: SE
Soil Temperature, Unit: 63 F
Soil Moisture: EXCELL
% Cloud Cover: 70
Next Moisture Occurred On: 5/4/2013

Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: GLXMA BSOY

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: IPOSS W
Pest 4 Code, Type, Scale: ERICA W
Pest 5 Code, Type, Scale: AMACH W

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: 8.5 FT
Boom Height, Unit: 30 IN
Ground Speed, Unit: 4 MPH
Carrier: WATER
Spray Volume, Unit: 24 GPA
Mix Size, Unit: 2.5 liters
Propellant: CO2

Date	By	Notes
5/1/2013	SARA	ENTIRE AREA OVERSPRAYED WITH LIBERTY BEFORE PLANTING

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN EARLY PREPLANT

Trial ID: S13026
Protocol ID: CHEM-HGLXMARIMTHI1301
Project ID: HGLXMARIMTHI1301

Location: LEXINGTON, KY Trial Year: 2013
Investigator: Charles H Slack
Study Director: CHARLES SLACK
Sponsor Contact: BRENT JACOBSON

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMAM	ERICA	STEME
Pest Scientific Name	Stellaria media	Lamium amplexi	Conyza canadensis	Stellaria media
Pest Name	Common chickweed	Henbit	Marestail	Common chickweed
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Crop Variety				
Description	2 WEEK AFTER A	2 WEEK AFTER A	2 WEEK AFTER A	AT PLANTING
Part Rated				
Rating Date	4/17/2013	4/17/2013	4/17/2013	5/3/2013
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	2 WEEK	4 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
1 2,4-D ESTER	2 PT/A	30D EPP	99	99	99	99
CRUSHER	0.75 OZ/A	30D EPP				
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
NIS	0.25 % V/V	30D EPP				
2 2,4-D ESTER	2 PT/A	30D EPP	99	99	99	99
CRUSHER	1 OZ/A	30D EPP				
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
NIS	0.25 % V/V	30D EPP				
3 2,4-D ESTER	2 PT/A	30D EPP	99	99	99	99
CRUSHER	2 OZ/A	30D EPP				
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
NIS	0.25 % V/V	30D EPP				
4 2,4-D ESTER	2 PT/A	30D EPP	99	99	99	99
LEADOFF	1.5 OZ/A	30D EPP				
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
NIS	0.25 % V/V	30D EPP				
5 2,4-D ESTER	2 PT/A	30D EPP	99	99	99	99
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
NIS	0.25 % V/V	30D EPP				
6 2,4-D ESTER	2 PT/A	30D EPP	99	99	99	99
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
UNTREATED						
LSD (P=.05)			0.0	0.0	0.0	0.0
Standard Deviation			0.0	0.0	0.0	0.0
CV			0.0	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed		
Pest Code	LAMAM	ERICA	SETFA	AMBTR		
Pest Scientific Name	Lamium amplexi>	Conyza canad>	Setaria faberi	Ambrosia trifi>		
Pest Name	Henbit	Marestail	Giant foxtail	Giant ragweed		
Crop Code						
BBCH Scale						
Crop Scientific Name						
Crop Name						
Crop Variety						
Description	AT PLANTING	AT PLANTING	AT PLANTING	AT PLANTING		
Part Rated						
Rating Date	5/3/2013	5/3/2013	5/3/2013	5/3/2013		
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT		
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK		
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	5	6		
			7	8		
1 2,4-D ESTER	2 PT/A	30D EPP	99	95	99	99
CRUSHER	0.75 OZ/A	30D EPP				
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
NIS	0.25 % V/V	30D EPP				
2 2,4-D ESTER	2 PT/A	30D EPP	99	85	99	99
CRUSHER	1 OZ/A	30D EPP				
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
NIS	0.25 % V/V	30D EPP				
3 2,4-D ESTER	2 PT/A	30D EPP	99	95	99	99
CRUSHER	2 OZ/A	30D EPP				
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
NIS	0.25 % V/V	30D EPP				
4 2,4-D ESTER	2 PT/A	30D EPP	99	95	99	99
LEADOFF	1.5 OZ/A	30D EPP				
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
NIS	0.25 % V/V	30D EPP				
5 2,4-D ESTER	2 PT/A	30D EPP	99	85	99	99
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
NIS	0.25 % V/V	30D EPP				
6 2,4-D ESTER	2 PT/A	30D EPP	99	85	99	99
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
UNTREATED						
LSD (P=.05)			0.0	0.0	0.0	0.0
Standard Deviation			0.0	0.0	0.0	0.0
CV			0.0	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed			
Pest Code	IPOSS	SETFA	AMBTR			
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>			
Pest Name	Morning glory	Giant foxtail	Giant ragweed			
Crop Code		GLXMA				
BBCH Scale		BSOY				
Crop Scientific Name		Glycine max				
Crop Name		Soybean				
Crop Variety						
Description	AT PLANTING	AFTER PLANTING	AFTER PLANTING			
Part Rated						
Rating Date	5/3/2013	5/31/2013	5/31/2013			
Rating Type	CONTROL	INJURY	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT			
Rating Timing	4 WEEK	8 WEEK	8 WEEK			
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	9	10	11	12
1 2,4-D ESTER	2 PT/A	30D EPP	99	0	70	47
CRUSHER	0.75 OZ/A	30D EPP				
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
NIS	0.25 % V/V	30D EPP				
2 2,4-D ESTER	2 PT/A	30D EPP	99	0	73	73
CRUSHER	1 OZ/A	30D EPP				
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
NIS	0.25 % V/V	30D EPP				
3 2,4-D ESTER	2 PT/A	30D EPP	99	0	88	91
CRUSHER	2 OZ/A	30D EPP				
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
NIS	0.25 % V/V	30D EPP				
4 2,4-D ESTER	2 PT/A	30D EPP	99	0	73	70
LEADOFF	1.5 OZ/A	30D EPP				
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
NIS	0.25 % V/V	30D EPP				
5 2,4-D ESTER	2 PT/A	30D EPP	99	0	50	43
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
NIS	0.25 % V/V	30D EPP				
6 2,4-D ESTER	2 PT/A	30D EPP	99	0	57	43
GLYFOS X-TRA	32 FL OZ/A	30D EPP				
UNTREATED						
LSD (P=.05)			0.0	0.0	19.8	19.1
Standard Deviation			0.0	0.0	10.9	10.5
CV			0.0	0.0	15.84	17.09

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed
Pest Code	IPOSS	ERICA
Pest Scientific Name	Ipomoea sp. Conyza canadensis	
Pest Name	Morning glory	Marestail
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Crop Variety		
Description	AFTER PLANTING	AFTER PLANTING
Part Rated		
Rating Date	5/31/2013	5/31/2013
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
Rating Timing	8 WEEK	8 WEEK

Trt	Treatment	Rate	Growth		
No.	Name	Rate Unit	Stage	13	14
1	2,4-D ESTER	2 PT/A	30D EPP	60	99
	CRUSHER	0.75 OZ/A	30D EPP		
	GLYFOS X-TRA	32 FL OZ/A	30D EPP		
	NIS	0.25 % V/V	30D EPP		
2	2,4-D ESTER	2 PT/A	30D EPP	73	99
	CRUSHER	1 OZ/A	30D EPP		
	GLYFOS X-TRA	32 FL OZ/A	30D EPP		
	NIS	0.25 % V/V	30D EPP		
3	2,4-D ESTER	2 PT/A	30D EPP	87	99
	CRUSHER	2 OZ/A	30D EPP		
	GLYFOS X-TRA	32 FL OZ/A	30D EPP		
	NIS	0.25 % V/V	30D EPP		
4	2,4-D ESTER	2 PT/A	30D EPP	70	99
	LEADOFF	1.5 OZ/A	30D EPP		
	GLYFOS X-TRA	32 FL OZ/A	30D EPP		
	NIS	0.25 % V/V	30D EPP		
5	2,4-D ESTER	2 PT/A	30D EPP	57	99
	GLYFOS X-TRA	32 FL OZ/A	30D EPP		
	NIS	0.25 % V/V	30D EPP		
6	2,4-D ESTER	2 PT/A	30D EPP	53	99
	GLYFOS X-TRA	32 FL OZ/A	30D EPP		
	UNTREATED				
	LSD (P=.05)			12.0	0.0
	Standard Deviation			6.6	0.0
	CV			9.87	0.0

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3832

Planting Rate, Unit: 210000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 7 IN
Soil Temperature, Unit: 63 F
Soil Moisture: WET wet
Seed Bed: MEDIUM medium

Planting Date: 5/3/2013
Planting Method: DRILLE drilled
Planting Equipment: SR Drilling Machine
Emergence Date: 5/10/2013

Pest Description

- Pest 1 Type:** W **Code:** STEME *Stellaria media*
Common Name: Common chickweed
- Pest 2 Type:** W **Code:** LAMAM *Lamium amplexicaule*
Common Name: Henbit
- Pest 3 Type:** W **Code:** ERICA *Conyza canadensis*
Common Name: Marestail
- Pest 4 Type:** W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed
- Pest 5 Type:** W **Code:** SETFA *Setaria faberi*
Common Name: Giant foxtail
- Pest 6 Type:** W **Code:** IPOSS *Ipomoea sp.*
Common Name: Morning glory

Site and Design

Treated Plot Width: 8.5 FT
Treated Plot Length: 44 FT
Treated Plot Area: 374 FT²
Replications: 3

Site Type: FIELD field
Treatments: 6
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

Analyzed By:

Plant and Soil Science, U of KY
Weed Science Research

Moisture and Weather Conditions

Overall Moisture Conditions:
Closest Weather Station: SPINDLETOP

WET wet
Distance, Unit: 2 MI

Application Description

A
Application Date: 4/3/2013
Appl. Start Time: 11:00 AM
Appl. Stop Time: 11:15 AM
Application Method: SPRAY
Application Timing: 30 DAY
Application Placement: BROFOL
Applied By: C H SLACK
Air Temperature, Unit: 43 F
% Relative Humidity: 35
Wind Velocity, Unit: 7 MPH
Wind Direction: N
Soil Temperature, Unit: 50 F
Soil Moisture: EXCELL
% Cloud Cover: 10
Next Moisture Occurred On: 4/11/2013

Crop Stage At Each Application

A
Crop 1 Code, BBCH Scale: GLXMA BSOY

Pest Stage At Each Application

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

Plant and Soil Science, U of KY
Weed Science Research

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: 8.5 FT
Boom Height, Unit: 30 IN
Ground Speed, Unit: 4 MPH
Carrier: WATER
Spray Volume, Unit: 24 GPA
Mix Size, Unit: 2.5 liters
Propellant: CO2

Date	By	Notes
5/1/2013	SARA	ENTIRE AREA OVERSPRAYED WITH LIBERTY

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN EARLY PREPLANT II

Trial ID: S13027
Protocol ID: DUPONT-118-13-01
Project ID:

Location: LEXINGTON, KY Trial Year: 2013
Investigator: Charles H Slack
Study Director: CHARLES SLACK
Sponsor Contact: KELLY BARNETT

Pest Type	W Weed	W Weed	W Weed
Pest Code	STEME	LAMAM	STEME
Pest Scientific Name	Stellaria media	Lamium amplexi>	Stellaria media
Pest Name	Common chickwe>	Henbit	Common chickwe>
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Crop Variety			
Description	2 WEEK AFTER A	2 WEEK AFTER A	AT PLANTING
Part Rated			
Rating Date			
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	4 WEEK

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3
1	LEADOFF	0.5 OZ	AI/A	30D EPP	99	99	99
	WEEDONE LV4	2 PT/A		30D EPP			
	ABUNDIT EXTRA	32 FL OZ/A		30D EPP			
	AMS	2 LB/A		30D EPP			
	ENVIVE	3.5 OZ/A		PRE			
	GRAMOXONE INTEON	2 PT/A		PRE			
	ABUNDIT EXTRA	32 FL OZ/A		MP			
	AMS	2 LB/A		MP			
	PREFIX	2 PT/A		MP			
2	LEADOFF	0.5 OZ	AI/A	30D EPP	99	99	99
	WEEDONE LV4	2 PT/A		30D EPP			
	ABUNDIT EXTRA	32 FL OZ/A		30D EPP			
	AMS	2 LB/A		30D EPP			
	CANOPY	6 OZ/A		PRE			
	CINCH	1 PT/A		PRE			
	GRAMOXONE INTEON	2 PT/A		PRE			
	ABUNDIT EXTRA	32 FL OZ/A		MP			
	AMS	2 LB/A		MP			
	PREFIX	2 PT/A		MP			
3	LEADOFF	0.5 OZ	AI/A	30D EPP	99	99	99
	WEEDONE LV4	2 PT/A		30D EPP			
	ABUNDIT EXTRA	32 FL OZ/A		30D EPP			
	AMS	2 LB/A		30D EPP			
	TRIVENCE	8 OZ/A		PRE			
	GRAMOXONE INTEON	2 PT/A		PRE			
	ABUNDIT EXTRA	32 FL OZ/A		MP			
	AMS	2 LB/A		MP			
	PREFIX	2 PT/A		MP			

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	STEME	LAMAM	STEME
Pest Scientific Name	Stellaria media	Lamium amplexi>	Stellaria media
Pest Name	Common chickwe>	Henbit	Common chickwe>
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Crop Variety			
Description	2 WEEK AFTER A	2 WEEK AFTER A	AT PLANTING
Part Rated			
Rating Date			
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	4 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3
4	CANOPY EX	1.5 OZ/A	-2 WK			
	WEEDONE LV4	2 PT/A	-2 WK	99		99
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK			
	AMS	2 LB/A	-2 WK			
	ENVIVE	3.5 OZ/A	PRE			
	GRAMOXONE INTEON	2 PT/A	PRE			
	ABUNDIT EXTRA	32 FL OZ/A	MP			
	AMS	2 LB/A	MP			
	PREFIX	2 PT/A	MP			
5	CANOPY EX	1.5 OZ/A	-2 WK	99		99
	WEEDONE LV4	2 PT/A	-2 WK			
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK			
	AMS	2 LB/A	-2 WK			
	CANOPY	6 OZ/A	PRE			
	CINCH	1 PT/A	PRE			
	GRAMOXONE INTEON	2 PT/A	PRE			
	ABUNDIT EXTRA	32 FL OZ/A	MP			
	AMS	2 LB/A	MP			
	PREFIX	2 PT/A	MP			
6	CANOPY EX	1.5 OZ/A	-2 WK	99		99
	WEEDONE LV4	2 PT/A	-2 WK			
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK			
	AMS	2 LB/A	-2 WK			
	TRIVENCE	8 OZ/A	PRE			
	GRAMOXONE INTEON	2 PT/A	PRE			
	ABUNDIT EXTRA	32 FL OZ/A	MP			
	AMS	2 LB/A	MP			
	PREFIX	2 PT/A	MP			
7	ENVIVE	3.5 OZ/A	-2 WK	99		99
	WEEDONE LV4	2 PT/A	-2 WK			
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK			
	AMS	2 LB/A	-2 WK			
	GRAMOXONE INTEON	2 PT/A	PRE			
	ABUNDIT EXTRA	32 FL OZ/A	MP			
	AMS	2 LB/A	MP			
	PREFIX	2 PT/A	MP			

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	STEME	LAMAM	STEME
Pest Scientific Name	Stellaria media	Lamium amplexi>	Stellaria media
Pest Name	Common chickwe>	Henbit	Common chickwe>
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Crop Variety			
Description	2 WEEK AFTER A	2 WEEK AFTER A	AT PLANTING
Part Rated			
Rating Date			
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	4 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3
8	CANOPY	6 OZ/A	-2 WK		99	99
	CINCH	1 PT/A	-2 WK			
	WEEDONE LV4	1 PT/A	-2 WK			
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK			
	AMS	2 LB/A	-2 WK			
	GRAMOXONE INTEON	2 PT/A	PRE			
	ABUNDIT EXTRA	32 FL OZ/A	MP			
	AMS	2 LB/A	MP			
	PREFIX	2 PT/A	MP			
9	TRIVENCE	8 OZ/A	-2 WK	99		99
	WEEDONE LV4	1 PT/A	-2 WK			
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK			
	AMS	2 LB/A	-2 WK			
	GRAMOXONE INTEON	2 PT/A	PRE			
	ABUNDIT EXTRA	32 FL OZ/A	MP			
	AMS	2 LB/A	MP			
	PREFIX	2 PT/A	MP			
10	TRIVENCE	8 OZ/A	-2 WK	99		99
	WEEDONE LV4	1 PT/A	-2 WK			
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK			
	AMS	2 LB/A	-2 WK			
	GRAMOXONE INTEON	2 PT/A	PRE			
11	BOUNDARY	1.5 PT/A	-2 WK	99		99
	WEEDONE LV4	1 PT/A	-2 WK			
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK			
	AMS	2 LB/A	-2 WK			
	GRAMOXONE INTEON	2 PT/A	PRE			
	ABUNDIT EXTRA	32 FL OZ/A	MP			
	AMS	2 LB/A	MP			
	PREFIX	2 PT/A	MP			
12	FIERCE	3 OZ/A	-2 WK	99		99
	WEEDONE LV4	1 PT/A	-2 WK			
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK			
	AMS	2 LB/A	-2 WK			
	GRAMOXONE INTEON	2 PT/A	PRE			
	ABUNDIT EXTRA	32 FL OZ/A	MP			
	AMS	2 LB/A	MP			
	PREFIX	2 PT/A	MP			
13	GRAMOXONE INTEON	2 PT/A	PRE	0		0
	CHECK UNTREATED					
	LSD (P=.05)			0.0		0.0
	Standard Deviation			0.0		0.0
	CV			0.0		0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed		
Pest Code	LAMAM	SETFA	AMBTR	IPOSS		
Pest Scientific Name	Lamium amplexi>	Setaria faberi	Ambrosia trifi>	Ipomoea sp.		
Pest Name	Henbit	Giant foxtail	Giant ragweed	Morning glory		
Crop Code						
BBCH Scale						
Crop Scientific Name						
Crop Name						
Crop Variety						
Description	AT PLANTING	AT PLANTING	AT PLANTING	AT PLANTING		
Part Rated						
Rating Date						
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT		
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK		
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	4	5	6	7
1 LEADOFF	0.5 OZ AI/A	30D EPP	99	99	99	99
WEEDONE LV4	2 PT/A	30D EPP				
ABUNDIT EXTRA	32 FL OZ/A	30D EPP				
AMS	2 LB/A	30D EPP				
ENVIVE	3.5 OZ/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/AMP					
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
2 LEADOFF	0.5 OZ AI/A	30D EPP	99	99	99	99
WEEDONE LV4	2 PT/A	30D EPP				
ABUNDIT EXTRA	32 FL OZ/A	30D EPP				
AMS	2 LB/A	30D EPP				
CANOPY	6 OZ/A	PRE				
CINCH	1 PT/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/AMP					
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
3 LEADOFF	0.5 OZ AI/A	30D EPP	99	99	99	99
WEEDONE LV4	2 PT/A	30D EPP				
ABUNDIT EXTRA	32 FL OZ/A	30D EPP				
AMS	2 LB/A	30D EPP				
TRIVENCE	8 OZ/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/AMP					
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	LAMAM	SETFA	AMBTR	IPOSS
Pest Scientific Name	Lamium amplexi>	Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name	Henbit	Giant foxtail	Giant ragweed	Morning glory
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Crop Variety				
Description	AT PLANTING	AT PLANTING	AT PLANTING	AT PLANTING
Part Rated				
Rating Date				
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	4	5	6	7
4 CANOPY EX	1.5 OZ/A	-2 WK				
WEEDONE LV4	2 PT/A	-2 WK	99	99	99	99
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
ENVIVE	3.5 OZ/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
5 CANOPY EX	1.5 OZ/A	-2 WK	99	99	99	99
WEEDONE LV4	2 PT/A	-2 WK				
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
CANOPY	6 OZ/A	PRE				
CINCH	1 PT/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
6 CANOPY EX	1.5 OZ/A	-2 WK	99	99	99	99
WEEDONE LV4	2 PT/A	-2 WK				
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
TRIVENCE	8 OZ/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
7 ENVIVE	3.5 OZ/A	-2 WK	99	99	99	99
WEEDONE LV4	2 PT/A	-2 WK				
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	LAMAM	SETFA	AMBTR	IPOSS
Pest Scientific Name	Lamium amplexi>	Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name	Henbit	Giant foxtail	Giant ragweed	Morning glory
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Crop Variety				
Description	AT PLANTING	AT PLANTING	AT PLANTING	AT PLANTING
Part Rated				
Rating Date				
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK

Trt Treatment	Rate	Growth	4		5		6		7	
No. Name	Rate Unit	Stage								
8 CANOPY	6 OZ/A	-2 WK		99		99		99		99
CINCH	1 PT/A	-2 WK								
WEEDONE LV4	1 PT/A	-2 WK								
ABUNDIT EXTRA	32 FL OZ/A	-2 WK								
AMS	2 LB/A	-2 WK								
GRAMOXONE INTEON	2 PT/A	PRE								
ABUNDIT EXTRA	32 FL OZ/A	MP								
AMS	2 LB/A	MP								
PREFIX	2 PT/A	MP								
9 TRIVENCE	8 OZ/A	-2 WK		99		99		99		99
WEEDONE LV4	1 PT/A	-2 WK								
ABUNDIT EXTRA	32 FL OZ/A	-2 WK								
AMS	2 LB/A	-2 WK								
GRAMOXONE INTEON	2 PT/A	PRE								
ABUNDIT EXTRA	32 FL OZ/A	MP								
AMS	2 LB/A	MP								
PREFIX	2 PT/A	MP								
10 TRIVENCE	8 OZ/A	-2 WK		99		99		99		99
WEEDONE LV4	1 PT/A	-2 WK								
ABUNDIT EXTRA	32 FL OZ/A	-2 WK								
AMS	2 LB/A	-2 WK								
GRAMOXONE INTEON	2 PT/A	PRE								
11 BOUNDARY	1.5 PT/A	-2 WK		99		99		99		99
WEEDONE LV4	1 PT/A	-2 WK								
ABUNDIT EXTRA	32 FL OZ/A	-2 WK								
AMS	2 LB/A	-2 WK								
GRAMOXONE INTEON	2 PT/A	PRE								
ABUNDIT EXTRA	32 FL OZ/A	MP								
AMS	2 LB/A	MP								
PREFIX	2 PT/A	MP								
12 FIERCE	3 OZ/A	-2 WK		99		99		99		99
WEEDONE LV4	1 PT/A	-2 WK								
ABUNDIT EXTRA	32 FL OZ/A	-2 WK								
AMS	2 LB/A	-2 WK								
GRAMOXONE INTEON	2 PT/A	PRE								
ABUNDIT EXTRA	32 FL OZ/A	MP								
AMS	2 LB/A	MP								
PREFIX	2 PT/A	MP								
13 GRAMOXONE INTEON	2 PT/A	PRE		0		0		0		0
CHECK UNTREATED										
LSD (P=.05)				0.0		0.0		0.0		0.0
Standard Deviation				0.0		0.0		0.0		0.0
CV				0.0		0.0		0.0		0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed		
Pest Code		ERICA	AMACH	SETFA		
Pest Scientific Name		Conyza canadensis	Amaranthus hybridus	Setaria faberii		
Pest Name		Marestail	Smooth pigweed	Giant foxtail		
Crop Code				GLXMA		
BBCH Scale				BSOY		
Crop Scientific Name				Glycine max		
Crop Name				Soybean		
Crop Variety						
Description		AT PLANTING	AT PLANTING	AT POST		
Part Rated						
Rating Date						
Rating Type		CONTROL	CONTROL	INJURY		
Rating Unit		PERCENT	PERCENT	PERCENT		
Rating Timing		4 WEEK	4 WEEK	8 WEEK		
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	8	9		
			10	11		
1 LEADOFF	0.5 OZ AI/A	30D EPP	99	99	0	93
WEEDONE LV4	2 PT/A	30D EPP				
ABUNDIT EXTRA	32 FL OZ/A	30D EPP				
AMS	2 LB/A	30D EPP				
ENVIVE	3.5 OZ/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/AMP					
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
2 LEADOFF	0.5 OZ AI/A	30D EPP	99	99	0	96
WEEDONE LV4	2 PT/A	30D EPP				
ABUNDIT EXTRA	32 FL OZ/A	30D EPP				
AMS	2 LB/A	30D EPP				
CANOPY	6 OZ/A	PRE				
CINCH	1 PT/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/AMP					
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
3 LEADOFF	0.5 OZ AI/A	30D EPP	99	99	0	96
WEEDONE LV4	2 PT/A	30D EPP				
ABUNDIT EXTRA	32 FL OZ/A	30D EPP				
AMS	2 LB/A	30D EPP				
TRIVENCE	8 OZ/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/AMP					
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	ERICA	AMACH		SETFA
Pest Scientific Name	Conyza canadensis	Amaranthus hybridus		Setaria faberii
Pest Name	Marestail	Smooth pigweed		Giant foxtail
Crop Code			GLXMA	
BBCH Scale			BSOY	
Crop Scientific Name			Glycine max	
Crop Name			Soybean	
Crop Variety				
Description	AT PLANTING	AT PLANTING	AT POST	AT POST
Part Rated				
Rating Date				
Rating Type	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK

Trt Treatment No. Name	Rate	Growth Stage	8	9	10	11
4 CANOPY EX	1.5 OZ/A	-2 WK				
WEEDONE LV4	2 PT/A	-2 WK				
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
ENVIVE	3.5 OZ/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
5 CANOPY EX	1.5 OZ/A	-2 WK	99	99	0	99
WEEDONE LV4	2 PT/A	-2 WK				
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
CANOPY	6 OZ/A	PRE				
CINCH	1 PT/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
6 CANOPY EX	1.5 OZ/A	-2 WK	99	99	0	99
WEEDONE LV4	2 PT/A	-2 WK				
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
TRIVENCE	8 OZ/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
7 ENVIVE	3.5 OZ/A	-2 WK	99	99	0	92
WEEDONE LV4	2 PT/A	-2 WK				
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	ERICA	AMACH		SETFA
Pest Scientific Name	Conyza canadensis	Amaranthus hybridus		Setaria faberii
Pest Name	Marestail	Smooth pigweed		Giant foxtail
Crop Code			GLXMA	
BBCH Scale			BSOY	
Crop Scientific Name			Glycine max	
Crop Name			Soybean	
Crop Variety				
Description	AT PLANTING	AT PLANTING	AT POST	AT POST
Part Rated				
Rating Date				
Rating Type	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	8	9	10	11	
8 CANOPY	6 OZ/A	-2 WK		99	99	0	99
CINCH	1 PT/A	-2 WK					
WEEDONE LV4	1 PT/A	-2 WK					
ABUNDIT EXTRA	32 FL OZ/A	-2 WK					
AMS	2 LB/A	-2 WK					
GRAMOXONE INTEON	2 PT/A	PRE					
ABUNDIT EXTRA	32 FL OZ/A	MP					
AMS	2 LB/A	MP					
PREFIX	2 PT/A	MP					
9 TRIVENCE	8 OZ/A	-2 WK	99		99	0	92
WEEDONE LV4	1 PT/A	-2 WK					
ABUNDIT EXTRA	32 FL OZ/A	-2 WK					
AMS	2 LB/A	-2 WK					
GRAMOXONE INTEON	2 PT/A	PRE					
ABUNDIT EXTRA	32 FL OZ/A	MP					
AMS	2 LB/A	MP					
PREFIX	2 PT/A	MP					
10 TRIVENCE	8 OZ/A	-2 WK	99		99	0	89
WEEDONE LV4	1 PT/A	-2 WK					
ABUNDIT EXTRA	32 FL OZ/A	-2 WK					
AMS	2 LB/A	-2 WK					
GRAMOXONE INTEON	2 PT/A	PRE					
11 BOUNDARY	1.5 PT/A	-2 WK	99		99	0	96
WEEDONE LV4	1 PT/A	-2 WK					
ABUNDIT EXTRA	32 FL OZ/A	-2 WK					
AMS	2 LB/A	-2 WK					
GRAMOXONE INTEON	2 PT/A	PRE					
ABUNDIT EXTRA	32 FL OZ/A	MP					
AMS	2 LB/A	MP					
PREFIX	2 PT/A	MP					
12 FIERCE	3 OZ/A	-2 WK	99		99	0	91
WEEDONE LV4	1 PT/A	-2 WK					
ABUNDIT EXTRA	32 FL OZ/A	-2 WK					
AMS	2 LB/A	-2 WK					
GRAMOXONE INTEON	2 PT/A	PRE					
ABUNDIT EXTRA	32 FL OZ/A	MP					
AMS	2 LB/A	MP					
PREFIX	2 PT/A	MP					
13 GRAMOXONE INTEON	2 PT/A	PRE	0		0	0	93
CHECK UNTREATED							
LSD (P=.05)			0.0		0.0	0.0	11.3
Standard Deviation			0.0		0.0	0.0	6.7
CV			0.0		0.0	0.0	7.04

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	ERICA
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	Conyza canaden>
Pest Name	Giant ragweed	Morning glory	Marestail
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Crop Variety			
Description	AT POST	AT POST	AT POST
Part Rated			
Rating Date			
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	8 WEEK	8 WEEK	8 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	12	13	14
1	LEADOFF	0.5 OZ AI/A	30D EPP	96	96	99
	WEEDONE LV4	2 PT/A	30D EPP			
	ABUNDIT EXTRA	32 FL OZ/A	30D EPP			
	AMS	2 LB/A	30D EPP			
	ENVIVE	3.5 OZ/A	PRE			
	GRAMOXONE INTEON	2 PT/A	PRE			
	ABUNDIT EXTRA	32 FL OZ/AMP				
	AMS	2 LB/A	MP			
	PREFIX	2 PT/A	MP			
2	LEADOFF	0.5 OZ AI/A	30D EPP	96	96	99
	WEEDONE LV4	2 PT/A	30D EPP			
	ABUNDIT EXTRA	32 FL OZ/A	30D EPP			
	AMS	2 LB/A	30D EPP			
	CANOPY	6 OZ/A	PRE			
	CINCH	1 PT/A	PRE			
	GRAMOXONE INTEON	2 PT/A	PRE			
	ABUNDIT EXTRA	32 FL OZ/AMP				
	AMS	2 LB/A	MP			
	PREFIX	2 PT/A	MP			
3	LEADOFF	0.5 OZ AI/A	30D EPP	93	92	99
	WEEDONE LV4	2 PT/A	30D EPP			
	ABUNDIT EXTRA	32 FL OZ/A	30D EPP			
	AMS	2 LB/A	30D EPP			
	TRIVENCE	8 OZ/A	PRE			
	GRAMOXONE INTEON	2 PT/A	PRE			
	ABUNDIT EXTRA	32 FL OZ/AMP				
	AMS	2 LB/A	MP			
	PREFIX	2 PT/A	MP			

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	ERICA
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	Conyza canaden>
Pest Name	Giant ragweed	Morning glory	Marestail
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Crop Variety			
Description	AT POST	AT POST	AT POST
Part Rated			
Rating Date			
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	8 WEEK	8 WEEK	8 WEEK

Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	12	13	14
4 CANOPY EX	1.5 OZ/A	-2 WK			
WEEDONE LV4	2 PT/A	-2 WK		95	98
ABUNDIT EXTRA	32 FL OZ/A	-2 WK			
AMS	2 LB/A	-2 WK			
ENVIVE	3.5 OZ/A	PRE			
GRAMOXONE INTEON	2 PT/A	PRE			
ABUNDIT EXTRA	32 FL OZ/A	MP			
AMS	2 LB/A	MP			
PREFIX	2 PT/A	MP			
5 CANOPY EX	1.5 OZ/A	-2 WK		93	99
WEEDONE LV4	2 PT/A	-2 WK			
ABUNDIT EXTRA	32 FL OZ/A	-2 WK			
AMS	2 LB/A	-2 WK			
CANOPY	6 OZ/A	PRE			
CINCH	1 PT/A	PRE			
GRAMOXONE INTEON	2 PT/A	PRE			
ABUNDIT EXTRA	32 FL OZ/A	MP			
AMS	2 LB/A	MP			
PREFIX	2 PT/A	MP			
6 CANOPY EX	1.5 OZ/A	-2 WK		91	99
WEEDONE LV4	2 PT/A	-2 WK			
ABUNDIT EXTRA	32 FL OZ/A	-2 WK			
AMS	2 LB/A	-2 WK			
TRIVENCE	8 OZ/A	PRE			
GRAMOXONE INTEON	2 PT/A	PRE			
ABUNDIT EXTRA	32 FL OZ/A	MP			
AMS	2 LB/A	MP			
PREFIX	2 PT/A	MP			
7 ENVIVE	3.5 OZ/A	-2 WK		90	87
WEEDONE LV4	2 PT/A	-2 WK			
ABUNDIT EXTRA	32 FL OZ/A	-2 WK			
AMS	2 LB/A	-2 WK			
GRAMOXONE INTEON	2 PT/A	PRE			
ABUNDIT EXTRA	32 FL OZ/A	MP			
AMS	2 LB/A	MP			
PREFIX	2 PT/A	MP			

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	ERICA
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	Conyza canaden>
Pest Name	Giant ragweed	Morning glory	Marestail
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Crop Variety			
Description	AT POST	AT POST	AT POST
Part Rated			
Rating Date			
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	8 WEEK	8 WEEK	8 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	12	13	14	
8	CANOPY	6 OZ/A	-2 WK		83	77	99
	CINCH	1 PT/A	-2 WK				
	WEEDONE LV4	1 PT/A	-2 WK				
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
	AMS	2 LB/A	-2 WK				
	GRAMOXONE INTEON	2 PT/A	PRE				
	ABUNDIT EXTRA	32 FL OZ/A	MP				
	AMS	2 LB/A	MP				
	PREFIX	2 PT/A	MP				
9	TRIVENCE	8 OZ/A	-2 WK	17		67	99
	WEEDONE LV4	1 PT/A	-2 WK				
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
	AMS	2 LB/A	-2 WK				
	GRAMOXONE INTEON	2 PT/A	PRE				
	ABUNDIT EXTRA	32 FL OZ/A	MP				
	AMS	2 LB/A	MP				
	PREFIX	2 PT/A	MP				
10	TRIVENCE	8 OZ/A	-2 WK	92		86	99
	WEEDONE LV4	1 PT/A	-2 WK				
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
	AMS	2 LB/A	-2 WK				
	GRAMOXONE INTEON	2 PT/A	PRE				
11	BOUNDARY	1.5 PT/A	-2 WK	92		88	98
	WEEDONE LV4	1 PT/A	-2 WK				
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
	AMS	2 LB/A	-2 WK				
	GRAMOXONE INTEON	2 PT/A	PRE				
	ABUNDIT EXTRA	32 FL OZ/A	MP				
	AMS	2 LB/A	MP				
	PREFIX	2 PT/A	MP				
12	FIERCE	3 OZ/A	-2 WK	80		88	99
	WEEDONE LV4	1 PT/A	-2 WK				
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
	AMS	2 LB/A	-2 WK				
	GRAMOXONE INTEON	2 PT/A	PRE				
	ABUNDIT EXTRA	32 FL OZ/A	MP				
	AMS	2 LB/A	MP				
	PREFIX	2 PT/A	MP				
13	GRAMOXONE INTEON	2 PT/A	PRE	85		89	99
	CHECK UNTREATED						
	LSD (P=.05)			8.6		14.0	1.1
	Standard Deviation			5.1		8.3	0.6
	CV			5.99		9.38	0.65

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed			
Pest Code	AMACH	SETFA	AMBTR			
Pest Scientific Name	Amaranthus hyb>	Setaria faberi	Ambrosia trifi>			
Pest Name	Smooth pigweed	Giant foxtail	Giant ragweed			
Crop Code		GLXMA				
BBCH Scale		BSOY				
Crop Scientific Name		Glycine max				
Crop Name		Soybean				
Crop Variety						
Description	AT POST	AFTER POST	AFTER POST			
Part Rated						
Rating Date		6/14/2013	6/14/2013			
Rating Type	CONTROL	INJURY	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT			
Rating Timing	8 WEEK	2 WEEK	2 WEEK			
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	15	16	17	18
1 LEADOFF	0.5 OZ AI/A	30D EPP				
WEEDONE LV4	2 PT/A	30D EPP	86	0	93	89
ABUNDIT EXTRA	32 FL OZ/A	30D EPP				
AMS	2 LB/A	30D EPP				
ENVIVE	3.5 OZ/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/AMP					
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
2 LEADOFF	0.5 OZ AI/A	30D EPP	63	0	96	94
WEEDONE LV4	2 PT/A	30D EPP				
ABUNDIT EXTRA	32 FL OZ/A	30D EPP				
AMS	2 LB/A	30D EPP				
CANOPY	6 OZ/A	PRE				
CINCH	1 PT/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/AMP					
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
3 LEADOFF	0.5 OZ AI/A	30D EPP	84	0	96	92
WEEDONE LV4	2 PT/A	30D EPP				
ABUNDIT EXTRA	32 FL OZ/A	30D EPP				
AMS	2 LB/A	30D EPP				
TRIVENCE	8 OZ/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/AMP					
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMACH	SETFA	AMBTR
Pest Scientific Name	Amaranthus hyb>	Setaria faberi	Ambrosia trifi>
Pest Name	Smooth pigweed	Giant foxtail	Giant ragweed
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Crop Variety			
Description	AT POST	AFTER POST	AFTER POST
Part Rated			
Rating Date		6/14/2013	6/14/2013
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	8 WEEK	2 WEEK	2 WEEK

Trt Treatment	Rate	Growth						
No. Name	Rate Unit	Stage	15	16	17	18		
8 CANOPY	6 OZ/A	-2 WK		67	0	99		91
CINCH	1 PT/A	-2 WK						
WEEDONE LV4	1 PT/A	-2 WK						
ABUNDIT EXTRA	32 FL OZ/A	-2 WK						
AMS	2 LB/A	-2 WK						
GRAMOXONE INTEON	2 PT/A	PRE						
ABUNDIT EXTRA	32 FL OZ/A	MP						
AMS	2 LB/A	MP						
PREFIX	2 PT/A	MP						
9 TRIVENCE	8 OZ/A	-2 WK		37	0	91		95
WEEDONE LV4	1 PT/A	-2 WK						
ABUNDIT EXTRA	32 FL OZ/A	-2 WK						
AMS	2 LB/A	-2 WK						
GRAMOXONE INTEON	2 PT/A	PRE						
ABUNDIT EXTRA	32 FL OZ/A	MP						
AMS	2 LB/A	MP						
PREFIX	2 PT/A	MP						
10 TRIVENCE	8 OZ/A	-2 WK		78	0	89		37
WEEDONE LV4	1 PT/A	-2 WK						
ABUNDIT EXTRA	32 FL OZ/A	-2 WK						
AMS	2 LB/A	-2 WK						
GRAMOXONE INTEON	2 PT/A	PRE						
11 BOUNDARY	1.5 PT/A	-2 WK		88	0	96		95
WEEDONE LV4	1 PT/A	-2 WK						
ABUNDIT EXTRA	32 FL OZ/A	-2 WK						
AMS	2 LB/A	-2 WK						
GRAMOXONE INTEON	2 PT/A	PRE						
ABUNDIT EXTRA	32 FL OZ/A	MP						
AMS	2 LB/A	MP						
PREFIX	2 PT/A	MP						
12 FIERCE	3 OZ/A	-2 WK		92	0	91		93
WEEDONE LV4	1 PT/A	-2 WK						
ABUNDIT EXTRA	32 FL OZ/A	-2 WK						
AMS	2 LB/A	-2 WK						
GRAMOXONE INTEON	2 PT/A	PRE						
ABUNDIT EXTRA	32 FL OZ/A	MP						
AMS	2 LB/A	MP						
PREFIX	2 PT/A	MP						
13 GRAMOXONE INTEON	2 PT/A	PRE		83	0	96		20
CHECK UNTREATED								
LSD (P=.05)				22.7	0.0	10.3		16.6
Standard Deviation				13.4	0.0	6.1		9.8
CV				18.15	0.0	6.42		12.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	IPOSS	ERICA	AMACH	
Pest Scientific Name	Ipomoea sp. Conyza canadens>Amaranthus hyb>			
Pest Name	Morning glory	Marestail	Smooth pigweed	
Crop Code				GLXMA
BBCH Scale				BSOY
Crop Scientific Name				Glycine max
Crop Name				Soybean
Crop Variety				
Description	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Part Rated				
Rating Date	6/14/2013	6/14/2013	6/14/2013	6/28/2013
Rating Type	CONTROL	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	2 WEEK	4 WEEK

Trt Treatment No. Name	Rate	Growth Stage	19	20	21	22
1 LEADOFF	0.5 OZ AI/A	30D EPP	95	99	99	0
WEEDONE LV4	2 PT/A	30D EPP				
ABUNDIT EXTRA	32 FL OZ/A	30D EPP				
AMS	2 LB/A	30D EPP				
ENVIVE	3.5 OZ/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/AMP					
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
2 LEADOFF	0.5 OZ AI/A	30D EPP	91	99	99	0
WEEDONE LV4	2 PT/A	30D EPP				
ABUNDIT EXTRA	32 FL OZ/A	30D EPP				
AMS	2 LB/A	30D EPP				
CANOPY	6 OZ/A	PRE				
CINCH	1 PT/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/AMP					
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
3 LEADOFF	0.5 OZ AI/A	30D EPP	92	99	99	0
WEEDONE LV4	2 PT/A	30D EPP				
ABUNDIT EXTRA	32 FL OZ/A	30D EPP				
AMS	2 LB/A	30D EPP				
TRIVENCE	8 OZ/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/AMP					
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	IPOSS	ERICA	AMACH	
Pest Scientific Name	Ipomoea sp.	Conyza canadensis	Amaranthus hybridus	
Pest Name	Morning glory	Marestail	Smooth pigweed	
Crop Code				GLXMA
BBCH Scale				BSOY
Crop Scientific Name				Glycine max
Crop Name				Soybean
Crop Variety				
Description	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Part Rated				
Rating Date	6/14/2013	6/14/2013	6/14/2013	6/28/2013
Rating Type	CONTROL	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	2 WEEK	4 WEEK

Trt No.	Treatment Name	Rate	Unit	Growth Stage	19	20	21	22
4	CANOPY EX	1.5	OZ/A	-2 WK				
	WEEDONE LV4	2	PT/A	-2 WK	98		99	99
	ABUNDIT EXTRA	32	FL OZ/A	-2 WK				
	AMS	2	LB/A	-2 WK				
	ENVIVE	3.5	OZ/A	PRE				
	GRAMOXONE INTEON	2	PT/A	PRE				
	ABUNDIT EXTRA	32	FL OZ/A	MP				
	AMS	2	LB/A	MP				
	PREFIX	2	PT/A	MP				
5	CANOPY EX	1.5	OZ/A	-2 WK	99		99	99
	WEEDONE LV4	2	PT/A	-2 WK				
	ABUNDIT EXTRA	32	FL OZ/A	-2 WK				
	AMS	2	LB/A	-2 WK				
	CANOPY	6	OZ/A	PRE				
	CINCH	1	PT/A	PRE				
	GRAMOXONE INTEON	2	PT/A	PRE				
	ABUNDIT EXTRA	32	FL OZ/A	MP				
	AMS	2	LB/A	MP				
	PREFIX	2	PT/A	MP				
6	CANOPY EX	1.5	OZ/A	-2 WK	92		99	99
	WEEDONE LV4	2	PT/A	-2 WK				
	ABUNDIT EXTRA	32	FL OZ/A	-2 WK				
	AMS	2	LB/A	-2 WK				
	TRIVENCE	8	OZ/A	PRE				
	GRAMOXONE INTEON	2	PT/A	PRE				
	ABUNDIT EXTRA	32	FL OZ/A	MP				
	AMS	2	LB/A	MP				
	PREFIX	2	PT/A	MP				
7	ENVIVE	3.5	OZ/A	-2 WK	92		99	99
	WEEDONE LV4	2	PT/A	-2 WK				
	ABUNDIT EXTRA	32	FL OZ/A	-2 WK				
	AMS	2	LB/A	-2 WK				
	GRAMOXONE INTEON	2	PT/A	PRE				
	ABUNDIT EXTRA	32	FL OZ/A	MP				
	AMS	2	LB/A	MP				
	PREFIX	2	PT/A	MP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	IPOSS	ERICA	AMACH	
Pest Scientific Name	Ipomoea sp.	Conyza canadens	Amaranthus hyb	
Pest Name	Morning glory	Marestail	Smooth pigweed	
Crop Code				GLXMA
BBCH Scale				BSOY
Crop Scientific Name				Glycine max
Crop Name				Soybean
Crop Variety				
Description	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Part Rated				
Rating Date	6/14/2013	6/14/2013	6/14/2013	6/28/2013
Rating Type	CONTROL	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	2 WEEK	4 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	19	20	21	22
8 CANOPY	6 OZ/A	-2 WK		92		
CINCH	1 PT/A	-2 WK			99	0
WEEDONE LV4	1 PT/A	-2 WK				
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
9 TRIVENCE	8 OZ/A	-2 WK	95		99	0
WEEDONE LV4	1 PT/A	-2 WK				
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
10 TRIVENCE	8 OZ/A	-2 WK	63		99	0
WEEDONE LV4	1 PT/A	-2 WK				
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
GRAMOXONE INTEON	2 PT/A	PRE				
11 BOUNDARY	1.5 PT/A	-2 WK	96		99	0
WEEDONE LV4	1 PT/A	-2 WK				
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
12 FIERCE	3 OZ/A	-2 WK	93		99	0
WEEDONE LV4	1 PT/A	-2 WK				
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
13 GRAMOXONE INTEON	2 PT/A	PRE	20		99	0
CHECK UNTREATED						
LSD (P=.05)			9.1	0.0	9.4	0.0
Standard Deviation			5.4	0.0	5.6	0.0
CV			6.26	0.0	5.78	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed		
Pest Code	SETFA	AMBTR	IPOSS	ERICA		
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Ipomoea sp.	Conyza canaden>		
Pest Name	Giant foxtail	Giant ragweed	Morning glory	Marestail		
Crop Code						
BBCH Scale						
Crop Scientific Name						
Crop Name						
Crop Variety						
Description	AFTER POST	AFTER POST	AFTER POST	AFTER POST		
Part Rated						
Rating Date	6/28/2013	6/28/2013	6/28/2013	6/28/2013		
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT		
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK		
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	23	24	25	26
1 LEADOFF	0.5 OZ AI/A	30D EPP	93	89	95	99
WEEDONE LV4	2 PT/A	30D EPP				
ABUNDIT EXTRA	32 FL OZ/A	30D EPP				
AMS	2 LB/A	30D EPP				
ENVIVE	3.5 OZ/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/AMP					
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
2 LEADOFF	0.5 OZ AI/A	30D EPP	96	95	91	99
WEEDONE LV4	2 PT/A	30D EPP				
ABUNDIT EXTRA	32 FL OZ/A	30D EPP				
AMS	2 LB/A	30D EPP				
CANOPY	6 OZ/A	PRE				
CINCH	1 PT/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/AMP					
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
3 LEADOFF	0.5 OZ AI/A	30D EPP	96	92	92	99
WEEDONE LV4	2 PT/A	30D EPP				
ABUNDIT EXTRA	32 FL OZ/A	30D EPP				
AMS	2 LB/A	30D EPP				
TRIVENCE	8 OZ/A	PRE				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/AMP					
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	IPOSS	ERICA
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Ipomoea sp.	Conyza canadens>
Pest Name	Giant foxtail	Giant ragweed	Morning glory	Marestail
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Crop Variety				
Description	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Part Rated				
Rating Date	6/28/2013	6/28/2013	6/28/2013	6/28/2013
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	23	24	25	26	99
4	CANOPY EX	1.5 OZ/A	-2 WK					
	WEEDONE LV4	2 PT/A	-2 WK	99		84	98	99
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK					
	AMS	2 LB/A	-2 WK					
	ENVIVE	3.5 OZ/A	PRE					
	GRAMOXONE INTEON	2 PT/A	PRE					
	ABUNDIT EXTRA	32 FL OZ/A	MP					
	AMS	2 LB/A	MP					
	PREFIX	2 PT/A	MP					
5	CANOPY EX	1.5 OZ/A	-2 WK	99		92	99	99
	WEEDONE LV4	2 PT/A	-2 WK					
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK					
	AMS	2 LB/A	-2 WK					
	CANOPY	6 OZ/A	PRE					
	CINCH	1 PT/A	PRE					
	GRAMOXONE INTEON	2 PT/A	PRE					
	ABUNDIT EXTRA	32 FL OZ/A	MP					
	AMS	2 LB/A	MP					
	PREFIX	2 PT/A	MP					
6	CANOPY EX	1.5 OZ/A	-2 WK	99		93	92	99
	WEEDONE LV4	2 PT/A	-2 WK					
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK					
	AMS	2 LB/A	-2 WK					
	TRIVENCE	8 OZ/A	PRE					
	GRAMOXONE INTEON	2 PT/A	PRE					
	ABUNDIT EXTRA	32 FL OZ/A	MP					
	AMS	2 LB/A	MP					
	PREFIX	2 PT/A	MP					
7	ENVIVE	3.5 OZ/A	-2 WK	92		92	92	99
	WEEDONE LV4	2 PT/A	-2 WK					
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK					
	AMS	2 LB/A	-2 WK					
	GRAMOXONE INTEON	2 PT/A	PRE					
	ABUNDIT EXTRA	32 FL OZ/A	MP					
	AMS	2 LB/A	MP					
	PREFIX	2 PT/A	MP					

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	IPOSS	ERICA
Pest Scientific Name	Setaria faberi	Ambrosia trifidi>	Ipomoea sp.	Conyza canadens>
Pest Name	Giant foxtail	Giant ragweed	Morning glory	Marestail
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Crop Variety				
Description	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Part Rated				
Rating Date	6/28/2013	6/28/2013	6/28/2013	6/28/2013
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK

Trt Treatment	Rate	Growth	23	24	25	26
No. Name	Rate Unit	Stage				
8 CANOPY	6 OZ/A	-2 WK		99	91	92
CINCH	1 PT/A	-2 WK				
WEEDONE LV4	1 PT/A	-2 WK				
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
9 TRIVENCE	8 OZ/A	-2 WK	89		95	95
WEEDONE LV4	1 PT/A	-2 WK				
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
10 TRIVENCE	8 OZ/A	-2 WK	89		30	78
WEEDONE LV4	1 PT/A	-2 WK				
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
GRAMOXONE INTEON	2 PT/A	PRE				
11 BOUNDARY	1.5 PT/A	-2 WK	96		95	96
WEEDONE LV4	1 PT/A	-2 WK				
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
12 FIERCE	3 OZ/A	-2 WK	91		94	93
WEEDONE LV4	1 PT/A	-2 WK				
ABUNDIT EXTRA	32 FL OZ/A	-2 WK				
AMS	2 LB/A	-2 WK				
GRAMOXONE INTEON	2 PT/A	PRE				
ABUNDIT EXTRA	32 FL OZ/A	MP				
AMS	2 LB/A	MP				
PREFIX	2 PT/A	MP				
13 GRAMOXONE INTEON	2 PT/A	PRE	75		20	20
CHECK UNTREATED						
LSD (P=.05)			15.0		12.2	9.9
Standard Deviation			8.9		7.2	5.9
CV			9.51		8.88	6.78

Plant and Soil Science, U of KY
Weed Science Research

Pest Type W Weed
 Pest Code AMACH
 Pest Scientific Name Amaranthus hyb>
 Pest Name Smooth pigweed
 Crop Code
 BBCH Scale
 Crop Scientific Name
 Crop Name
 Crop Variety
 Description AFTER POST
 Part Rated
 Rating Date 6/28/2013
 Rating Type CONTROL
 Rating Unit PERCENT
 Rating Timing 4 WEEK

Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	27

1 LEADOFF	0.5 OZ AI/A	30D EPP	99
WEEDONE LV4	2 PT/A	30D EPP	
ABUNDIT EXTRA	32 FL OZ/A	30D EPP	
AMS	2 LB/A	30D EPP	
ENVIVE	3.5 OZ/A	PRE	
GRAMOXONE INTEON	2 PT/A	PRE	
ABUNDIT EXTRA	32 FL OZ/AMP		
AMS	2 LB/A	MP	
PREFIX	2 PT/A	MP	
2 LEADOFF	0.5 OZ AI/A	30D EPP	99
WEEDONE LV4	2 PT/A	30D EPP	
ABUNDIT EXTRA	32 FL OZ/A	30D EPP	
AMS	2 LB/A	30D EPP	
CANOPY	6 OZ/A	PRE	
CINCH	1 PT/A	PRE	
GRAMOXONE INTEON	2 PT/A	PRE	
ABUNDIT EXTRA	32 FL OZ/AMP		
AMS	2 LB/A	MP	
PREFIX	2 PT/A	MP	
3 LEADOFF	0.5 OZ AI/A	30D EPP	99
WEEDONE LV4	2 PT/A	30D EPP	
ABUNDIT EXTRA	32 FL OZ/A	30D EPP	
AMS	2 LB/A	30D EPP	
TRIVENCE	8 OZ/A	PRE	
GRAMOXONE INTEON	2 PT/A	PRE	
ABUNDIT EXTRA	32 FL OZ/AMP		
AMS	2 LB/A	MP	
PREFIX	2 PT/A	MP	

Plant and Soil Science, U of KY
Weed Science Research

Pest Type W Weed
 Pest Code AMACH
 Pest Scientific Name Amaranthus hyb>
 Pest Name Smooth pigweed
 Crop Code
 BBCH Scale
 Crop Scientific Name
 Crop Name
 Crop Variety
 Description AFTER POST
 Part Rated
 Rating Date 6/28/2013
 Rating Type CONTROL
 Rating Unit PERCENT
 Rating Timing 4 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	
		Rate Unit		27
4	CANOPY EX	1.5 OZ/A	-2 WK	99
	WEEDONE LV4	2 PT/A	-2 WK	
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK	
	AMS	2 LB/A	-2 WK	
	ENVIVE	3.5 OZ/A	PRE	
	GRAMOXONE INTEON	2 PT/A	PRE	
	ABUNDIT EXTRA	32 FL OZ/A	MP	
	AMS	2 LB/A	MP	
	PREFIX	2 PT/A	MP	
5	CANOPY EX	1.5 OZ/A	-2 WK	99
	WEEDONE LV4	2 PT/A	-2 WK	
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK	
	AMS	2 LB/A	-2 WK	
	CANOPY	6 OZ/A	PRE	
	CINCH	1 PT/A	PRE	
	GRAMOXONE INTEON	2 PT/A	PRE	
	ABUNDIT EXTRA	32 FL OZ/A	MP	
	AMS	2 LB/A	MP	
	PREFIX	2 PT/A	MP	
6	CANOPY EX	1.5 OZ/A	-2 WK	99
	WEEDONE LV4	2 PT/A	-2 WK	
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK	
	AMS	2 LB/A	-2 WK	
	TRIVENCE	8 OZ/A	PRE	
	GRAMOXONE INTEON	2 PT/A	PRE	
	ABUNDIT EXTRA	32 FL OZ/A	MP	
	AMS	2 LB/A	MP	
	PREFIX	2 PT/A	MP	
7	ENVIVE	3.5 OZ/A	-2 WK	99
	WEEDONE LV4	2 PT/A	-2 WK	
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK	
	AMS	2 LB/A	-2 WK	
	GRAMOXONE INTEON	2 PT/A	PRE	
	ABUNDIT EXTRA	32 FL OZ/A	MP	
	AMS	2 LB/A	MP	
	PREFIX	2 PT/A	MP	

Plant and Soil Science, U of KY
Weed Science Research

Pest Type W Weed
 Pest Code AMACH
 Pest Scientific Name Amaranthus hyb>
 Pest Name Smooth pigweed
 Crop Code
 BBCH Scale
 Crop Scientific Name
 Crop Name
 Crop Variety
 Description AFTER POST
 Part Rated
 Rating Date 6/28/2013
 Rating Type CONTROL
 Rating Unit PERCENT
 Rating Timing 4 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	
		Rate Unit		27
8	CANOPY	6 OZ/A	-2 WK	99
	CINCH	1 PT/A	-2 WK	
	WEEDONE LV4	1 PT/A	-2 WK	
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK	
	AMS	2 LB/A	-2 WK	
	GRAMOXONE INTEON	2 PT/A	PRE	
	ABUNDIT EXTRA	32 FL OZ/A	MP	
	AMS	2 LB/A	MP	
	PREFIX	2 PT/A	MP	
9	TRIVENCE	8 OZ/A	-2 WK	99
	WEEDONE LV4	1 PT/A	-2 WK	
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK	
	AMS	2 LB/A	-2 WK	
	GRAMOXONE INTEON	2 PT/A	PRE	
	ABUNDIT EXTRA	32 FL OZ/A	MP	
	AMS	2 LB/A	MP	
	PREFIX	2 PT/A	MP	
10	TRIVENCE	8 OZ/A	-2 WK	99
	WEEDONE LV4	1 PT/A	-2 WK	
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK	
	AMS	2 LB/A	-2 WK	
	GRAMOXONE INTEON	2 PT/A	PRE	
11	BOUNDARY	1.5 PT/A	-2 WK	99
	WEEDONE LV4	1 PT/A	-2 WK	
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK	
	AMS	2 LB/A	-2 WK	
	GRAMOXONE INTEON	2 PT/A	PRE	
	ABUNDIT EXTRA	32 FL OZ/A	MP	
	AMS	2 LB/A	MP	
	PREFIX	2 PT/A	MP	
12	FIERCE	3 OZ/A	-2 WK	99
	WEEDONE LV4	1 PT/A	-2 WK	
	ABUNDIT EXTRA	32 FL OZ/A	-2 WK	
	AMS	2 LB/A	-2 WK	
	GRAMOXONE INTEON	2 PT/A	PRE	
	ABUNDIT EXTRA	32 FL OZ/A	MP	
	AMS	2 LB/A	MP	
	PREFIX	2 PT/A	MP	
13	GRAMOXONE INTEON	2 PT/A	PRE	83
	CHECK UNTREATED			
	LSD (P=.05)			13.2
	Standard Deviation			7.8
	CV			8.03

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG3832 **BBCH Scale:** BSOY

Planting Date: 5/3/2013

Planting Rate, Unit: 210000 S/A

Planting Method: DRILLE drilled

Depth, Unit: 1.5 IN

Planting Equipment: SR Drilling Machine

Row Spacing, Unit: 7.5 IN

Emergence Date: 5/10/2013

Soil Temperature, Unit: 63 F

Soil Moisture: GOOD good

Seed Bed: MEDIUM medium

Pest Description

Pest 1 Type: W **Code:** STEME *Stellaria media*
Common Name: Common chickweed

Pest 2 Type: W **Code:** LAMAM *Lamium amplexicaule*
Common Name: Henbit

Pest 3 Type: W **Code:** SETFA *Setaria faberi*
Common Name: Giant foxtail

Pest 4 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 5 Type: W **Code:** IPOSS *Ipomoea sp.*
Common Name: Morning glory

Pest 6 Type: W **Code:** ERICA *Conyza canadensis*
Common Name: Marestalk

Pest 7 Type: W **Code:** AMACH *Amaranthus hybridus*
Common Name: Smooth pigweed

Site and Design

Treated Plot Width: 8.5 FT

Site Type: FIELD field

Treated Plot Length: 44 FT

Treated Plot Area: 374 FT² **Treatments:** 13

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

Plant and Soil Science, U of KY
Weed Science Research

Analyzed By:

Moisture and Weather Conditions

Overall Moisture Conditions: WET wet
Closest Weather Station: SPINDLETOP Distance, Unit: 2 MI

Application Description

	A	B	C	D
Application Date:	4/3/2013	4/18/2013	5/3/2013	5/31/2013
Appl. Start Time:	11:30 AM	10:30 AM	1 PM	2 PM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	30 DAY	-2WK	PRE	MP
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	43 F	70 F	74 F	81 F
% Relative Humidity:	35	58	43	54
Wind Velocity, Unit:	7 MPH	10 MPH	6 MPH	8 MPH
Wind Direction:	N	SSW	SE	S
Soil Temperature, Unit:	51 F	60 F	63 F	71 F
Soil Moisture:	EXCELL	EXCELL	EXCELL	EXCELL
% Cloud Cover:	10	20	70	70
Next Moisture Occurred On:	4/11/2013	4/19/2013	5/4/2013	5/31/2013

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	GLXMA	BSOY GLXMA	BSOY GLXMA	BSOY GLXMA
Stage Scale Used:			2	TR
Height, Unit:			4	IN

Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Type, Scale:	STEME W	STEME W	STEME W	STEME W
Height, Unit:	2	IN 2	IN	
Pest 2 Code, Type, Scale:	LAMAM W	LAMAM W	LAMAM W	LAMAM W
Height, Unit:	2	IN 3	IN	
Pest 3 Code, Type, Scale:	SETFA W	SETFA W	SETFA W	SETFA W
Height, Unit:		1	IN 2	IN 3
Pest 4 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W	AMBTR W
Height, Unit:		1	IN 2	IN 4
Pest 5 Code, Type, Scale:	IPOSS W	IPOSS W	IPOSS W	IPOSS W
Height, Unit:			1	IN 2
Pest 6 Code, Type, Scale:	ERICA W	ERICA W	ERICA W	ERICA W
Height, Unit:		1	IN 2	IN 4
Pest 7 Code, Type, Scale:	AMACH W	AMACH W	AMACH W	AMACH W
Height, Unit:		1	IN 2	IN 3

Plant and Soil Science, U of KY
Weed Science Research

Application Equipment

	A		B		C		D	
Appl. Equipment:	ATV		ATV		ATV		ATV	
Equipment Type:	ALTEVE		ALTEVE		ALTEVE		ALTEVE	
Operation Pressure, Unit:	30	PSI	30	PSI	30	PSI	30	PSI
Nozzle Type:	FLAT	FAN	FLAT	FAN	FLAT	FAN	FLAT	FAN
Nozzle Size:	8004	DG	8004	DG	8004	DG	8004	DG
Nozzle Spacing, Unit:	20	IN	20	IN	20	IN	20	IN
Boom Length, Unit:	8.5	FT	8.5	FT	8.5	FT	8.5	FT
Boom Height, Unit:	25	IN	25	IN	20	IN	25	IN
Ground Speed, Unit:	4	MPH	4	MPH	4	MPH	4	MPH
Carrier:	WATER		WATER		WATER		WATER	
Spray Volume, Unit:	24	GPA	24	GPA	24	GPA	24	GPA
Mix Size, Unit:	2.5	liters	2.5	liters	2.5	liters	2.5	liters
Propellant:	CO2		CO2		CO2		CO2	

Date	By	Notes
5/3/2013	SARA LAWSON	ENTIRE TRIAL OVERSPRAYED WITH LIBERTY AT PLANTING

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN VI

Trial ID: S13028 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: SYN-SOY-NT Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: SCOTT CULLY

Pest Type W Weed W Weed W Weed
Pest Code SETFA AMBTR CHEAL
Pest Scientific Name Setaria faberi Ambrosia trifida Chenopodium alba
Pest Name Giant foxtail Giant ragweed Common lambsquarters
Crop Code GLXMA
BBCH Scale BSOY
Crop Scientific Name Glycine max
Crop Name Soybean
Crop Variety
Description BEFORE POST BEFORE POST BEFORE POST BEFORE POST
Part Rated
Rating Date
Rating Type INJURY CONTROL CONTROL CONTROL
Rating Unit PERCENT PERCENT PERCENT PERCENT
Rating Timing

Trt No.	Treatment Name	Rate	Growth Unit	Stage	1	2	3	4
1	GRAMOXONE INTEON	2.5	PT/A	PRE	0	99	70	99
	BOUNDARY	1.75	PT/A	PRE				
	FLEXSTAR GT	4	PT/A	MP				
2	GRAMOXONE INTEON	2.5	PT/A	PRE	0	99	85	99
	PREFIX	2	PT/A	PRE				
	SEQUENCE	3	PT/A	MP				
3	GRAMOXONE INTEON	2.5	PT/A	PRE	0	99	80	99
	BOUNDARY	1.75	PT/A	PRE				
	PREFIX	2	PT/A	MP				
	TOUCHDOWN TOTAL	24	OZ/A	MP				
4	ROUNDUP POWERMAX	22	OZ/A	PRE	0	99	82	99
	VERDICT	5	OZ/A	PRE				
	WARRANT	1.25	QT/A	MP				
	ROUNDUP POWERMAX	22	OZ/A	MP				
5	ROUNDUP POWERMAX	22	OZ/A	PRE	0	99	98	99
	VALOR XLT	4	OZ/A	PRE				
	WARRANT	1.25	QT/A	MP				
	ROUNDUP POWERMAX	22	OZ/A	MP				
6	GRAMOXONE INTEON	2.5	PT/A	PRE	0	99	77	99
	STALWART MTZ	1.5	PT/A	PRE				
	ROUNDUP POWERMAX	22	OZ/A	MP				
	LSD (P=.05)				0.0	0.0	9.9	0.0
	Standard Deviation				0.0	0.0	5.4	0.0
	CV				0.0	0.0	6.64	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed		
Pest Code	IPOSS	SETFA	AMBTR		
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>		
Pest Name	Morning glory	Giant foxtail	Giant ragweed		
Crop Code		GLXMA			
BBCH Scale		BSOY			
Crop Scientific Name		Glycine max			
Crop Name		Soybean			
Crop Variety					
Description	BEFORE POST	AFTER POST	AFTER POST		
Part Rated					
Rating Date		6/18/2013	6/18/2013		
Rating Type	CONTROL	INJURY	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT		
Rating Timing		2 WEEK	2 WEEK		
Trt Treatment	Rate Growth				
No. Name	Rate Unit Stage	5	6	7	8
1 GRAMOXONE INTEON	2.5 PT/A PRE	73	0	99	99
BOUNDARY	1.75 PT/A PRE				
FLEXSTAR GT	4 PT/AMP				
2 GRAMOXONE INTEON	2.5 PT/A PRE	90	0	99	99
PREFIX	2 PT/A PRE				
SEQUENCE	3 PT/AMP				
3 GRAMOXONE INTEON	2.5 PT/A PRE	83	0	99	99
BOUNDARY	1.75 PT/A PRE				
PREFIX	2 PT/AMP				
TOUCHDOWN TOTAL	24 OZ/AMP				
4 ROUNDUP POWERMAX	22 OZ/A PRE	85	0	99	99
VERDICT	5 OZ/A PRE				
WARRANT	1.25 QT/AMP				
ROUNDUP POWERMAX	22 OZ/AMP				
5 ROUNDUP POWERMAX	22 OZ/A PRE	99	0	99	99
VALOR XLT	4 OZ/A PRE				
WARRANT	1.25 QT/AMP				
ROUNDUP POWERMAX	22 OZ/AMP				
6 GRAMOXONE INTEON	2.5 PT/A PRE	70	0	99	99
STALWART MTZ	1.5 PT/A PRE				
ROUNDUP POWERMAX	22 OZ/AMP				
LSD (P=.05)		7.4	0.0	0.0	0.0
Standard Deviation		4.0	0.0	0.0	0.0
CV		4.85	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed	
Pest Code	CHEAL	IPOSS		SETFA	
Pest Scientific Name	Chenopodium al>	Ipomoea sp.		Setaria faberi	
Pest Name	Common lambsqu>	Morning glory		Giant foxtail	
Crop Code			GLXMA		
BBCH Scale			BSOY		
Crop Scientific Name			Glycine max		
Crop Name			Soybean		
Crop Variety					
Description	AFTER POST	AFTER POST			
Part Rated					
Rating Date	6/18/2013	6/18/2013	7/2/2013	7/2/2013	
Rating Type	CONTROL	CONTROL	INJURY	CONTROL	
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	
Rating Timing	2 WEEK	2 WEEK	4 WEEK	4 WEEK	
Trt Treatment	Rate Growth				
No. Name	Rate Unit Stage	9	10	11	
		12			
1 GRAMOXONE INTEON	2.5 PT/A PRE	99	99	0	99
BOUNDARY	1.75 PT/A PRE				
FLEXSTAR GT	4 PT/A MP				
2 GRAMOXONE INTEON	2.5 PT/A PRE	99	99	0	99
PREFIX	2 PT/A PRE				
SEQUENCE	3 PT/A MP				
3 GRAMOXONE INTEON	2.5 PT/A PRE	99	99	0	99
BOUNDARY	1.75 PT/A PRE				
PREFIX	2 PT/A MP				
TOUCHDOWN TOTAL	24 OZ/A MP				
4 ROUNDUP POWERMAX	22 OZ/A PRE	99	99	0	99
VERDICT	5 OZ/A PRE				
WARRANT	1.25 QT/A MP				
ROUNDUP POWERMAX	22 OZ/A MP				
5 ROUNDUP POWERMAX	22 OZ/A PRE	99	99	0	99
VALOR XLT	4 OZ/A PRE				
WARRANT	1.25 QT/A MP				
ROUNDUP POWERMAX	22 OZ/A MP				
6 GRAMOXONE INTEON	2.5 PT/A PRE	99	99	0	99
STALWART MTZ	1.5 PT/A PRE				
ROUNDUP POWERMAX	22 OZ/A MP				
LSD (P=.05)		0.0	0.0	0.0	0.0
Standard Deviation		0.0	0.0	0.0	0.0
CV		0.0	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W	Weed	W	Weed	W	Weed
Pest Code		AMBTR		CHEAL		IPOSS
Pest Scientific Name	Ambrosia trifi>		Chenopodium al>		Ipomoea sp.	
Pest Name	Giant ragweed		Common lambsqu>		Morning glory	
Crop Code						GLXMA
BBCH Scale						BSOY
Crop Scientific Name						Glycine max
Crop Name						Soybean
Crop Variety						
Description						
Part Rated						
Rating Date	7/2/2013		7/2/2013		7/2/2013 10/28/2013	
Rating Type	CONTROL		CONTROL		CONTROL YIELD	
Rating Unit	PERCENT		PERCENT		PERCENT BU	
Rating Timing	4 WEEK		4 WEEK		4 WEEK	
Trt Treatment	Rate Growth					
No. Name	Rate	Unit Stage	13	14	15	19
1 GRAMOXONE INTEON	2.5	PT/A PRE	99	99	99	66
BOUNDARY	1.75	PT/A PRE				
FLEXSTAR GT	4	PT/AMP				
2 GRAMOXONE INTEON	2.5	PT/A PRE	99	99	99	54
PREFIX	2	PT/A PRE				
SEQUENCE	3	PT/AMP				
3 GRAMOXONE INTEON	2.5	PT/A PRE	99	99	99	54
BOUNDARY	1.75	PT/A PRE				
PREFIX	2	PT/AMP				
TOUCHDOWN TOTAL	24	OZ/AMP				
4 ROUNDUP POWERMAX	22	OZ/A PRE	91	99	95	47
VERDICT	5	OZ/A PRE				
WARRANT	1.25	QT/AMP				
ROUNDUP POWERMAX	22	OZ/AMP				
5 ROUNDUP POWERMAX	22	OZ/A PRE	98	99	98	60
VALOR XLT	4	OZ/A PRE				
WARRANT	1.25	QT/AMP				
ROUNDUP POWERMAX	22	OZ/AMP				
6 GRAMOXONE INTEON	2.5	PT/A PRE	93	99	99	57
STALWART MTZ	1.5	PT/A PRE				
ROUNDUP POWERMAX	22	OZ/AMP				
LSD (P=.05)			3.2	0.0	4.7	4.5
Standard Deviation			1.8	0.0	2.6	2.5
CV			1.82	0.0	2.62	4.38

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN VI

Trial ID: S13028 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: SYN-SOY-NT Investigator: Charles H Slack
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, = US
AMBTR, Ambrosia trifida, = US
CHEAL, Chenopodium album, = US
IPOSS, Ipomoea sp., = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent
BU = bushel

ARM Action Codes

TY1 = $3.821053 * [17] * (100 - [18]) / 87$

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN VI

Trial ID: S13028 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: SYN-SOY-NT Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: SCOTT CULLY

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/3/2013
Completion Date: 10/28/2013

Trial Location

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

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: 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

Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3832

Planting Date: 5/3/2013

Planting Rate, Unit: 210000 S/A

Planting Method: DRILLE drilled

Depth, Unit: 1.5 IN

Planting Equipment: SR Drilling Machine

Row Spacing, Unit: 7.5 IN

Emergence Date: 5/10/2013

Harvest Date: 10/28/2013

Harvested Width, Unit: 5 FT

Soil Temperature, Unit: 63 F

Harvested Length, Unit: 38 FT

Soil Moisture: WET wet

Harvest Equipment: WINTERSTEIGER

Seed Bed: MEDIUM medium

% 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:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Pest 4 Type: W **Code:** IPOSS Ipomoea sp.
Common Name: Morning glory

Site and Design

Treated Plot Width: 8.5 FT

Site Type: FIELD field

Treated Plot Length: 44 FT

Treated Plot Area: 374 FT²

Treatments: 6

Tillage Type: NOTILL no-till

Replications: 3

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: WET wet

Closest Weather Station: SPINDLETOP

Distance, Unit: 2 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

	A	B
Application Date:	5/9/2013	6/4/2013
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	MP
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	70 F	75 F
% Relative Humidity:	40	54
Wind Velocity, Unit:	6 MPH	9 MPH
Wind Direction:	N	E
Soil Temperature, Unit:	65 F	71 F
Soil Moisture:	EXCELL	NORMAL
% Cloud Cover:	80	10
Next Moisture Occurred On:	5/10/2013	6/6/2013

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:		BBCH
Stage Majority, Percent:		2 TRI 95

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA WSETFA	W
Height, Unit:		2 IN
Pest 2 Code, Type, Scale:	AMBTR WAMBTR	W
Height, Unit:		4 IN
Pest 3 Code, Type, Scale:	CHEAL WCHEAL	W
Height, Unit:		2.5 IN
Pest 4 Code, Type, Scale:	IPOSS WIPOSS	W
Height, Unit:		1.5 IN

Plant and Soil Science, U of KY
Weed Science Research

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:	8.5	FT	8.5	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:	2.5	liters	2.5	liters
Propellant:	CO2		CO2	

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN VII

Trial ID: S13029
Protocol ID: FMC-ANTH-SB-PRE
Project ID:

Location: LEXINGTON, KY Trial Year: 2013
Investigator: Charles H Slack
Study Director: CHARLES SLACK
Sponsor Contact: RUSTY MITCHELL

Pest Type		W Weed	W Weed
Pest Code		SETFA	AMBTR
Pest Scientific Name		Setaria faberi	Ambrosia trifida
Pest Name		Giant foxtail	Giant ragweed
Crop Code	GLXMA		
BBCH Scale	BSOY		
Crop Scientific Name	Glycine max		
Crop Name	Soybean		
Crop Variety			
Description			
Part Rated			
Rating Date	5/23/2013	5/23/2013	5/23/2013
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	2 WEEK

Trt Treatment No. Name	Rate Growth Unit Stage	1	2	3
1 CHECK UNTREATED		0	0	0
2 AUTHORITY XL	4 OZ/A PRE	0	99	96
ROUNDUP POWERMAX	22 OZ/A 42 DAP			
3 ANTHEM	6 OZ/A PRE	0	99	96
AUTHORITY XL	4 OZ/A PRE			
ROUNDUP POWERMAX	22 OZ/A 42 DAP			
4 AUTHORITY MAXX (F9016-2)	4 OZ/A PRE	0	98	93
ROUNDUP POWERMAX	22 OZ/A 42 DAP			
5 ANTHEM	6 OZ/A PRE	0	99	96
AUTHORITY MAXX (F9016-2)	4 OZ/A PRE			
ROUNDUP POWERMAX	22 OZ/A 42 DAP			
6 AUTHORITY MTZ	14 OZ/A PRE	0	93	80
ROUNDUP POWERMAX	22 OZ/A 42 DAP			
7 ANTHEM	6 OZ/A PRE	0	99	88
AUTHORITY MTZ	14 OZ/A PRE			
ROUNDUP POWERMAX	22 OZ/A 42 DAP			
8 AUTHORITY ELITE	28 OZ/A PRE	0	99	79
ROUNDUP POWERMAX	22 OZ/A 42 DAP			
9 FIERCE	3 OZ/A PRE	0	99	77
ROUNDUP POWERMAX	22 OZ/A 42 DAP			
10 ZIDUA	2 OZ/A PRE	0	99	78
ROUNDUP POWERMAX	22 OZ/A 42 DAP			
11 VALOR XLT	3 OZ/A PRE	0	99	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP			
12 PREFIX	32 OZ/A PRE	0	99	96
ROUNDUP POWERMAX	22 OZ/A 42 DAP			
LSD (P=.05)		0.0	2.7	7.7
Standard Deviation		0.0	1.6	4.6
CV		0.0	1.79	5.6

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	CHEAL	IPOSS		SETFA
Pest Scientific Name	Chenopodium al>	Ipomoea sp.		Setaria faberi
Pest Name	Common lambsqu>	Morning glory		Giant foxtail
Crop Code			GLXMA	
BBCH Scale			BSOY	
Crop Scientific Name			Glycine max	
Crop Name			Soybean	
Crop Variety				
Description				
Part Rated				
Rating Date	5/23/2013	5/23/2013	6/6/2013	6/6/2013
Rating Type	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	4 WEEK	4 WEEK
Trt Treatment	Rate	Growth		
No. Name	Rate	Unit Stage	4	5
			6	7
1 CHECK UNTREATED			0	0
2 AUTHORITY XL	4 OZ/A PRE		99	96
ROUNDUP POWERMAX	22 OZ/A 42 DAP			0
3 ANTHEM	6 OZ/A PRE		99	98
AUTHORITY XL	4 OZ/A PRE			0
ROUNDUP POWERMAX	22 OZ/A 42 DAP			99
4 AUTHORITY MAXX (F9016-2)	4 OZ/A PRE		99	96
ROUNDUP POWERMAX	22 OZ/A 42 DAP			0
5 ANTHEM	6 OZ/A PRE		99	96
AUTHORITY MAXX (F9016-2)	4 OZ/A PRE			0
ROUNDUP POWERMAX	22 OZ/A 42 DAP			99
6 AUTHORITY MTZ	14 OZ/A PRE		99	85
ROUNDUP POWERMAX	22 OZ/A 42 DAP			0
7 ANTHEM	6 OZ/A PRE		99	88
AUTHORITY MTZ	14 OZ/A PRE			0
ROUNDUP POWERMAX	22 OZ/A 42 DAP			99
8 AUTHORITY ELITE	28 OZ/A PRE		99	80
ROUNDUP POWERMAX	22 OZ/A 42 DAP			0
9 FIERCE	3 OZ/A PRE		99	73
ROUNDUP POWERMAX	22 OZ/A 42 DAP			0
10 ZIDUA	2 OZ/A PRE		99	83
ROUNDUP POWERMAX	22 OZ/A 42 DAP			0
11 VALOR XLT	3 OZ/A PRE		99	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP			0
12 PREFIX	32 OZ/A PRE		99	96
ROUNDUP POWERMAX	22 OZ/A 42 DAP			0
LSD (P=.05)			0.0	7.7
Standard Deviation			0.0	4.5
CV			0.0	5.48

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	AMBTR	CHEAL	IPOSS	
Pest Scientific Name	Ambrosia trifida	Chenopodium album	Ipomoea sp.	
Pest Name	Giant ragweed	Common lambsquarters	Morning glory	
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Crop Variety				
Description				
Part Rated				
Rating Date	6/6/2013	6/6/2013	6/6/2013	
Rating Type	CONTROL	CONTROL	CONTROL	
Rating Unit	PERCENT	PERCENT	PERCENT	
Rating Timing	4 WEEK	4 WEEK	4 WEEK	
Trt Treatment	Rate	Growth		
No. Name	Rate	Unit	Stage	
			8	9
				10
1 CHECK UNTREATED			0	0
2 AUTHORITY XL	4 OZ/A	PRE	96	99
ROUNDUP POWERMAX	22 OZ/A	42 DAP		
3 ANTHEM	6 OZ/A	PRE	96	99
AUTHORITY XL	4 OZ/A	PRE		
ROUNDUP POWERMAX	22 OZ/A	42 DAP		
4 AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE	93	99
ROUNDUP POWERMAX	22 OZ/A	42 DAP		
5 ANTHEM	6 OZ/A	PRE	96	99
AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE		
ROUNDUP POWERMAX	22 OZ/A	42 DAP		
6 AUTHORITY MTZ	14 OZ/A	PRE	80	99
ROUNDUP POWERMAX	22 OZ/A	42 DAP		
7 ANTHEM	6 OZ/A	PRE	88	99
AUTHORITY MTZ	14 OZ/A	PRE		
ROUNDUP POWERMAX	22 OZ/A	42 DAP		
8 AUTHORITY ELITE	28 OZ/A	PRE	79	99
ROUNDUP POWERMAX	22 OZ/A	42 DAP		
9 FIERCE	3 OZ/A	PRE	77	99
ROUNDUP POWERMAX	22 OZ/A	42 DAP		
10 ZIDUA	2 OZ/A	PRE	78	99
ROUNDUP POWERMAX	22 OZ/A	42 DAP		
11 VALOR XLT	3 OZ/A	PRE	99	99
ROUNDUP POWERMAX	22 OZ/A	42 DAP		
12 PREFIX	32 OZ/A	PRE	96	99
ROUNDUP POWERMAX	22 OZ/A	42 DAP		
LSD (P=.05)			7.7	0.0
Standard Deviation			4.6	0.0
CV			5.6	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed
Pest Code		SETFA	AMBTR
Pest Scientific Name		Setaria faberi	Ambrosia trifi>
Pest Name		Giant foxtail	Giant ragweed
Crop Code	GLXMA		
BBCH Scale	BSOY		
Crop Scientific Name	Glycine max		
Crop Name	Soybean		
Crop Variety			
Description	AFTER POST	AFTER POST	AFTER POST
Part Rated			
Rating Date	7/2/2013	7/2/2013	7/2/2013
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	2 WEEK
Trt Treatment	Rate Growth		
No. Name	Rate Unit Stage	11	12
			13
1 CHECK UNTREATED		0	0
2 AUTHORITY XL	4 OZ/A PRE	0	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		99
3 ANTHEM	6 OZ/A PRE	0	99
AUTHORITY XL	4 OZ/A PRE		99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		99
4 AUTHORITY MAXX (F9016-2)	4 OZ/A PRE	0	98
ROUNDUP POWERMAX	22 OZ/A 42 DAP		99
5 ANTHEM	6 OZ/A PRE	0	99
AUTHORITY MAXX (F9016-2)	4 OZ/A PRE		99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		99
6 AUTHORITY MTZ	14 OZ/A PRE	0	96
ROUNDUP POWERMAX	22 OZ/A 42 DAP		99
7 ANTHEM	6 OZ/A PRE	0	99
AUTHORITY MTZ	14 OZ/A PRE		99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		99
8 AUTHORITY ELITE	28 OZ/A PRE	0	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		99
9 FIERCE	3 OZ/A PRE	0	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		99
10 ZIDUA	2 OZ/A PRE	0	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		99
11 VALOR XLT	3 OZ/A PRE	0	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		99
12 PREFIX	32 OZ/A PRE	0	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		99
LSD (P=.05)		0.0	2.7
Standard Deviation		0.0	1.6
CV		0.0	1.75

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	CHEAL	IPOSS	
Pest Scientific Name	Chenopodium al>	Ipomoea sp.	
Pest Name	Common lambsqu>	Morning glory	
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Crop Variety			
Description	AFTER POST	AFTER POST	
Part Rated			
Rating Date	7/2/2013	7/2/2013	11/4/2013
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
Rating Timing	2 WEEK	2 WEEK	
Trt Treatment	Rate Growth		
No. Name	Rate Unit Stage	14	15
1 CHECK UNTREATED		0	0
2 AUTHORITY XL	4 OZ/A PRE	99	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
3 ANTHEM	6 OZ/A PRE	99	99
AUTHORITY XL	4 OZ/A PRE		
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
4 AUTHORITY MAXX (F9016-2)	4 OZ/A PRE	99	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
5 ANTHEM	6 OZ/A PRE	99	99
AUTHORITY MAXX (F9016-2)	4 OZ/A PRE		
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
6 AUTHORITY MTZ	14 OZ/A PRE	99	96
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
7 ANTHEM	6 OZ/A PRE	99	99
AUTHORITY MTZ	14 OZ/A PRE		
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
8 AUTHORITY ELITE	28 OZ/A PRE	99	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
9 FIERCE	3 OZ/A PRE	99	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
10 ZIDUA	2 OZ/A PRE	99	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
11 VALOR XLT	3 OZ/A PRE	99	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
12 PREFIX	32 OZ/A PRE	99	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
LSD (P=.05)		0.0	2.5
Standard Deviation		0.0	1.5
CV		0.0	1.66

GLXMA
BSOY
Glycine max
Soybean

AFTER POST AFTER POST

7/2/2013 7/2/2013 11/4/2013
CONTROL CONTROL YIELD
PERCENT PERCENT BU
2 WEEK 2 WEEK

Trt Treatment	Rate Growth		
No. Name	Rate Unit Stage	14	15
1 CHECK UNTREATED		0	0
2 AUTHORITY XL	4 OZ/A PRE	99	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
3 ANTHEM	6 OZ/A PRE	99	99
AUTHORITY XL	4 OZ/A PRE		
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
4 AUTHORITY MAXX (F9016-2)	4 OZ/A PRE	99	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
5 ANTHEM	6 OZ/A PRE	99	99
AUTHORITY MAXX (F9016-2)	4 OZ/A PRE		
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
6 AUTHORITY MTZ	14 OZ/A PRE	99	96
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
7 ANTHEM	6 OZ/A PRE	99	99
AUTHORITY MTZ	14 OZ/A PRE		
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
8 AUTHORITY ELITE	28 OZ/A PRE	99	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
9 FIERCE	3 OZ/A PRE	99	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
10 ZIDUA	2 OZ/A PRE	99	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
11 VALOR XLT	3 OZ/A PRE	99	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
12 PREFIX	32 OZ/A PRE	99	99
ROUNDUP POWERMAX	22 OZ/A 42 DAP		
LSD (P=.05)		0.0	2.5
Standard Deviation		0.0	1.5
CV		0.0	1.66

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN VII

Trial ID: S13029	Location: LEXINGTON, KY	Trial Year: 2013
Protocol ID: FMC-ANTH-SB-PRE	Investigator: Charles H Slack	
Project ID:	Study Director: CHARLES SLACK	
	Sponsor Contact: RUSTY MITCHELL	

Pest Type

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

Pest Code

SETFA, Setaria faberi, = US
 AMBTR, Ambrosia trifida, = US
 CHEAL, Chenopodium album, = US
 IPOSS, Ipomoea sp., = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent
 BU = bushel

ARM Action Codes

TY1 = $3.821053 * [17] * (100 - [18]) / 87$

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3832

Planting Rate, Unit: 210000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 7 IN

Planting Date: 5/9/2013
Planting Method: DRILLE drilled
Planting Equipment: SR Drilling Machine
Emergence Date: 5/16/2013
Harvest Date: 11/4/2013

Soil Temperature, Unit: 65 F
Soil Moisture: GOOD good
Seed Bed: MEDIUM medium

Harvested Width, Unit: 5 FT
Harvested Length, Unit: 38 FT
Harvest Equipment: WINTERSTEIGER
% 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:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Pest 4 Type: W **Code:** IPOSS Ipomoea sp.
Common Name: Morning glory

Site and Design

Treated Plot Width: 8.5 FT
Treated Plot Length: 44 FT

Site Type: FIELD field

Treated Plot Area: 374 FT² **Treatments:** 12
Replications: 3

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: WET wet

Closest Weather Station: SPINDLETOP **Distance, Unit:** 2 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

	A	B
Application Date:	5/9/2013	6/18/2013
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	42 DAP
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	70 F	75 F
% Relative Humidity:	60	65
Wind Velocity, Unit:	4 MPH	5 MPH
Wind Direction:	SW	SSW
Soil Temperature, Unit:	65 F	75 F
Soil Moisture:	GOOD	WET
% Cloud Cover:	40	60
Next Moisture Occurred On:	5/10/2013	6/24/2013

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Height, Unit:	8	IN

Pest Stage At Each Application

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

Plant and Soil Science, U of KY
Weed Science Research

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:	8.5	FT	8.5	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:	2.5	liters	2.5	liters
Propellant:	CO2		CO2	

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN VIII

Trial ID: S13030 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: FMC-AUTH-SB Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: RUSTY MITCHELL

Pest Type W Weed W Weed
Pest Code SETFA AMBTR
Pest Scientific Name Setaria faberi Ambrosia trifida
Pest Name Giant foxtail Giant ragweed
Crop Code GLXMA
BBCH Scale BSOY
Crop Scientific Name Glycine max
Crop Name Soybean
Crop Variety
Description BEFORE POST BEFORE POST BEFORE POST
Part Rated
Rating Date 6/4/2013 6/4/2013 6/4/2013
Rating Type INJURY CONTROL CONTROL
Rating Unit PERCENT PERCENT PERCENT
Rating Timing

Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	1	2	3
1 CHECK UNTREATED			0	0	0
2 ROUNDUP POWERMAX	22 OZ/A	2 TRI	0	0	0
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
3 AUTHORITY ELITE	28 OZ/A	PRE	0	99	83
ANTHEM	6 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
4 AUTHORITY ELITE	28 OZ/A	PRE	0	99	85
MARVEL	7 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
5 AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE	0	99	89
ANTHEM	6 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
6 AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE	0	99	89
MARVEL	7 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
7 ANTHEM	6 OZ/A	PRE	0	99	88
AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE			
MARVEL	6.5 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
8 AUTHORITY MTZ	14 OZ/A	PRE	0	99	87
ANTHEM	6 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed
Pest Code		SETFA	AMBTR
Pest Scientific Name		Setaria faberi	Ambrosia trifi>
Pest Name		Giant foxtail	Giant ragweed
Crop Code	GLXMA		
B BCH Scale	BSOY		
Crop Scientific Name	Glycine max		
Crop Name	Soybean		
Crop Variety			
Description	BEFORE POST	BEFORE POST	BEFORE POST
Part Rated			
Rating Date	6/4/2013	6/4/2013	6/4/2013
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3
9	AUTHORITY MTZ	14 OZ/A	PRE	0	99	90
	MARVEL	7 OZ/A	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	2 TRI			
	NIS	0.25 % V/V	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	42 DAP			
10	ANTHEM	6 OZ/A	PRE	0	99	88
	AUTHORITY MTZ	14 OZ/A	PRE			
	MARVEL	6.5 OZ/A	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	2 TRI			
	NIS	0.25 % V/V	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	42 DAP			
11	AUTHORITY XL	4 OZ/A	PRE	0	89	93
	ANTHEM	6 OZ/A	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	2 TRI			
	NIS	0.25 % V/V	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	42 DAP			
12	AUTHORITY XL	4 OZ/A	PRE	0	90	99
	MARVEL	7 OZ/A	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	2 TRI			
	NIS	0.25 % V/V	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	42 DAP			
13	ANTHEM	6 OZ/A	PRE	0	99	93
	AUTHORITY XL	4 OZ/A	PRE			
	MARVEL	6.5 OZ/A	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	2 TRI			
	NIS	0.25 % V/V	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	42 DAP			
14	FIERCE	3 OZ/A	PRE	0	99	89
	PREFIX	32 OZ/A	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	2 TRI			
	NIS	0.25 % V/V	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	42 DAP			
15	BOUNDARY	32 OZ/A	PRE	0	99	80
	PREFIX	32 OZ/A	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	2 TRI			
	NIS	0.25 % V/V	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	42 DAP			
16	VALOR XLT	3 OZ/A	PRE	0	99	99
	PREFIX	32 OZ/A	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	2 TRI			
	NIS	0.25 % V/V	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	42 DAP			
LSD (P=.05)				0.0	0.5	2.8
Standard Deviation				0.0	0.3	1.7
CV				0.0	0.34	2.13

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	CHEAL	IPOSS	
Pest Scientific Name	Chenopodium al>	Ipomoea sp.	
Pest Name	Common lambsqu>	Morning glory	
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Crop Variety			
Description	BEFORE POST	BEFORE POST	AFTER POST
Part Rated			
Rating Date	6/4/2013	6/4/2013	6/18/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	4	5	6
1 CHECK UNTREATED				0	0
2 ROUNDUP POWERMAX	22 OZ/A	2 TRI		0	0
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
3 AUTHORITY ELITE	28 OZ/A	PRE	99	82	0
ANTHEM	6 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
4 AUTHORITY ELITE	28 OZ/A	PRE	99	83	0
MARVEL	7 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
5 AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE	99	90	0
ANTHEM	6 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
6 AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE	99	87	0
MARVEL	7 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
7 ANTHEM	6 OZ/A	PRE	99	87	0
AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE			
MARVEL	6.5 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
8 AUTHORITY MTZ	14 OZ/A	PRE	99	90	0
ANTHEM	6 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	CHEAL	IPOSS	
Pest Scientific Name	Chenopodium al>	Ipomoea sp.	
Pest Name	Common lambsqu>	Morning glory	
Crop Code			GLXMA
BBCB Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Crop Variety			
Description	BEFORE POST	BEFORE POST	AFTER POST
Part Rated			
Rating Date	6/4/2013	6/4/2013	6/18/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt No.	Treatment Name	Rate	Growth Unit	Stage	4	5	6
9	AUTHORITY MTZ	14 OZ/A		PRE	99	90	0
	MARVEL	7 OZ/A		2 TRI			
	ROUNDUP POWERMAX	22 OZ/A		2 TRI			
	NIS	0.25 % V/V		2 TRI			
	ROUNDUP POWERMAX	22 OZ/A		42 DAP			
10	ANTHEM	6 OZ/A		PRE	99	87	0
	AUTHORITY MTZ	14 OZ/A		PRE			
	MARVEL	6.5 OZ/A		2 TRI			
	ROUNDUP POWERMAX	22 OZ/A		2 TRI			
	NIS	0.25 % V/V		2 TRI			
	ROUNDUP POWERMAX	22 OZ/A		42 DAP			
11	AUTHORITY XL	4 OZ/A		PRE	99	90	0
	ANTHEM	6 OZ/A		2 TRI			
	ROUNDUP POWERMAX	22 OZ/A		2 TRI			
	NIS	0.25 % V/V		2 TRI			
	ROUNDUP POWERMAX	22 OZ/A		42 DAP			
12	AUTHORITY XL	4 OZ/A		PRE	99	99	0
	MARVEL	7 OZ/A		2 TRI			
	ROUNDUP POWERMAX	22 OZ/A		2 TRI			
	NIS	0.25 % V/V		2 TRI			
	ROUNDUP POWERMAX	22 OZ/A		42 DAP			
13	ANTHEM	6 OZ/A		PRE	99	95	0
	AUTHORITY XL	4 OZ/A		PRE			
	MARVEL	6.5 OZ/A		2 TRI			
	ROUNDUP POWERMAX	22 OZ/A		2 TRI			
	NIS	0.25 % V/V		2 TRI			
	ROUNDUP POWERMAX	22 OZ/A		42 DAP			
14	FIERCE	3 OZ/A		PRE	99	90	0
	PREFIX	32 OZ/A		2 TRI			
	ROUNDUP POWERMAX	22 OZ/A		2 TRI			
	NIS	0.25 % V/V		2 TRI			
	ROUNDUP POWERMAX	22 OZ/A		42 DAP			
15	BOUNDARY	32 OZ/A		PRE	99	80	0
	PREFIX	32 OZ/A		2 TRI			
	ROUNDUP POWERMAX	22 OZ/A		2 TRI			
	NIS	0.25 % V/V		2 TRI			
	ROUNDUP POWERMAX	22 OZ/A		42 DAP			
16	VALOR XLT	3 OZ/A		PRE	99	99	0
	PREFIX	32 OZ/A		2 TRI			
	ROUNDUP POWERMAX	22 OZ/A		2 TRI			
	NIS	0.25 % V/V		2 TRI			
	ROUNDUP POWERMAX	22 OZ/A		42 DAP			
LSD (P=.05)					0.0	2.4	0.0
Standard Deviation					0.0	1.4	0.0
CV					0.0	1.83	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL
Pest Scientific Name	Setaria faberi	Ambrosia trifi	Chenopodium al
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Crop Variety			
Description	AFTER POST	AFTER POST	AFTER POST
Part Rated			
Rating Date	6/18/2013	6/18/2013	6/18/2013
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	7	8	9
1 CHECK UNTREATED			0	0	0
2 ROUNDUP POWERMAX	22 OZ/A	2 TRI	99	99	99
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
3 AUTHORITY ELITE	28 OZ/A	PRE	99	99	99
ANTHEM	6 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
4 AUTHORITY ELITE	28 OZ/A	PRE	99	99	99
MARVEL	7 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
5 AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE	99	99	99
ANTHEM	6 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
6 AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE	99	99	99
MARVEL	7 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
7 ANTHEM	6 OZ/A	PRE	99	99	99
AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE			
MARVEL	6.5 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
8 AUTHORITY MTZ	14 OZ/A	PRE	99	99	99
ANTHEM	6 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL
Pest Scientific Name	Setaria faberi	Ambrosia trifi	Chenopodium al
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu
Crop Code			
B BCH Scale			
Crop Scientific Name			
Crop Name			
Crop Variety			
Description	AFTER POST	AFTER POST	AFTER POST
Part Rated			
Rating Date	6/18/2013	6/18/2013	6/18/2013
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	7	8	9
9 AUTHORITY MTZ	14 OZ/A	PRE	99	99	99
MARVEL	7 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
10 ANTHEM	6 OZ/A	PRE	99	99	99
AUTHORITY MTZ	14 OZ/A	PRE			
MARVEL	6.5 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
11 AUTHORITY XL	4 OZ/A	PRE	99	99	99
ANTHEM	6 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
12 AUTHORITY XL	4 OZ/A	PRE	99	99	99
MARVEL	7 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
13 ANTHEM	6 OZ/A	PRE	99	99	99
AUTHORITY XL	4 OZ/A	PRE			
MARVEL	6.5 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
14 FIERCE	3 OZ/A	PRE	99	99	99
PREFIX	32 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
15 BOUNDARY	32 OZ/A	PRE	99	99	99
PREFIX	32 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
16 VALOR XLT	3 OZ/A	PRE	99	99	99
PREFIX	32 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
LSD (P=.05)			0.0	0.0	0.0
Standard Deviation			0.0	0.0	0.0
CV			0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	IPOSS	SETFA	
Pest Scientific Name	Ipomoea sp.	Setaria faberi	
Pest Name	Morning glory	Giant foxtail	
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name	Glycine max		
Crop Name	Soybean		
Crop Variety			
Description	AFTER POST		
Part Rated			
Rating Date	6/18/2013	7/2/2013	7/2/2013
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	10	11	12
1 CHECK UNTREATED			0	0	0
2 ROUNDUP POWERMAX	22 OZ/A	2 TRI	99	0	99
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
3 AUTHORITY ELITE	28 OZ/A	PRE	99	0	99
ANTHEM	6 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
4 AUTHORITY ELITE	28 OZ/A	PRE	99	0	99
MARVEL	7 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
5 AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE	99	0	99
ANTHEM	6 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
6 AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE	99	0	99
MARVEL	7 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
7 ANTHEM	6 OZ/A	PRE	99	0	99
AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE			
MARVEL	6.5 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
8 AUTHORITY MTZ	14 OZ/A	PRE	99	0	99
ANTHEM	6 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	IPOSS	SETFA	
Pest Scientific Name	Ipomoea sp.	Setaria faberi	
Pest Name	Morning glory	Giant foxtail	
Crop Code		GLXMA	
BBCB Scale		BSOY	
Crop Scientific Name	Glycine max		
Crop Name	Soybean		
Crop Variety			
Description	AFTER POST		
Part Rated			
Rating Date	6/18/2013	7/2/2013	7/2/2013
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt No.	Treatment Name	Rate	Growth Stage	10	11	12
9	AUTHORITY MTZ	14 OZ/A	PRE	99	0	99
	MARVEL	7 OZ/A	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	2 TRI			
	NIS	0.25 % V/V	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	42 DAP			
10	ANTHEM	6 OZ/A	PRE	99	0	99
	AUTHORITY MTZ	14 OZ/A	PRE			
	MARVEL	6.5 OZ/A	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	2 TRI			
	NIS	0.25 % V/V	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	42 DAP			
11	AUTHORITY XL	4 OZ/A	PRE	99	0	90
	ANTHEM	6 OZ/A	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	2 TRI			
	NIS	0.25 % V/V	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	42 DAP			
12	AUTHORITY XL	4 OZ/A	PRE	99	0	90
	MARVEL	7 OZ/A	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	2 TRI			
	NIS	0.25 % V/V	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	42 DAP			
13	ANTHEM	6 OZ/A	PRE	99	0	99
	AUTHORITY XL	4 OZ/A	PRE			
	MARVEL	6.5 OZ/A	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	2 TRI			
	NIS	0.25 % V/V	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	42 DAP			
14	FIERCE	3 OZ/A	PRE	99	0	99
	PREFIX	32 OZ/A	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	2 TRI			
	NIS	0.25 % V/V	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	42 DAP			
15	BOUNDARY	32 OZ/A	PRE	99	0	99
	PREFIX	32 OZ/A	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	2 TRI			
	NIS	0.25 % V/V	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	42 DAP			
16	VALOR XLT	3 OZ/A	PRE	99	0	99
	PREFIX	32 OZ/A	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	2 TRI			
	NIS	0.25 % V/V	2 TRI			
	ROUNDUP POWERMAX	22 OZ/A	42 DAP			
LSD (P=.05)				0.0	0.0	0.0
Standard Deviation				0.0	0.0	0.0
CV				0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	CHEAL	IPOSS
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.
Pest Name	Giant ragweed	Common lambsqu>	Morning glory
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Crop Variety			
Description			
Part Rated			
Rating Date	7/2/2013	7/2/2013	7/2/2013
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	13	14	15
1 CHECK UNTREATED			0	0	0
2 ROUNDUP POWERMAX	22 OZ/A	2 TRI	94	99	99
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
3 AUTHORITY ELITE	28 OZ/A	PRE	85	99	85
ANTHEM	6 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
4 AUTHORITY ELITE	28 OZ/A	PRE	85	99	85
MARVEL	7 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
5 AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE	90	99	90
ANTHEM	6 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
6 AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE	90	99	90
MARVEL	7 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
7 ANTHEM	6 OZ/A	PRE	90	99	90
AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE			
MARVEL	6.5 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
8 AUTHORITY MTZ	14 OZ/A	PRE	88	99	90
ANTHEM	6 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	CHEAL	IPOSS
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.
Pest Name	Giant ragweed	Common lambsqu>	Morning glory
Crop Code			
B BCH Scale			
Crop Scientific Name			
Crop Name			
Crop Variety			
Description			
Part Rated			
Rating Date	7/2/2013	7/2/2013	7/2/2013
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing			

Trt Treatment No. Name	Rate	Growth Stage	13	14	15
9 AUTHORITY MTZ	14 OZ/A	PRE			
MARVEL	7 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
10 ANTHEM	6 OZ/A	PRE	90		
AUTHORITY MTZ	14 OZ/A	PRE			
MARVEL	6.5 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
11 AUTHORITY XL	4 OZ/A	PRE	95		
ANTHEM	6 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
12 AUTHORITY XL	4 OZ/A	PRE	99		
MARVEL	7 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
13 ANTHEM	6 OZ/A	PRE	95		
AUTHORITY XL	4 OZ/A	PRE			
MARVEL	6.5 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
14 FIERCE	3 OZ/A	PRE	90		
PREFIX	32 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
15 BOUNDARY	32 OZ/A	PRE	80		
PREFIX	32 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
16 VALOR XLT	3 OZ/A	PRE	99		
PREFIX	32 OZ/A	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	2 TRI			
NIS	0.25 % V/V	2 TRI			
ROUNDUP POWERMAX	22 OZ/A	42 DAP			
LSD (P=.05)			3.4	0.0	0.0
Standard Deviation			2.0	0.0	0.0
CV			2.38	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type
 Pest Code
 Pest Scientific Name
 Pest Name
 Crop Code GLXMA
 BBCH Scale BSOY
 Crop Scientific Name Glycine max
 Crop Name Soybean
 Crop Variety
 Description
 Part Rated
 Rating Date 11/4/2013
 Rating Type YIELD
 Rating Unit BU
 Rating Timing

Trt Treatment No. Name	Rate	Growth Stage	Yield
1 CHECK UNTREATED			12
2 ROUNDUP POWERMAX	22 OZ/A	2 TRI	61
ROUNDUP POWERMAX	22 OZ/A	42 DAP	
3 AUTHORITY ELITE	28 OZ/A	PRE	73
ANTHEM	6 OZ/A	2 TRI	
ROUNDUP POWERMAX	22 OZ/A	2 TRI	
NIS	0.25 % V/V	2 TRI	
ROUNDUP POWERMAX	22 OZ/A	42 DAP	
4 AUTHORITY ELITE	28 OZ/A	PRE	75
MARVEL	7 OZ/A	2 TRI	
ROUNDUP POWERMAX	22 OZ/A	2 TRI	
NIS	0.25 % V/V	2 TRI	
ROUNDUP POWERMAX	22 OZ/A	42 DAP	
5 AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE	65
ANTHEM	6 OZ/A	2 TRI	
ROUNDUP POWERMAX	22 OZ/A	2 TRI	
NIS	0.25 % V/V	2 TRI	
ROUNDUP POWERMAX	22 OZ/A	42 DAP	
6 AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE	63
MARVEL	7 OZ/A	2 TRI	
ROUNDUP POWERMAX	22 OZ/A	2 TRI	
NIS	0.25 % V/V	2 TRI	
ROUNDUP POWERMAX	22 OZ/A	42 DAP	
7 ANTHEM	6 OZ/A	PRE	62
AUTHORITY MAXX (F9016-2)	4 OZ/A	PRE	
MARVEL	6.5 OZ/A	2 TRI	
ROUNDUP POWERMAX	22 OZ/A	2 TRI	
NIS	0.25 % V/V	2 TRI	
ROUNDUP POWERMAX	22 OZ/A	42 DAP	
8 AUTHORITY MTZ	14 OZ/A	PRE	63
ANTHEM	6 OZ/A	2 TRI	
ROUNDUP POWERMAX	22 OZ/A	2 TRI	
NIS	0.25 % V/V	2 TRI	
ROUNDUP POWERMAX	22 OZ/A	42 DAP	

Plant and Soil Science, U of KY
Weed Science Research

Pest Type
Pest Code
Pest Scientific Name
Pest Name
Crop Code GLXMA
BBCH Scale BSOY
Crop Scientific Name Glycine max
Crop Name Soybean
Crop Variety
Description
Part Rated
Rating Date 11/4/2013
Rating Type YIELD
Rating Unit BU
Rating Timing

Trt No.	Treatment Name	Rate	Growth Stage	
9	AUTHORITY MTZ	14 OZ/A	PRE	65
	MARVEL	7 OZ/A	2 TRI	
	ROUNDUP POWERMAX	22 OZ/A	2 TRI	
	NIS	0.25 % V/V	2 TRI	
	ROUNDUP POWERMAX	22 OZ/A	42 DAP	
10	ANTHEM	6 OZ/A	PRE	61
	AUTHORITY MTZ	14 OZ/A	PRE	
	MARVEL	6.5 OZ/A	2 TRI	
	ROUNDUP POWERMAX	22 OZ/A	2 TRI	
	NIS	0.25 % V/V	2 TRI	
	ROUNDUP POWERMAX	22 OZ/A	42 DAP	
11	AUTHORITY XL	4 OZ/A	PRE	59
	ANTHEM	6 OZ/A	2 TRI	
	ROUNDUP POWERMAX	22 OZ/A	2 TRI	
	NIS	0.25 % V/V	2 TRI	
	ROUNDUP POWERMAX	22 OZ/A	42 DAP	
12	AUTHORITY XL	4 OZ/A	PRE	63
	MARVEL	7 OZ/A	2 TRI	
	ROUNDUP POWERMAX	22 OZ/A	2 TRI	
	NIS	0.25 % V/V	2 TRI	
	ROUNDUP POWERMAX	22 OZ/A	42 DAP	
13	ANTHEM	6 OZ/A	PRE	61
	AUTHORITY XL	4 OZ/A	PRE	
	MARVEL	6.5 OZ/A	2 TRI	
	ROUNDUP POWERMAX	22 OZ/A	2 TRI	
	NIS	0.25 % V/V	2 TRI	
	ROUNDUP POWERMAX	22 OZ/A	42 DAP	
14	FIERCE	3 OZ/A	PRE	60
	PREFIX	32 OZ/A	2 TRI	
	ROUNDUP POWERMAX	22 OZ/A	2 TRI	
	NIS	0.25 % V/V	2 TRI	
	ROUNDUP POWERMAX	22 OZ/A	42 DAP	
15	BOUNDARY	32 OZ/A	PRE	67
	PREFIX	32 OZ/A	2 TRI	
	ROUNDUP POWERMAX	22 OZ/A	2 TRI	
	NIS	0.25 % V/V	2 TRI	
	ROUNDUP POWERMAX	22 OZ/A	42 DAP	
16	VALOR XLT	3 OZ/A	PRE	68
	PREFIX	32 OZ/A	2 TRI	
	ROUNDUP POWERMAX	22 OZ/A	2 TRI	
	NIS	0.25 % V/V	2 TRI	
	ROUNDUP POWERMAX	22 OZ/A	42 DAP	
	LSD (P=.05)			5.3
	Standard Deviation			3.2
	CV			5.19

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN VIII

Trial ID: S13030	Location: LEXINGTON, KY	Trial Year: 2013
Protocol ID: FMC-AUTH-SB	Investigator: Charles H Slack	
Project ID:	Study Director: CHARLES SLACK	
	Sponsor Contact: RUSTY MITCHELL	

Pest Type

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

Pest Code

SETFA, Setaria faberi, = US
 AMBTR, Ambrosia trifida, = US
 CHEAL, Chenopodium album, = US
 IPOSS, Ipomoea sp., = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent
 BU = bushel

ARM Action Codes

TY1 = $3.821053 * [17] * (100 - [18]) / 87$

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN VIII

Trial ID: S13030 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: FMC-AUTH-SB Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: RUSTY MITCHELL

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/9/2013
Completion Date: 11/4/2013

Trial Location

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

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: 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

Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3832

Planting Date: 5/9/2013

Planting Rate, Unit: 210000 S/A

Planting Method: DRILLE drilled

Depth, Unit: 1.5 IN

Planting Equipment: SR Drilling Machine

Row Spacing, Unit: 7 IN

Emergence Date: 5/16/2013

Harvest Date: 11/4/2013

Harvested Width, Unit: 5 FT

Soil Temperature, Unit: 65 F

Harvested Length, Unit: 38 FT

Soil Moisture: GOOD good

Harvest Equipment: WINTERSTEIGER

Seed Bed: MEDIUM medium

% 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:** CHEAL *Chenopodium album*
Common Name: Common lambsquarters

Pest 4 Type: W **Code:** IPOSS *Ipomoea sp.*
Common Name: Morning glory

Site and Design

Treated Plot Width: 8.5 FT

Site Type: FIELD field

Treated Plot Length: 44 FT

Treated Plot Area: 374 FT² **Treatments:** 16

Tillage Type: NOTILL no-till

Replications: 3

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

Analyzed By:

Moisture and Weather Conditions

Overall Moisture Conditions: WET wet

Closest Weather Station: SPINDLETOP

Distance, Unit: 2 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

	A	B	C
Application Date:	5/9/2013	6/4/2013	6/18/2013
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	2TRI	42 DAP
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	70 F	75 F	75 F
% Relative Humidity:	40	54	65
Wind Velocity, Unit:	6 MPH	9 MPH	5 MPH
Wind Direction:	N	E	SSW
Soil Temperature, Unit:	65 F	70 F	75 F
Soil Moisture:	EXCELL	NORMAL	WET
% Cloud Cover:	80	10	60
Next Moisture Occurred On:	5/10/2013	6/6/2013	6/24/2013

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:	2 TRI	95	
Height, Unit:	8 IN		

Pest Stage At Each Application

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

Plant and Soil Science, U of KY
Weed Science Research

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:	8.5	FT	8.5	FT	8.5	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:	2.5	liters	2.5	liters	2.5	liters
Propellant:	CO2		CO2		CO2	

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN IX

Trial ID: S13031 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: VAL-SB-PRE Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: JOHN CRANMER

Pest Type W Weed W Weed W Weed
Pest Code SETFA AMBTR CHEAL
Pest Scientific Name Setaria faberi Ambrosia trifida Chenopodium albidum
Pest Name Giant foxtail Giant ragweed Common lambsquarters
Crop Code GLXMA
BBCH Scale BSOY
Crop Scientific Name Glycine max
Crop Name Soybean
Crop Variety
Description
Part Rated
Rating Date 5/23/2013 5/23/2013 5/23/2013 5/23/2013
Rating Type INJURY CONTROL CONTROL CONTROL
Rating Unit PERCENT PERCENT PERCENT PERCENT
Rating Timing 2 WEEK 2 WEEK 2 WEEK 2 WEEK

Trt No.	Treatment Name	Rate	Growth Unit	Stage	1	2	3	4
1	CHECK UNTREATED				0	0	0	0
2	VALOR SX	2 OZ/A	PRE		0	99	89	99
3	VALOR SX	3 OZ/A	PRE		0	99	93	99
4	FIERCE	3 OZ/A	PRE		0	99	90	99
5	FIERCE	3.75 OZ/A	PRE		0	99	90	99
6	VALOR XLT	3 OZ/A	PRE		3	99	99	99
7	GANGSTER FR	0.4 OZ/A	PRE		0	99	99	99
	GANGSTER V	2 OZ/A	PRE					
8	AUTHORITY XL	4 OZ/A	PRE		0	99	96	99
9	SONIC	3.2 OZ/A	PRE		0	99	96	99
10	SONIC	4 OZ/A	PRE		0	99	99	99
11	ENLITE	2.8 OZ/A	PRE		0	99	96	99
12	FIERCE	2.5 OZ/A	PRE		0	99	99	99
	CLASSIC	1 OZ/A	PRE					
13	FIERCE	2.75 OZ/A	PRE		3	99	99	99
	CLASSIC	1 OZ/A	PRE					
14	FIERCE	3 OZ/A	PRE		0	99	99	99
	CLASSIC	1 OZ/A	PRE					
15	FIERCE	2.5 OZ/A	PRE		0	99	99	99
	GANGSTER FR	0.3 OZ/A	PRE					
16	FIERCE	2.75 OZ/A	PRE		0	99	99	99
	GANGSTER FR	0.3 OZ/A	PRE					
17	FIERCE	3 OZ/A	PRE		7	99	96	99
	GANGSTER FR	0.3 OZ/A	PRE					
18	FIERCE	2.75 OZ/A	PRE		0	99	99	99
	GANGSTER FR	0.4 OZ/A	PRE					
19	FIERCE	2.75 OZ/A	PRE		0	99	99	99
	CLASSIC	0.33 OZ/A	PRE					
20	CHECK UNTREATED				0	99	83	99
	LSD (P=.05)				3.8	0.0	9.1	0.0
	Standard Deviation				2.3	0.0	5.5	0.0
	CV				341.24	0.0	6.08	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed		
Pest Code	IPOSS	SETFA	AMBTR		
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>		
Pest Name	Morning glory	Giant foxtail	Giant ragweed		
Crop Code		GLXMA			
BBCH Scale		BSOY			
Crop Scientific Name	Glycine max				
Crop Name	Soybean				
Crop Variety					
Description					
Part Rated					
Rating Date	5/23/2013	6/7/2013	6/7/2013		
Rating Type	CONTROL	INJURY	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT		
Rating Timing	2 WEEK	4 WEEK	4 WEEK		
Trt Treatment	Rate Growth				
No. Name	Rate Unit Stage	5	6	7	8
1 CHECK UNTREATED		0	0	0	0
2 VALOR SX	2 OZ/A PRE	83	0	94	78
3 VALOR SX	3 OZ/A PRE	90	0	99	82
4 FIERCE	3 OZ/A PRE	90	0	99	73
5 FIERCE	3.75 OZ/A PRE	90	0	99	82
6 VALOR XLT	3 OZ/A PRE	96	3	96	99
7 GANGSTER FR	0.4 OZ/A PRE	99	0	99	99
GANGSTER V	2 OZ/A PRE				
8 AUTHORITY XL	4 OZ/A PRE	99	0	98	96
9 SONIC	3.2 OZ/A PRE	96	3	99	94
10 SONIC	4 OZ/A PRE	99	0	99	96
11 ENLITE	2.8 OZ/A PRE	93	0	96	83
12 FIERCE	2.5 OZ/A PRE	99	0	99	95
CLASSIC	1 OZ/A PRE				
13 FIERCE	2.75 OZ/A PRE	99	3	99	99
CLASSIC	1 OZ/A PRE				
14 FIERCE	3 OZ/A PRE	99	3	96	99
CLASSIC	1 OZ/A PRE				
15 FIERCE	2.5 OZ/A PRE	96	0	96	96
GANGSTER FR	0.3 OZ/A PRE				
16 FIERCE	2.75 OZ/A PRE	99	3	96	99
GANGSTER FR	0.3 OZ/A PRE				
17 FIERCE	3 OZ/A PRE	96	7	99	96
GANGSTER FR	0.3 OZ/A PRE				
18 FIERCE	2.75 OZ/A PRE	93	0	96	99
GANGSTER FR	0.4 OZ/A PRE				
19 FIERCE	2.75 OZ/A PRE	99	0	99	99
CLASSIC	0.33 OZ/A PRE				
20 CHECK UNTREATED		90	0	99	73
LSD (P=.05)		7.6	5.3	5.7	11.2
Standard Deviation		4.6	3.2	3.5	6.8
CV		5.12	276.93	3.72	7.81

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	CHEAL	IPOSS		SETFA
Pest Scientific Name	Chenopodium al>	Ipomoea sp.		Setaria faberi
Pest Name	Common lambsqu>	Morning glory		Giant foxtail
Crop Code			GLXMA	
BBCH Scale			BSOY	
Crop Scientific Name			Glycine max	
Crop Name			Soybean	
Crop Variety				
Description				
Part Rated				
Rating Date	6/7/2013	6/7/2013	7/8/2013	7/8/2013
Rating Type	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK
Trt Treatment	Rate	Growth		
No. Name	Rate Unit Stage	9	10	11
				12
1 CHECK UNTREATED		0	0	0
2 VALOR SX	2 OZ/A PRE	99	77	0
3 VALOR SX	3 OZ/A PRE	99	83	0
4 FIERCE	3 OZ/A PRE	96	80	0
5 FIERCE	3.75 OZ/A PRE	99	80	0
6 VALOR XLT	3 OZ/A PRE	99	93	3
7 GANGSTER FR	0.4 OZ/A PRE	99	93	0
GANGSTER V	2 OZ/A PRE			
8 AUTHORITY XL	4 OZ/A PRE	99	99	0
9 SONIC	3.2 OZ/A PRE	99	96	3
10 SONIC	4 OZ/A PRE	99	99	0
11 ENLITE	2.8 OZ/A PRE	99	87	0
12 FIERCE	2.5 OZ/A PRE	99	96	0
CLASSIC	1 OZ/A PRE			
13 FIERCE	2.75 OZ/A PRE	99	93	3
CLASSIC	1 OZ/A PRE			
14 FIERCE	3 OZ/A PRE	99	99	3
CLASSIC	1 OZ/A PRE			
15 FIERCE	2.5 OZ/A PRE	99	93	0
GANGSTER FR	0.3 OZ/A PRE			
16 FIERCE	2.75 OZ/A PRE	99	99	3
GANGSTER FR	0.3 OZ/A PRE			
17 FIERCE	3 OZ/A PRE	99	93	7
GANGSTER FR	0.3 OZ/A PRE			
18 FIERCE	2.75 OZ/A PRE	99	90	0
GANGSTER FR	0.4 OZ/A PRE			
19 FIERCE	2.75 OZ/A PRE	99	96	0
CLASSIC	0.33 OZ/A PRE			
20 CHECK UNTREATED		99	81	0
LSD (P=.05)		1.9	10.5	5.3
Standard Deviation		1.2	6.4	3.2
CV		1.24	7.37	276.93

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	CHEAL	IPOSS
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.
Pest Name	Giant ragweed	Common lambsqu>	Morning glory
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Crop Variety			
Description			
Part Rated			
Rating Date	7/8/2013	7/8/2013	7/8/2013
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	8 WEEK	8 WEEK	8 WEEK

Trt Treatment	Rate Growth			
No. Name	Rate Unit Stage	13	14	15
1 CHECK UNTREATED		0	0	0
2 VALOR SX	2 OZ/A PRE	70	99	73
3 VALOR SX	3 OZ/A PRE	80	99	79
4 FIERCE	3 OZ/A PRE	67	96	73
5 FIERCE	3.75 OZ/A PRE	78	99	77
6 VALOR XLT	3 OZ/A PRE	93	99	90
7 GANGSTER FR	0.4 OZ/A PRE	95	99	92
GANGSTER V	2 OZ/A PRE			
8 AUTHORITY XL	4 OZ/A PRE	91	99	96
9 SONIC	3.2 OZ/A PRE	91	99	95
10 SONIC	4 OZ/A PRE	92	99	96
11 ENLITE	2.8 OZ/A PRE	82	99	85
12 FIERCE	2.5 OZ/A PRE	91	99	93
CLASSIC	1 OZ/A PRE			
13 FIERCE	2.75 OZ/A PRE	90	99	91
CLASSIC	1 OZ/A PRE			
14 FIERCE	3 OZ/A PRE	93	99	90
CLASSIC	1 OZ/A PRE			
15 FIERCE	2.5 OZ/A PRE	90	99	90
GANGSTER FR	0.3 OZ/A PRE			
16 FIERCE	2.75 OZ/A PRE	93	99	92
GANGSTER FR	0.3 OZ/A PRE			
17 FIERCE	3 OZ/A PRE	92	99	84
GANGSTER FR	0.3 OZ/A PRE			
18 FIERCE	2.75 OZ/A PRE	89	99	86
GANGSTER FR	0.4 OZ/A PRE			
19 FIERCE	2.75 OZ/A PRE	89	99	89
CLASSIC	0.33 OZ/A PRE			
20 CHECK UNTREATED		0	0	0
LSD (P=.05)		8.3	1.9	9.6
Standard Deviation		5.0	1.2	5.8
CV		6.4	1.31	7.42

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN IX

Trial ID: S13031 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: VAL-SB-PRE Investigator: Charles H Slack
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, = US
AMBTR, Ambrosia trifida, = US
CHEAL, Chenopodium album, = US
IPOSS, Ipomoea sp., = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Unit

PERCENT = percent

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN IX

Trial ID: S13031 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: VAL-SB-PRE Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: JOHN CRANMER

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/3/2013
Completion Date: 10/1/2013

Trial Location

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

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: 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

Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3832

Planting Rate, Unit: 210000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 7 IN
Soil Temperature, Unit: 65 F
Soil Moisture: GOOD good
Seed Bed: MEDIUM medium

Planting Date: 5/9/2013
Planting Method: DRILLE drilled
Planting Equipment: SR Drilling Machine
Emergence Date: 5/15/2013

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:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Pest 4 Type: W **Code:** IPOSS Ipomoea sp.
Common Name: Morning glory

Site and Design

Treated Plot Width: 8.5 FT
Treated Plot Length: 44 FT
Treated Plot Area: 374 FT²
Replications: 3

Site Type: FIELD field
Treatments: 20
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

Analyzed By:

Moisture and Weather Conditions

Overall Moisture Conditions: WET wet
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2.25 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

A

Application Date: 5/9/2013
Application Method: SPRAY
Application Timing: PRE
Application Placement: BROFOL
Applied By: C H SLACK
Air Temperature, Unit: 70 F
% Relative Humidity: 60
Wind Velocity, Unit: 5 MPH
Wind Direction: SE
Soil Temperature, Unit: 62 F
Soil Moisture: GOOD
Next Moisture Occurred On: 5/10/2013

Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: GLXMA BSOY

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: CHEAL W
Pest 4 Code, Type, Scale: IPOSS W

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: 8.5 FT
Boom Height, Unit: 30 IN
Ground Speed, Unit: 4 MPH
Carrier: WATER
Spray Volume, Unit: 24 GPA
Mix Size, Unit: 2.5 liters
Propellant: CO2

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN POSTEMERGENCE

Trial ID: S13032
Protocol ID: MON-2013-01-24-08
Project ID:

Location: LEXINGTON, KY Trial Year: 2013
Investigator: Charles H Slack
Study Director: CHARLES SLACK
Sponsor Contact: JOHN WILLIS

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	CHEAL
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Crop Variety				
Description				
Part Rated				
Rating Date	6/11/2013	6/11/2013	6/11/2013	6/11/2013
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	1 WEEK	1 WEEK	1 WEEK	1 WEEK

Trt No.	Treatment	Rate	Unit	Growth Stage	1	2	3	4
1	ROUNDUP POWERMAX	1.125	LB AE/A	V2	0	99	99	99
	AMS	2 %	W/W	V2				
	WARRANT	1.12	LB AI/A	V2				
2	MSO	1 %	V/V	V2	20	99	99	99
	ROUNDUP POWERMAX	1.125	LB AE/A	V2				
	AMS	2 %	W/W	V2				
	COBRA	0.12	LB AI/A	V2				
3	MSO	1 %	V/V	V2	20	99	99	99
	WARRANT	1.12	LB AI/A	V2				
	COBRA	0.12	LB AI/A	V2				
	ROUNDUP POWERMAX	1.125	LB AE/A	V2				
	AMS	2 %	W/W	V2				
4	MSO	1 %	V/V	V2	10	99	99	99
	ROUNDUP POWERMAX	1.125	LB AE/A	V2				
	AMS	2 %	W/W	V2				
	PHOENIX	0.2	LB AI/A	V2				
5	MSO	1 %	V/V	V2	18	99	99	99
	WARRANT	1.12	LB AI/A	V2				
	PHOENIX	0.12	LB AI/A	V2				
	ROUNDUP POWERMAX	1.125	LB AE/A	V2				
	AMS	2 %	W/W	V2				
6	ROUNDUP POWERMAX	1.125	LB AE/A	V2	10	99	99	99
	AMS	2 %	W/W	V2				
	NIS	0.25 %	V/V	V2				
	FLEXSTAR	0.25	LB AI/A	V2				
7	NIS	0.25 %	V/V	V2	10	99	99	99
	WARRANT	1.12	LB AI/A	V2				
	FLEXSTAR	0.25	LB AI/A	V2				
	ROUNDUP POWERMAX	1.125	LB AE/A	V2				
	AMS	2 %	W/W	V2				
8	ROUNDUP POWERMAX	1.125	LB AE/A	V2	0	99	99	99
	AMS	2 %	W/W	V2				
	NIS	0.25 %	V/V	V2				
	SELECT MAX	0.05	LB AI/A	V2				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	CHEAL
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Crop Variety				
Description				
Part Rated				
Rating Date	6/11/2013	6/11/2013	6/11/2013	6/11/2013
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	1 WEEK	1 WEEK	1 WEEK	1 WEEK

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4
9	WARRANT	1.12	LB AI/AV2		0	99	99	99
	SELECT MAX	0.05	LB AI/AV2					
	NIS	0.25	% V/V V2					
	ROUNDUP POWERMAX	1.125	LB AE/AV2					
	AMS	2	% W/W V2					
10	FIRSTRATE	0.02	LB AI/AV2		0	99	99	99
	ROUNDUP POWERMAX	1.125	LB AE/AV2					
	AMS	2	% W/W V2					
	NIS	0.25	% V/V V2					
11	NIS	0.25	% V/V V2		0	99	99	99
	WARRANT	1.12	LB AI/AV2					
	FIRSTRATE	0.02	LB AI/AV2					
	ROUNDUP POWERMAX	1.125	LB AE/AV2					
	AMS	2	% W/W V2					
12	CHECK UNTREATED				0	0	0	0
	LSD (P=.05)				1.4	0.0	0.0	0.0
	Standard Deviation				0.8	0.0	0.0	0.0
	CV				11.32	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	SETFA	AMBTR
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>
Pest Name	Morning glory	Giant foxtail	Giant ragweed
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Crop Variety			
Description			
Part Rated			
Rating Date	6/11/2013	6/18/2013	6/18/2013
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	1 WEEK	2 WEEK	2 WEEK

Trt No.	Treatment	Rate	Unit	Growth Stage	5	6	7	8
1	ROUNDUP POWERMAX	1.125	LB AE/AV2		99	0	99	99
	AMS	2 %	W/W V2					
	WARRANT	1.12	LB AI/AV2					
2	MSO	1 %	V/V V2		98	10	99	99
	ROUNDUP POWERMAX	1.125	LB AE/AV2					
	AMS	2 %	W/W V2					
	COBRA	0.12	LB AI/AV2					
3	MSO	1 %	V/V V2		99	10	99	99
	WARRANT	1.12	LB AI/AV2					
	COBRA	0.12	LB AI/AV2					
	ROUNDUP POWERMAX	1.125	LB AE/AV2					
	AMS	2 %	W/W V2					
4	MSO	1 %	V/V V2		99	10	99	99
	ROUNDUP POWERMAX	1.125	LB AE/AV2					
	AMS	2 %	W/W V2					
	PHOENIX	0.2	LB AI/AV2					
5	MSO	1 %	V/V V2		99	13	99	99
	WARRANT	1.12	LB AI/AV2					
	PHOENIX	0.12	LB AI/AV2					
	ROUNDUP POWERMAX	1.125	LB AE/AV2					
	AMS	2 %	W/W V2					
6	ROUNDUP POWERMAX	1.125	LB AE/AV2		99	10	99	99
	AMS	2 %	W/W V2					
	NIS	0.25 %	V/V V2					
	FLEXSTAR	0.25	LB AI/AV2					
7	NIS	0.25 %	V/V V2		99	10	99	99
	WARRANT	1.12	LB AI/AV2					
	FLEXSTAR	0.25	LB AI/AV2					
	ROUNDUP POWERMAX	1.125	LB AE/AV2					
	AMS	2 %	W/W V2					
8	ROUNDUP POWERMAX	1.125	LB AE/AV2		96	0	99	99
	AMS	2 %	W/W V2					
	NIS	0.25 %	V/V V2					
	SELECT MAX	0.05	LB AI/AV2					

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	SETFA	AMBTR
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>
Pest Name	Morning glory	Giant foxtail	Giant ragweed
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Crop Variety			
Description			
Part Rated			
Rating Date	6/11/2013	6/18/2013	6/18/2013
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	1 WEEK	2 WEEK	2 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	5	6	7	8
9 WARRANT	1.12 LB AI/AV2		99	0	99	99
SELECT MAX	0.05 LB AI/AV2					
NIS	0.25 % V/V V2					
ROUNDUP POWERMAX	1.125 LB AE/AV2					
AMS	2 % W/W V2					
10 FIRSTRATE	0.02 LB AI/AV2		99	0	99	99
ROUNDUP POWERMAX	1.125 LB AE/AV2					
AMS	2 % W/W V2					
NIS	0.25 % V/V V2					
11 NIS	0.25 % V/V V2		99	0	99	99
WARRANT	1.12 LB AI/AV2					
FIRSTRATE	0.02 LB AI/AV2					
ROUNDUP POWERMAX	1.125 LB AE/AV2					
AMS	2 % W/W V2					
12 CHECK UNTREATED			0	0	0	0
LSD (P=.05)			2.8	1.4	0.0	0.0
Standard Deviation			1.7	0.8	0.0	0.0
CV			1.85	15.79	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	IPOSS	SETFA
Pest Scientific Name	Chenopodium al>	Ipomoea sp.	Setaria faberi
Pest Name	Common lambsqu>	Morning glory	Giant foxtail
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Crop Variety			
Description			
Part Rated			
Rating Date	6/18/2013	6/18/2013	6/25/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	3 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	9	10	11	12
1 ROUNDUP POWERMAX	1.125 LB AE/A V2		99	99	0	99
AMS	2 % W/W V2					
WARRANT	1.12 LB AI/A V2					
2 MSO	1 % V/V V2		99	98	0	99
ROUNDUP POWERMAX	1.125 LB AE/A V2					
AMS	2 % W/W V2					
COBRA	0.12 LB AI/A V2					
3 MSO	1 % V/V V2		99	99	0	99
WARRANT	1.12 LB AI/A V2					
COBRA	0.12 LB AI/A V2					
ROUNDUP POWERMAX	1.125 LB AE/A V2					
AMS	2 % W/W V2					
4 MSO	1 % V/V V2		99	99	0	99
ROUNDUP POWERMAX	1.125 LB AE/A V2					
AMS	2 % W/W V2					
PHOENIX	0.2 LB AI/A V2					
5 MSO	1 % V/V V2		99	99	0	99
WARRANT	1.12 LB AI/A V2					
PHOENIX	0.12 LB AI/A V2					
ROUNDUP POWERMAX	1.125 LB AE/A V2					
AMS	2 % W/W V2					
6 ROUNDUP POWERMAX	1.125 LB AE/A V2		99	99	0	99
AMS	2 % W/W V2					
NIS	0.25 % V/V V2					
FLEXSTAR	0.25 LB AI/A V2					
7 NIS	0.25 % V/V V2		99	99	0	99
WARRANT	1.12 LB AI/A V2					
FLEXSTAR	0.25 LB AI/A V2					
ROUNDUP POWERMAX	1.125 LB AE/A V2					
AMS	2 % W/W V2					
8 ROUNDUP POWERMAX	1.125 LB AE/A V2		99	96	0	99
AMS	2 % W/W V2					
NIS	0.25 % V/V V2					
SELECT MAX	0.05 LB AI/A V2					

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	CHEAL	IPOSS		SETFA
Pest Scientific Name	Chenopodium al>	Ipomoea sp.		Setaria faberi
Pest Name	Common lambsqu>	Morning glory		Giant foxtail
Crop Code			GLXMA	
BBCH Scale			BSOY	
Crop Scientific Name			Glycine max	
Crop Name			Soybean	
Crop Variety				
Description				
Part Rated				
Rating Date	6/18/2013	6/18/2013	6/25/2013	6/25/2013
Rating Type	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	3 WEEK	3 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	9	10	11	12
9 WARRANT	1.12 LB AI/AV2		99	99	0	99
SELECT MAX	0.05 LB AI/AV2					
NIS	0.25 % V/V V2					
ROUNDUP POWERMAX	1.125 LB AE/AV2					
AMS	2 % W/W V2					
10 FIRSTRATE	0.02 LB AI/AV2		99	99	0	99
ROUNDUP POWERMAX	1.125 LB AE/AV2					
AMS	2 % W/W V2					
NIS	0.25 % V/V V2					
11 NIS	0.25 % V/V V2		99	99	0	99
WARRANT	1.12 LB AI/AV2					
FIRSTRATE	0.02 LB AI/AV2					
ROUNDUP POWERMAX	1.125 LB AE/AV2					
AMS	2 % W/W V2					
12 CHECK UNTREATED			0	0	0	0
LSD (P=.05)			0.0	2.8	0.0	0.0
Standard Deviation			0.0	1.7	0.0	0.0
CV			0.0	1.85	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	AMBTR	CHEAL	IPOSS	
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	
Pest Name	Giant ragweed	Common lambsqu>	Morning glory	
Crop Code				GLXMA
BBCH Scale				BSOY
Crop Scientific Name				Glycine max
Crop Name				Soybean
Crop Variety				
Description				
Part Rated				
Rating Date	6/25/2013	6/25/2013	6/25/2013	7/2/2013
Rating Type	CONTROL	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	3 WEEK	3 WEEK	3 WEEK	4 WEEK

Trt No.	Treatment Name	Rate	Unit	Growth Stage	13	14	15	16
1	ROUNDUP POWERMAX	1.125	LB	AE/A V2	99	99	99	0
	AMS	2 %	W/W	V2				
	WARRANT	1.12	LB	AI/A V2				
2	MSO	1 %	V/V	V2	99	99	98	0
	ROUNDUP POWERMAX	1.125	LB	AE/A V2				
	AMS	2 %	W/W	V2				
	COBRA	0.12	LB	AI/A V2				
3	MSO	1 %	V/V	V2	99	99	99	0
	WARRANT	1.12	LB	AI/A V2				
	COBRA	0.12	LB	AI/A V2				
	ROUNDUP POWERMAX	1.125	LB	AE/A V2				
	AMS	2 %	W/W	V2				
4	MSO	1 %	V/V	V2	99	99	99	0
	ROUNDUP POWERMAX	1.125	LB	AE/A V2				
	AMS	2 %	W/W	V2				
	PHOENIX	0.2	LB	AI/A V2				
5	MSO	1 %	V/V	V2	99	99	99	0
	WARRANT	1.12	LB	AI/A V2				
	PHOENIX	0.12	LB	AI/A V2				
	ROUNDUP POWERMAX	1.125	LB	AE/A V2				
	AMS	2 %	W/W	V2				
6	ROUNDUP POWERMAX	1.125	LB	AE/A V2	99	99	99	0
	AMS	2 %	W/W	V2				
	NIS	0.25 %	V/V	V2				
	FLEXSTAR	0.25	LB	AI/A V2				
7	NIS	0.25 %	V/V	V2	99	99	99	0
	WARRANT	1.12	LB	AI/A V2				
	FLEXSTAR	0.25	LB	AI/A V2				
	ROUNDUP POWERMAX	1.125	LB	AE/A V2				
	AMS	2 %	W/W	V2				
8	ROUNDUP POWERMAX	1.125	LB	AE/A V2	99	99	96	0
	AMS	2 %	W/W	V2				
	NIS	0.25 %	V/V	V2				
	SELECT MAX	0.05	LB	AI/A V2				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W	Weed	W	Weed	W	Weed	
Pest Code	AMBTR		CHEAL		IPOSS		
Pest Scientific Name	Ambrosia trifida		Chenopodium albidum		Ipomoea sp.		
Pest Name	Giant ragweed		Common lambsquarters		Morning glory		
Crop Code						GLXMA	
BBCH Scale						BSOY	
Crop Scientific Name						Glycine max	
Crop Name						Soybean	
Crop Variety							
Description							
Part Rated							
Rating Date	6/25/2013		6/25/2013		6/25/2013		7/2/2013
Rating Type	CONTROL		CONTROL		CONTROL		INJURY
Rating Unit	PERCENT		PERCENT		PERCENT		PERCENT
Rating Timing	3 WEEK		3 WEEK		3 WEEK		4 WEEK
Trt Treatment	Rate	Growth	13	14	15	16	
No. Name	Rate Unit	Stage					
9 WARRANT	1.12 LB AI/AV2						
SELECT MAX	0.05 LB AI/AV2		99	99	99	0	
NIS	0.25 % V/V	V2					
ROUNDUP POWERMAX	1.125 LB AE/AV2						
AMS	2 % W/W	V2					
10 FIRSTRATE	0.02 LB AI/AV2		99	99	99	0	
ROUNDUP POWERMAX	1.125 LB AE/AV2						
AMS	2 % W/W	V2					
NIS	0.25 % V/V	V2					
11 NIS	0.25 % V/V	V2	99	99	99	0	
WARRANT	1.12 LB AI/AV2						
FIRSTRATE	0.02 LB AI/AV2						
ROUNDUP POWERMAX	1.125 LB AE/AV2						
AMS	2 % W/W	V2					
12 CHECK UNTREATED			0	0	0	0	
LSD (P=.05)			0.0	0.0	2.8	0.0	
Standard Deviation			0.0	0.0	1.7	0.0	
CV			0.0	0.0	1.85	0.0	

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	IPOSS
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Chenopodium albidum	Ipomoea sp.
Pest Name	Giant foxtail	Giant ragweed	Common lambsquarters	Morning glory
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Crop Variety				
Description				
Part Rated				
Rating Date	7/2/2013	7/2/2013	7/2/2013	7/2/2013
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK

Trt No.	Treatment Name	Rate	Unit	Growth Stage	17	18	19	20
1	ROUNDUP POWERMAX	1.125	LB AE/A	V2	99	99	99	99
	AMS	2 %	W/W	V2				
	WARRANT	1.12	LB AI/A	V2				
2	MSO	1 %	V/V	V2	99	99	99	98
	ROUNDUP POWERMAX	1.125	LB AE/A	V2				
	AMS	2 %	W/W	V2				
	COBRA	0.12	LB AI/A	V2				
3	MSO	1 %	V/V	V2	99	99	99	99
	WARRANT	1.12	LB AI/A	V2				
	COBRA	0.12	LB AI/A	V2				
	ROUNDUP POWERMAX	1.125	LB AE/A	V2				
	AMS	2 %	W/W	V2				
4	MSO	1 %	V/V	V2	99	99	99	99
	ROUNDUP POWERMAX	1.125	LB AE/A	V2				
	AMS	2 %	W/W	V2				
	PHOENIX	0.2	LB AI/A	V2				
5	MSO	1 %	V/V	V2	99	99	99	99
	WARRANT	1.12	LB AI/A	V2				
	PHOENIX	0.12	LB AI/A	V2				
	ROUNDUP POWERMAX	1.125	LB AE/A	V2				
	AMS	2 %	W/W	V2				
6	ROUNDUP POWERMAX	1.125	LB AE/A	V2	99	99	99	99
	AMS	2 %	W/W	V2				
	NIS	0.25 %	V/V	V2				
	FLEXSTAR	0.25	LB AI/A	V2				
7	NIS	0.25 %	V/V	V2	99	99	99	99
	WARRANT	1.12	LB AI/A	V2				
	FLEXSTAR	0.25	LB AI/A	V2				
	ROUNDUP POWERMAX	1.125	LB AE/A	V2				
	AMS	2 %	W/W	V2				
8	ROUNDUP POWERMAX	1.125	LB AE/A	V2	99	99	99	96
	AMS	2 %	W/W	V2				
	NIS	0.25 %	V/V	V2				
	SELECT MAX	0.05	LB AI/A	V2				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	IPOSS
Pest Scientific Name	Setaria faberi	Ambrosia trifi	Chenopodium al	Ipomoea sp.
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu	Morning glory
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Crop Variety				
Description				
Part Rated				
Rating Date	7/2/2013	7/2/2013	7/2/2013	7/2/2013
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK

Trt No.	Treatment Name	Rate	Unit	Growth Stage	17	18	19	20
9	WARRANT	1.12	LB	AI/AV2	99	99	99	99
	SELECT MAX	0.05	LB	AI/AV2				
	NIS	0.25	%	V/V V2				
	ROUNDUP POWERMAX	1.125	LB	AE/AV2				
	AMS	2	%	W/W V2				
10	FIRSTRATE	0.02	LB	AI/AV2	99	99	99	99
	ROUNDUP POWERMAX	1.125	LB	AE/AV2				
	AMS	2	%	W/W V2				
	NIS	0.25	%	V/V V2				
11	NIS	0.25	%	V/V V2	99	99	99	99
	WARRANT	1.12	LB	AI/AV2				
	FIRSTRATE	0.02	LB	AI/AV2				
	ROUNDUP POWERMAX	1.125	LB	AE/AV2				
	AMS	2	%	W/W V2				
12	CHECK UNTREATED				0	0	0	0
	LSD (P=.05)				0.0	0.0	0.0	2.8
	Standard Deviation				0.0	0.0	0.0	1.7
	CV				0.0	0.0	0.0	1.85

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	CHEAL
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Crop Variety				
Description				
Part Rated				
Rating Date	7/30/2013	7/30/2013	7/30/2013	7/30/2013
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK

Trt No.	Treatment Name	Rate	Unit	Growth Stage	21	22	23	24
1	ROUNDUP POWERMAX	1.125	LB AE/A	V2	0	99	99	99
	AMS	2 %	W/W	V2				
	WARRANT	1.12	LB AI/A	V2				
2	MSO	1 %	V/V	V2	0	99	99	99
	ROUNDUP POWERMAX	1.125	LB AE/A	V2				
	AMS	2 %	W/W	V2				
	COBRA	0.12	LB AI/A	V2				
3	MSO	1 %	V/V	V2	0	99	99	99
	WARRANT	1.12	LB AI/A	V2				
	COBRA	0.12	LB AI/A	V2				
	ROUNDUP POWERMAX	1.125	LB AE/A	V2				
	AMS	2 %	W/W	V2				
4	MSO	1 %	V/V	V2	0	99	99	99
	ROUNDUP POWERMAX	1.125	LB AE/A	V2				
	AMS	2 %	W/W	V2				
	PHOENIX	0.2	LB AI/A	V2				
5	MSO	1 %	V/V	V2	0	99	99	99
	WARRANT	1.12	LB AI/A	V2				
	PHOENIX	0.12	LB AI/A	V2				
	ROUNDUP POWERMAX	1.125	LB AE/A	V2				
	AMS	2 %	W/W	V2				
6	ROUNDUP POWERMAX	1.125	LB AE/A	V2	0	99	99	99
	AMS	2 %	W/W	V2				
	NIS	0.25 %	V/V	V2				
	FLEXSTAR	0.25	LB AI/A	V2				
7	NIS	0.25 %	V/V	V2	0	99	99	99
	WARRANT	1.12	LB AI/A	V2				
	FLEXSTAR	0.25	LB AI/A	V2				
	ROUNDUP POWERMAX	1.125	LB AE/A	V2				
	AMS	2 %	W/W	V2				
8	ROUNDUP POWERMAX	1.125	LB AE/A	V2	0	99	99	99
	AMS	2 %	W/W	V2				
	NIS	0.25 %	V/V	V2				
	SELECT MAX	0.05	LB AI/A	V2				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	CHEAL
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Crop Variety				
Description				
Part Rated				
Rating Date	7/30/2013	7/30/2013	7/30/2013	7/30/2013
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK

Trt No.	Treatment Name	Rate	Unit	Growth Stage	21	22	23	24
9	WARRANT	1.12	LB AI/AV2		0	99	99	99
	SELECT MAX	0.05	LB AI/AV2					
	NIS	0.25	% V/V V2					
	ROUNDUP POWERMAX	1.125	LB AE/AV2					
	AMS	2	% W/W V2					
10	FIRSTRATE	0.02	LB AI/AV2		0	99	99	99
	ROUNDUP POWERMAX	1.125	LB AE/AV2					
	AMS	2	% W/W V2					
	NIS	0.25	% V/V V2					
11	NIS	0.25	% V/V V2		0	99	99	99
	WARRANT	1.12	LB AI/AV2					
	FIRSTRATE	0.02	LB AI/AV2					
	ROUNDUP POWERMAX	1.125	LB AE/AV2					
	AMS	2	% W/W V2					
12	CHECK UNTREATED				0	0	0	0
	LSD (P=.05)				0.0	0.0	0.0	0.0
	Standard Deviation				0.0	0.0	0.0	0.0
	CV				0.0	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type W Weed
 Pest Code IPOSS
 Pest Scientific Name Ipomoea sp.
 Pest Name Morning glory
 Crop Code
 BBCH Scale
 Crop Scientific Name
 Crop Name
 Crop Variety
 Description
 Part Rated
 Rating Date 7/30/2013
 Rating Type CONTROL
 Rating Unit PERCENT
 Rating Timing 8 WEEK

Trt No.	Treatment Name	Rate	Unit	Growth Stage	
1	ROUNDUP POWERMAX	1.125 LB	AE/AV2		99
	AMS	2 %	W/W	V2	
	WARRANT	1.12 LB	AI/AV2		
2	MSO	1 %	V/V	V2	98
	ROUNDUP POWERMAX	1.125 LB	AE/AV2		
	AMS	2 %	W/W	V2	
	COBRA	0.12 LB	AI/AV2		
3	MSO	1 %	V/V	V2	99
	WARRANT	1.12 LB	AI/AV2		
	COBRA	0.12 LB	AI/AV2		
	ROUNDUP POWERMAX	1.125 LB	AE/AV2		
	AMS	2 %	W/W	V2	
4	MSO	1 %	V/V	V2	99
	ROUNDUP POWERMAX	1.125 LB	AE/AV2		
	AMS	2 %	W/W	V2	
	PHOENIX	0.2 LB	AI/AV2		
5	MSO	1 %	V/V	V2	99
	WARRANT	1.12 LB	AI/AV2		
	PHOENIX	0.12 LB	AI/AV2		
	ROUNDUP POWERMAX	1.125 LB	AE/AV2		
	AMS	2 %	W/W	V2	
6	ROUNDUP POWERMAX	1.125 LB	AE/AV2		99
	AMS	2 %	W/W	V2	
	NIS	0.25 %	V/V	V2	
	FLEXSTAR	0.25 LB	AI/AV2		
7	NIS	0.25 %	V/V	V2	99
	WARRANT	1.12 LB	AI/AV2		
	FLEXSTAR	0.25 LB	AI/AV2		
	ROUNDUP POWERMAX	1.125 LB	AE/AV2		
	AMS	2 %	W/W	V2	
8	ROUNDUP POWERMAX	1.125 LB	AE/AV2		96
	AMS	2 %	W/W	V2	
	NIS	0.25 %	V/V	V2	
	SELECT MAX	0.05 LB	AI/AV2		

Plant and Soil Science, U of KY
Weed Science Research

Pest Type W Weed
 Pest Code IPOSS
 Pest Scientific Name Ipomoea sp.
 Pest Name Morning glory
 Crop Code
 BBCH Scale
 Crop Scientific Name
 Crop Name
 Crop Variety
 Description
 Part Rated
 Rating Date 7/30/2013
 Rating Type CONTROL
 Rating Unit PERCENT
 Rating Timing 8 WEEK

Trt No.	Treatment Name	Rate	Unit	Growth Stage	
9	WARRANT	1.12 LB	AI/AV2		99
	SELECT MAX	0.05 LB	AI/AV2		
	NIS	0.25 %	V/V	V2	
	ROUNDUP POWERMAX	1.125 LB	AE/AV2		
	AMS	2 %	W/W	V2	
10	FIRSTRATE	0.02 LB	AI/AV2		99
	ROUNDUP POWERMAX	1.125 LB	AE/AV2		
	AMS	2 %	W/W	V2	
	NIS	0.25 %	V/V	V2	
11	NIS	0.25 %	V/V	V2	99
	WARRANT	1.12 LB	AI/AV2		
	FIRSTRATE	0.02 LB	AI/AV2		
	ROUNDUP POWERMAX	1.125 LB	AE/AV2		
	AMS	2 %	W/W	V2	
12	CHECK UNTREATED				0
	LSD (P=.05)				2.8
	Standard Deviation				1.7
	CV				1.85

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3832

Planting Rate, Unit: 210000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 7 IN
Soil Temperature, Unit: 65 F
Soil Moisture: WET wet
Seed Bed: MEDIUM medium

Planting Date: 5/9/2013
Planting Method: DRILLE drilled
Planting Equipment: SR Drilling Machine
Emergence Date: 5/14/2013

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:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Pest 4 Type: W **Code:** IPOSS Ipomoea sp.
Common Name: Morning glory

Site and Design

Treated Plot Width: 8.5 FT
Treated Plot Length: 44 FT
Treated Plot Area: 374 FT2
Replications: 3

Site Type: FIELD field
Treatments: 12
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

Analyzed By:

Moisture and Weather Conditions

Overall Moisture Conditions: WET wet
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2.25 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

A

Application Date: 6/4/2013
Application Method: SPRAY
Application Timing: V2
Application Placement: BROFOL
Applied By: C H SLACK
Air Temperature, Unit: 75 F
% Relative Humidity: 50
Wind Velocity, Unit: 8 MPH
Wind Direction: E
Soil Temperature, Unit: 71 F
Soil Moisture: NORMAL
% Cloud Cover: 10
Next Moisture Occurred On: 6/6/2013

Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: GLXMA BSOY
Stage Scale Used: BBCH
Stage Majority, Percent: V2 95

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: CHEAL W
Height, Unit: 3 IN
Pest 4 Code, Type, Scale: IPOSS W
Height, Unit: 2 IN

Plant and Soil Science, U of KY
Weed Science Research

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: 8.5 FT
Boom Height, Unit: 30 IN
Ground Speed, Unit: 4 MPH
Carrier: WATER
Spray Volume, Unit: 24 GPA
Mix Size, Unit: 2.5 liters
Propellant: CO2

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN X

Trial ID: S13033 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: DOW SOY-PRE Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: JONATHAN HUFF

Pest Type W Weed W Weed W Weed
Pest Code SETFA AMBTR CHEAL
Pest Scientific Name Setaria faberi Ambrosia trifida> Chenopodium alba>
Pest Name Giant foxtail Giant ragweed Common lambsquarters
Crop Code GLXMA
BBCH Scale BSOY
Crop Scientific Name Glycine max
Crop Name Soybean
Crop Variety
Description
Part Rated
Rating Date 5/23/2013 5/23/2013 5/23/2013 5/23/2013
Rating Type INJURY CONTROL CONTROL CONTROL
Rating Unit PERCENT PERCENT PERCENT PERCENT
Rating Timing 2 WEEK 2 WEEK 2 WEEK 2 WEEK

Trt Treatment No. Name	Rate Unit Stage	1	2	3	4
1 CHECK UNTREATED		0	0	0	0
2 SONIC	3 OZ/A PRE	0	99	99	99
3 SONIC	4.5 OZ/A PRE	0	99	99	99
4 SONIC	6 OZ/A PRE	0	99	99	99
5 VALOR SX	1.5 OZ/A PRE	0	99	99	99
FIRSTRATE	0.3 OZ/A PRE				
6 VALOR SX	2 OZ/A PRE	0	99	99	99
FIRSTRATE	0.4 OZ/A PRE				
7 VALOR SX	2.5 OZ/A PRE	0	99	99	99
FIRSTRATE	0.5 OZ/A PRE				
8 VALOR SX	3 OZ/A PRE	0	99	99	99
FIRSTRATE	0.6 OZ/A PRE				
9 VALOR SX	1.75 OZ/A PRE	0	99	99	99
CLASSIC	1.23 OZ/A PRE				
10 PREFIX	32 OZ/A PRE	0	99	99	99
LSD (P=.05)		0.0	0.0	0.0	0.0
Standard Deviation		0.0	0.0	0.0	0.0
CV		0.0	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	SETFA	AMBTR
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>
Pest Name	Morning glory	Giant foxtail	Giant ragweed
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Crop Variety			
Description			
Part Rated			
Rating Date	5/23/2013	6/6/2013	6/6/2013
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	4 WEEK	4 WEEK

Trt Treatment	Rate Growth				
No. Name	Rate Unit Stage	5	6	7	8
1 CHECK UNTREATED		0	0	0	0
2 SONIC	3 OZ/A PRE	99	0	99	96
3 SONIC	4.5 OZ/A PRE	99	0	99	95
4 SONIC	6 OZ/A PRE	99	0	99	96
5 VALOR SX	1.5 OZ/A PRE	99	0	99	96
FIRSTRATE	0.3 OZ/A PRE				
6 VALOR SX	2 OZ/A PRE	99	0	99	99
FIRSTRATE	0.4 OZ/A PRE				
7 VALOR SX	2.5 OZ/A PRE	99	0	99	95
FIRSTRATE	0.5 OZ/A PRE				
8 VALOR SX	3 OZ/A PRE	99	0	99	96
FIRSTRATE	0.6 OZ/A PRE				
9 VALOR SX	1.75 OZ/A PRE	99	0	99	99
CLASSIC	1.23 OZ/A PRE				
10 PREFIX	32 OZ/A PRE	99	0	99	99
LSD (P=.05)		0.0	0.0	0.0	7.0
Standard Deviation		0.0	0.0	0.0	4.1
CV		0.0	0.0	0.0	4.66

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed	
Pest Code	CHEAL	IPOSS		SETFA	
Pest Scientific Name	Chenopodium al>	Ipomoea sp.		Setaria faberi	
Pest Name	Common lambsqu>	Morning glory		Giant foxtail	
Crop Code			GLXMA		
BBCH Scale			BSOY		
Crop Scientific Name			Glycine max		
Crop Name			Soybean		
Crop Variety					
Description					
Part Rated					
Rating Date	6/6/2013	6/6/2013	7/8/2013	7/8/2013	
Rating Type	CONTROL	CONTROL	INJURY	CONTROL	
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK	
Trt Treatment	Rate	Growth			
No. Name	Rate Unit Stage	9	10	11	
		12			
1 CHECK UNTREATED		0	0	0	0
2 SONIC	3 OZ/A PRE	99	99	0	98
3 SONIC	4.5 OZ/A PRE	99	99	0	96
4 SONIC	6 OZ/A PRE	99	99	0	98
5 VALOR SX	1.5 OZ/A PRE	99	99	0	93
FIRSTRATE	0.3 OZ/A PRE				
6 VALOR SX	2 OZ/A PRE	99	99	0	95
FIRSTRATE	0.4 OZ/A PRE				
7 VALOR SX	2.5 OZ/A PRE	99	99	0	96
FIRSTRATE	0.5 OZ/A PRE				
8 VALOR SX	3 OZ/A PRE	99	99	0	96
FIRSTRATE	0.6 OZ/A PRE				
9 VALOR SX	1.75 OZ/A PRE	99	99	0	99
CLASSIC	1.23 OZ/A PRE				
10 PREFIX	32 OZ/A PRE	99	96	0	99
LSD (P=.05)		0.0	2.8	0.0	6.4
Standard Deviation		0.0	1.6	0.0	3.7
CV		0.0	1.85	0.0	4.3

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	CHEAL	IPOSS
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.
Pest Name	Giant ragweed	Common lambsqu>	Morning glory
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Crop Variety			
Description			
Part Rated			
Rating Date	7/8/2013	7/8/2013	7/8/2013
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	8 WEEK	8 WEEK	8 WEEK

Trt Treatment	Rate Growth			
No. Name	Rate Unit Stage	13	14	15
1 CHECK UNTREATED		0	0	0
2 SONIC	3 OZ/A PRE	90	99	99
3 SONIC	4.5 OZ/A PRE	90	99	99
4 SONIC	6 OZ/A PRE	89	99	99
5 VALOR SX	1.5 OZ/A PRE	91	99	99
FIRSTRATE	0.3 OZ/A PRE			
6 VALOR SX	2 OZ/A PRE	93	99	96
FIRSTRATE	0.4 OZ/A PRE			
7 VALOR SX	2.5 OZ/A PRE	91	99	99
FIRSTRATE	0.5 OZ/A PRE			
8 VALOR SX	3 OZ/A PRE	94	99	99
FIRSTRATE	0.6 OZ/A PRE			
9 VALOR SX	1.75 OZ/A PRE	95	99	99
CLASSIC	1.23 OZ/A PRE			
10 PREFIX	32 OZ/A PRE	93	99	96
LSD (P=.05)		8.8	0.0	4.1
Standard Deviation		5.2	0.0	2.4
CV		6.23	0.0	2.7

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN X

Trial ID: S13033 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: DOW SOY-PRE Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: JONATHAN HUFF

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/9/2013
Completion Date: 9/9/2013

Trial Location

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

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: 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

Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3832

Planting Rate, Unit: 210000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 7 IN
Soil Temperature, Unit: 65 F
Soil Moisture: WET wet
Seed Bed: MEDIUM medium

Planting Date: 5/9/2013
Planting Method: DRILLE drilled
Planting Equipment: SR Drilling Machine
Emergence Date: 5/15/2013

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:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Pest 4 Type: W **Code:** IPOSS Ipomoea sp.
Common Name: Morning glory

Site and Design

Treated Plot Width: 8.75 FT
Treated Plot Length: 44 FT
Treated Plot Area: 385 FT2
Replications: 3

Site Type: FIELD field
Treatments: 10
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: WET wet
Closest Weather Station: SPINDLETOP
Distance, Unit: 2.25 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

A

Application Date: 5/9/2013
Application Method: SPRAY
Application Timing: PRE
Application Placement: BROSOI
Applied By: C H SLACK
Air Temperature, Unit: 75 F
% Relative Humidity: 60
Wind Velocity, Unit: 3 MPH
Wind Direction: SW
Soil Temperature, Unit: 65 F
Soil Moisture: WET
% Cloud Cover: 20
Next Moisture Occurred On: 5/10/2013

Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: GLXMA BSOY

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: CHEAL W
Pest 4 Code, Type, Scale: IPOSS W

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: 8.5 FT
Boom Height, Unit: 30 IN
Ground Speed, Unit: 4 MPH
Carrier: WATER
Spray Volume, Unit: 24 GPA
Mix Size, Unit: 2.5 liters
Propellant: CO2

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN EARLY PREPLANT III

Trial ID: S13034 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: BASF-SOY YIELD Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: GREG STAPLETON

Pest Type W Weed W Weed W Weed
Pest Code SETFA AMACH IPOSS
Pest Scientific Name Setaria faberi Amaranthus hyb> Ipomoea sp.
Pest Name Giant foxtail Smooth pigweed Morning glory
Crop Code GLXMA
BBCH Scale BSOY
Crop Scientific Name Glycine max
Crop Name Soybean
Crop Variety
Description
Part Rated
Rating Date
Rating Type INJURY CONTROL CONTROL CONTROL
Rating Unit PERCENT PERCENT PERCENT PERCENT
Rating Timing 2 WEEK 2 WEEK 2 WEEK 2 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
1 ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY	0	99	99	99
2,4-D ESTER	24 FL OZ/A	-7 DAY				
NIS	0.25 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
2 OPTILL	2 OZ WT/A	-7 DAY	0	99	99	99
OUTLOOK	10 FL OZ/A	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
MSO	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
3 OPTILL	2 OZ WT/A	-7 DAY	0	99	99	99
OUTLOOK	10 FL OZ/A	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
MSO	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
OUTLOOK	10 FL OZ/A	LP				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
4 OPTILL	2 OZ WT/A	-7 DAY	0	99	99	99
OUTLOOK	10 FL OZ/A	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
MSO	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
OUTLOOK	10 FL OZ/A	LP				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
PRIAXOR	4 FL OZ/A	R3				
NIS	0.25 % V/V	R3				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMACH	IPOSS
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Ipomoea sp.
Pest Name		Giant foxtail	Smooth pigweed	Morning glory
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Crop Variety				
Description				
Part Rated				
Rating Date				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
5 OPTILL	2 OZ WT/A	-7 DAY	0	99	99	99
OUTLOOK	10 FL OZ/A	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
M50	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
OUTLOOK	10 FL OZ/A	LP				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
PRIAXOR	4 FL OZ/A	R3				
FASTAC	3.8 FL OZ/A	R3				
NIS	0.25 % V/V	R3				
LSD (P=.05)			0.0	0.0	0.0	0.0
Standard Deviation			0.0	0.0	0.0	0.0
CV			0.0	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed			
Pest Code	CHEAL	SETFA	AMACH			
Pest Scientific Name	Chenopodium al>	Setaria faberi	Amaranthus hyb>			
Pest Name	Common lambsqu>	Giant foxtail	Smooth pigweed			
Crop Code		GLXMA				
BBCH Scale		BSOY				
Crop Scientific Name		Glycine max				
Crop Name		Soybean				
Crop Variety						
Description						
Part Rated						
Rating Date						
Rating Type	CONTROL	INJURY	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT			
Rating Timing	2 WEEK	4 WEEK	4 WEEK			
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	5	6	7	8
1 ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY	99	0	70	70
2,4-D ESTER	24 FL OZ/A	-7 DAY				
NIS	0.25 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
2 OPTILL	2 OZ WT/A	-7 DAY	99	0	99	99
OUTLOOK	10 FL OZ/A	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
MSO	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
3 OPTILL	2 OZ WT/A	-7 DAY	99	0	99	99
OUTLOOK	10 FL OZ/A	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
MSO	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
OUTLOOK	10 FL OZ/A	LP				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
4 OPTILL	2 OZ WT/A	-7 DAY	99	0	99	99
OUTLOOK	10 FL OZ/A	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
MSO	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
OUTLOOK	10 FL OZ/A	LP				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
PRIAXOR	4 FL OZ/A	R3				
NIS	0.25 % V/V	R3				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	SETFA	AMACH
Pest Scientific Name	Chenopodium al>	Setaria faberi	Amaranthus hyb>
Pest Name	Common lambsqu>	Giant foxtail	Smooth pigweed
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Crop Variety			
Description			
Part Rated			
Rating Date			
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	4 WEEK	4 WEEK

Trt Treatment	Rate	Growth	5		6		7		8	
No. Name	Rate Unit	Stage								
5 OPTILL	2 OZ WT/A	-7 DAY	99		0		99		99	
OUTLOOK	10 FL OZ/A	-7 DAY								
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY								
M50	1 % V/V	-7 DAY								
AMS	3.7 % V/V	-7 DAY								
OUTLOOK	10 FL OZ/A	LP								
ROUNDUP WeatherMAX	22 FL OZ/A	LP								
NIS	0.25 % V/V	LP								
AMS	3.7 % V/V	LP								
PRIAXOR	4 FL OZ/A	R3								
FASTAC	3.8 FL OZ/A	R3								
NIS	0.25 % V/V	R3								
LSD (P=.05)			0.0		0.0		0.0		0.0	
Standard Deviation			0.0		0.0		0.0		0.0	
CV			0.0		0.0		0.0		0.0	

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	IPOSS	CHEAL	SETFA	
Pest Scientific Name	Ipomoea sp.Chenopodium al>		Setaria faberi	
Pest Name	Morning gloryCommon lambsqu>		Giant foxtail	
Crop Code			GLXMA	
BBCH Scale			BSOY	
Crop Scientific Name			Glycine max	
Crop Name			Soybean	
Crop Variety				
Description			AFTER POST	
Part Rated				
Rating Date				
Rating Type	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK

Trt Treatment	Rate	Growth	9	10	11	12
No. Name	Rate Unit	Stage				
1 ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY	70	80	0	99
2,4-D ESTER	24 FL OZ/A	-7 DAY				
NIS	0.25 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
2 OPTILL	2 OZ WT/A	-7 DAY	90	90	0	99
OUTLOOK	10 FL OZ/A	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
MSO	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
3 OPTILL	2 OZ WT/A	-7 DAY	90	90	0	99
OUTLOOK	10 FL OZ/A	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
MSO	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
OUTLOOK	10 FL OZ/A	LP				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
4 OPTILL	2 OZ WT/A	-7 DAY	90	90	0	99
OUTLOOK	10 FL OZ/A	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
MSO	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
OUTLOOK	10 FL OZ/A	LP				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
PRIAXOR	4 FL OZ/A	R3				
NIS	0.25 % V/V	R3				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	CHEAL	SETFA
Pest Scientific Name	Ipomoea sp.	Chenopodium al>	Setaria faberi
Pest Name	Morning glory	Common lambsqu>	Giant foxtail
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Crop Variety			
Description			AFTER POST
Part Rated			AFTER POST
Rating Date			
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	8 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	9	10	11	12
5 OPTILL	2 OZ WT/A	-7 DAY				
OUTLOOK	10 FL OZ/A	-7 DAY	80		80	0
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
M50	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
OUTLOOK	10 FL OZ/A	LP				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
PRIAXOR	4 FL OZ/A	R3				
FASTAC	3.8 FL OZ/A	R3				
NIS	0.25 % V/V	R3				
LSD (P=.05)			0.0		0.0	0.0
Standard Deviation			0.0		0.0	0.0
CV			0.0		0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W	Weed	W	Weed	W	Weed
Pest Code		AMACH		IPOSS		CHEAL
Pest Scientific Name	Amaranthus hyb>		Ipomoea sp.		Chenopodium al>	
Pest Name	Smooth pigweed		Morning glory		Common lambsqu>	
Crop Code						GLXMA
BBCH Scale						BSOY
Crop Scientific Name						Glycine max
Crop Name						Soybean
Crop Variety						
Description	AFTER POST		AFTER POST		AFTER POST	
Part Rated						
Rating Date						10/28/2013
Rating Type	CONTROL		CONTROL		CONTROL	
Rating Unit	PERCENT		PERCENT		PERCENT	
Rating Timing	8 WEEK		8 WEEK		8 WEEK	
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	13	14	15	19
1 ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY	99	99	99	77
2,4-D ESTER	24 FL OZ/A	-7 DAY				
NIS	0.25 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
2 OPTILL	2 OZ WT/A	-7 DAY	99	99	99	76
OUTLOOK	10 FL OZ/A	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
MSO	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
3 OPTILL	2 OZ WT/A	-7 DAY	99	99	99	71
OUTLOOK	10 FL OZ/A	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
MSO	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
OUTLOOK	10 FL OZ/A	LP				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
4 OPTILL	2 OZ WT/A	-7 DAY	99	99	99	80
OUTLOOK	10 FL OZ/A	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
MSO	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
OUTLOOK	10 FL OZ/A	LP				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
PRIAXOR	4 FL OZ/A	R3				
NIS	0.25 % V/V	R3				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	AMACH	IPOSS	CHEAL	
Pest Scientific Name	Amaranthus hyb>	Ipomoea sp.	Chenopodium al>	
Pest Name	Smooth pigweed	Morning glory	Common lambsqu>	
Crop Code				GLXMA
BBCH Scale				BSOY
Crop Scientific Name				Glycine max
Crop Name				Soybean
Crop Variety				
Description	AFTER POST	AFTER POST	AFTER POST	
Part Rated				
Rating Date				10/28/2013
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
Rating Timing	8 WEEK	8 WEEK	8 WEEK	

Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	13	14	15	19	
5 OPTILL	2 OZ WT/A	-7 DAY		99	99	99	78
OUTLOOK	10 FL OZ/A	-7 DAY					
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY					
MISO	1 % V/V	-7 DAY					
AMS	3.7 % V/V	-7 DAY					
OUTLOOK	10 FL OZ/A	LP					
ROUNDUP WeatherMAX	22 FL OZ/A	LP					
NIS	0.25 % V/V	LP					
AMS	3.7 % V/V	LP					
PRIAXOR	4 FL OZ/A	R3					
FASTAC	3.8 FL OZ/A	R3					
NIS	0.25 % V/V	R3					
LSD (P=.05)			0.0	0.0	0.0	9.3	
Standard Deviation			0.0	0.0	0.0	7.7	
CV			0.0	0.0	0.0	10.11	

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN EARLY PREPLANT III

Trial ID: S13034 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: BASF-SOY YIELD Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: GREG STAPLETON

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/15/2013
Completion Date: 10/28/2013

Trial Location

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

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: 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

Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3832

Planting Rate, Unit: 190000 S/A	Planting Date: 5/21/2013
Depth, Unit: 1.5 IN	Planting Method: PLANTD planted
Row Spacing, Unit: 30 IN	Planting Equipment: PP Plot Planter
	Emergence Date: 5/27/2013
	Harvest Date: 10/28/2013
Soil Temperature, Unit: 72 F	Harvested Width, Unit: 5 FT
Soil Moisture: WET wet	Harvested Length, Unit: 38 FT
Seed Bed: MEDIUM medium	Harvest Equipment: WINTERSTEIGER
	% Standard Moisture: 13.0

Pest Description

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

Pest 2 Type: W **Code:** AMACH Amaranthus hybridus
Common Name: Smooth pigweed

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

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

Site and Design

Treated Plot Width: 10 FT	Site Type: FIELD field
Treated Plot Length: 44 FT	
Treated Plot Area: 440 FT2	Treatments: 5
Replications: 6	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

Analyzed By:

Moisture and Weather Conditions

Overall Moisture Conditions: WET wet

Closest Weather Station: SPINDLETOP **Distance, Unit:** 2.5 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

	A	B	C
Application Date:	5/15/2013	7/3/2013	7/29/2013
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	-7 DAY	LP	R3
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	C H SLACK	SARA LAWSON	SARA LAWSON
Air Temperature, Unit:	75 F	75 F	73 F
% Relative Humidity:	41	80	60
Wind Velocity, Unit:	9 MPH	6 MPH	4 MPH
Wind Direction:	S	SW	SE
Soil Temperature, Unit:	65 F	74 F	72 F
Soil Moisture:	EXCELL	WET	WET
% Cloud Cover:	0	20	10
Next Moisture Occurred On:	5/16/2013	7/4/2013	7/30/2013

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 100
Height, Unit:		18 IN	30 IN

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	SETFA	W SETFA	W SETFA
Height, Unit:		6 IN	8 IN
Pest 2 Code, Type, Scale:	AMACH	W AMACH	W AMACH
Height, Unit:		6 IN	8 IN
Pest 3 Code, Type, Scale:	IPOSS	W IPOSS	W IPOSS
Height, Unit:		4 IN	6 IN
Pest 4 Code, Type, Scale:	CHEAL	W CHEAL	W CHEAL
Height, Unit:		5 IN	7 IN

Plant and Soil Science, U of KY
Weed Science Research

Application Equipment

	A		B		C	
Appl. Equipment:	ATV		BACKPACK		BACKPACK	
Equipment Type:	ALTEVE		BELSPR		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:	6	liters	6	liters	6	liters
Propellant:	CO2		CO2		CO2	

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMACH	IPOSS
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Ipomoea sp.
Pest Name		Giant foxtail	Smooth pigweed	Morning glory
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Crop Variety				
Description				
Part Rated				
Rating Date				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
5 OPTILL	2 OZ WT/A	-7 DAY	0	99	99	99
OUTLOOK	10 FL OZ/A	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
M50	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
OUTLOOK	10 FL OZ/A	LP				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
PRIAXOR	4 FL OZ/A	R3				
FASTAC	3.8 FL OZ/A	R3				
NIS	0.25 % V/V	R3				
LSD (P=.05)			0.0	0.0	0.0	0.0
Standard Deviation			0.0	0.0	0.0	0.0
CV			0.0	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed			
Pest Code	CHEAL	SETFA	AMACH			
Pest Scientific Name	Chenopodium al>	Setaria faberi	Amaranthus hyb>			
Pest Name	Common lambsqu>	Giant foxtail	Smooth pigweed			
Crop Code		GLXMA				
BBCH Scale		BSOY				
Crop Scientific Name		Glycine max				
Crop Name		Soybean				
Crop Variety						
Description						
Part Rated						
Rating Date						
Rating Type	CONTROL	INJURY	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT			
Rating Timing	2 WEEK	4 WEEK	4 WEEK			
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	5	6	7	8
1 ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY	99	0	99	99
2,4-D ESTER	24 FL OZ/A	-7 DAY				
NIS	0.25 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
2 OPTILL	2 OZ WT/A	-7 DAY	99	0	99	99
OUTLOOK	10 FL OZ/A	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
MSO	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
3 OPTILL	2 OZ WT/A	-7 DAY	99	0	99	99
OUTLOOK	10 FL OZ/A	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
MSO	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
OUTLOOK	10 FL OZ/A	LP				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
4 OPTILL	2 OZ WT/A	-7 DAY	99	0	99	99
OUTLOOK	10 FL OZ/A	-7 DAY				
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
MSO	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
OUTLOOK	10 FL OZ/A	LP				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
PRIAXOR	4 FL OZ/A	R3				
NIS	0.25 % V/V	R3				

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	SETFA	AMACH
Pest Scientific Name	Chenopodium al>	Setaria faberi	Amaranthus hyb>
Pest Name	Common lambsqu>	Giant foxtail	Smooth pigweed
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Crop Variety			
Description			
Part Rated			
Rating Date			
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	4 WEEK	4 WEEK

Trt Treatment	Rate	Growth	5		6		7		8	
No. Name	Rate Unit	Stage								
5 OPTILL	2 OZ WT/A	-7 DAY	99		0		99		99	
OUTLOOK	10 FL OZ/A	-7 DAY								
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY								
MSO	1 % V/V	-7 DAY								
AMS	3.7 % V/V	-7 DAY								
OUTLOOK	10 FL OZ/A	LP								
ROUNDUP WeatherMAX	22 FL OZ/A	LP								
NIS	0.25 % V/V	LP								
AMS	3.7 % V/V	LP								
PRIAXOR	4 FL OZ/A	R3								
FASTAC	3.8 FL OZ/A	R3								
NIS	0.25 % V/V	R3								
LSD (P=.05)			0.0		0.0		0.0		0.0	
Standard Deviation			0.0		0.0		0.0		0.0	
CV			0.0		0.0		0.0		0.0	

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed		W Weed
Pest Code		IPOSS	CHEAL		SETFA
Pest Scientific Name		Ipomoea sp.	Chenopodium al>		Setaria faberi
Pest Name		Morning glory	Common lambsqu>		Giant foxtail
Crop Code				GLXMA	
BBCH Scale				BSOY	
Crop Scientific Name				Glycine max	
Crop Name				Soybean	
Crop Variety					
Description					
Part Rated					
Rating Date					
Rating Type		CONTROL	CONTROL	INJURY	CONTROL
Rating Unit		PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing		4 WEEK	4 WEEK	8 WEEK	8 WEEK
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	9	10	11
1 ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY	99	99	0
2,4-D ESTER	24 FL OZ/A	-7 DAY			
NIS	0.25 % V/V	-7 DAY			
AMS	3.7 % V/V	-7 DAY			
ROUNDUP WeatherMAX	22 FL OZ/A	LP			
NIS	0.25 % V/V	LP			
AMS	3.7 % V/V	LP			
2 OPTILL	2 OZ WT/A	-7 DAY	99	99	0
OUTLOOK	10 FL OZ/A	-7 DAY			
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY			
MSO	1 % V/V	-7 DAY			
AMS	3.7 % V/V	-7 DAY			
ROUNDUP WeatherMAX	22 FL OZ/A	LP			
NIS	0.25 % V/V	LP			
AMS	3.7 % V/V	LP			
3 OPTILL	2 OZ WT/A	-7 DAY	99	99	0
OUTLOOK	10 FL OZ/A	-7 DAY			
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY			
MSO	1 % V/V	-7 DAY			
AMS	3.7 % V/V	-7 DAY			
OUTLOOK	10 FL OZ/A	LP			
ROUNDUP WeatherMAX	22 FL OZ/A	LP			
NIS	0.25 % V/V	LP			
AMS	3.7 % V/V	LP			
4 OPTILL	2 OZ WT/A	-7 DAY	99	99	0
OUTLOOK	10 FL OZ/A	-7 DAY			
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY			
MSO	1 % V/V	-7 DAY			
AMS	3.7 % V/V	-7 DAY			
OUTLOOK	10 FL OZ/A	LP			
ROUNDUP WeatherMAX	22 FL OZ/A	LP			
NIS	0.25 % V/V	LP			
AMS	3.7 % V/V	LP			
PRIAXOR	4 FL OZ/A	R3			
NIS	0.25 % V/V	R3			

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	CHEAL	SETFA
Pest Scientific Name	Ipomoea sp.	Chenopodium al>	Setaria faberi
Pest Name	Morning glory	Common lambsqu>	Giant foxtail
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Crop Variety			
Description			
Part Rated			
Rating Date			
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	8 WEEK

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	9	10	11	12
5 OPTILL	2 OZ WT/A	-7 DAY	99		99	0
OUTLOOK	10 FL OZ/A	-7 DAY				99
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY				
M50	1 % V/V	-7 DAY				
AMS	3.7 % V/V	-7 DAY				
OUTLOOK	10 FL OZ/A	LP				
ROUNDUP WeatherMAX	22 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
AMS	3.7 % V/V	LP				
PRIAXOR	4 FL OZ/A	R3				
FASTAC	3.8 FL OZ/A	R3				
NIS	0.25 % V/V	R3				
LSD (P=.05)			0.0	0.0	0.0	0.0
Standard Deviation			0.0	0.0	0.0	0.0
CV			0.0	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	AMACH	IPOSS	CHEAL	
Pest Scientific Name	Amaranthus hyb>	Ipomoea sp.	Chenopodium al>	
Pest Name	Smooth pigweed	Morning glory	Common lambsqu>	
Crop Code				GLXMA
BBCH Scale				BSOY
Crop Scientific Name				Glycine max
Crop Name				Soybean
Crop Variety				
Description				
Part Rated				
Rating Date				10/28/2013
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
Rating Timing	8 WEEK	8 WEEK	8 WEEK	
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	13	14
			15	19
1 ROUNDUP WeatherMAX	22 FL OZ/A -7 DAY		99	99
2,4-D ESTER	24 FL OZ/A -7 DAY			
NIS	0.25 % V/V -7 DAY			
AMS	3.7 % V/V -7 DAY			
ROUNDUP WeatherMAX	22 FL OZ/A LP			
NIS	0.25 % V/V LP			
AMS	3.7 % V/V LP			
2 OPTILL	2 OZ WT/A -7 DAY		99	99
OUTLOOK	10 FL OZ/A -7 DAY			
ROUNDUP WeatherMAX	22 FL OZ/A -7 DAY			
MISO	1 % V/V -7 DAY			
AMS	3.7 % V/V -7 DAY			
ROUNDUP WeatherMAX	22 FL OZ/A LP			
NIS	0.25 % V/V LP			
AMS	3.7 % V/V LP			
3 OPTILL	2 OZ WT/A -7 DAY		99	99
OUTLOOK	10 FL OZ/A -7 DAY			
ROUNDUP WeatherMAX	22 FL OZ/A -7 DAY			
MISO	1 % V/V -7 DAY			
AMS	3.7 % V/V -7 DAY			
OUTLOOK	10 FL OZ/A LP			
ROUNDUP WeatherMAX	22 FL OZ/A LP			
NIS	0.25 % V/V LP			
AMS	3.7 % V/V LP			
4 OPTILL	2 OZ WT/A -7 DAY		99	99
OUTLOOK	10 FL OZ/A -7 DAY			
ROUNDUP WeatherMAX	22 FL OZ/A -7 DAY			
MISO	1 % V/V -7 DAY			
AMS	3.7 % V/V -7 DAY			
OUTLOOK	10 FL OZ/A LP			
ROUNDUP WeatherMAX	22 FL OZ/A LP			
NIS	0.25 % V/V LP			
AMS	3.7 % V/V LP			
PRIAXOR	4 FL OZ/A R3			
NIS	0.25 % V/V R3			

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMACH	IPOSS	CHEAL
Pest Scientific Name	Amaranthus hyb>	Ipomoea sp.	Chenopodium al>
Pest Name	Smooth pigweed	Morning glory	Common lambsqu>
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Crop Variety			
Description			
Part Rated			
Rating Date			10/28/2013
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	8 WEEK	8 WEEK	8 WEEK

Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	13	14	15	19	
5 OPTILL	2 OZ WT/A	-7 DAY		99	99	99	61
OUTLOOK	10 FL OZ/A	-7 DAY					
ROUNDUP WeatherMAX	22 FL OZ/A	-7 DAY					
M50	1 % V/V	-7 DAY					
AMS	3.7 % V/V	-7 DAY					
OUTLOOK	10 FL OZ/A	LP					
ROUNDUP WeatherMAX	22 FL OZ/A	LP					
NIS	0.25 % V/V	LP					
AMS	3.7 % V/V	LP					
PRIAXOR	4 FL OZ/A	R3					
FASTAC	3.8 FL OZ/A	R3					
NIS	0.25 % V/V	R3					
LSD (P=.05)			0.0	0.0	0.0	4.6	
Standard Deviation			0.0	0.0	0.0	2.4	
CV			0.0	0.0	0.0	3.89	

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN EARLY PREPLANT IV

Trial ID: S13034-2 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: BASF-SOY YIELD Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: GREG STAPLETON

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/29/2013
Completion Date: 10/28/2013

Trial Location

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

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: 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

Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3832

Planting Rate, Unit: 190000 S/A	Planting Date: 6/5/2013
Depth, Unit: 1.5 IN	Planting Method: PLANTD planted
Row Spacing, Unit: 30 IN	Planting Equipment: PP Plot Planter
	Emergence Date: 6/11/2013
	Harvest Date: 10/28/2013
	Harvested Width, Unit: 5 FT
Soil Temperature, Unit: 71 F	Harvested Length, Unit: 38 FT
Soil Moisture: WET wet	Harvest Equipment: WINTERSTEIGER
Seed Bed: MEDIUM medium	% Standard Moisture: 13.0

Pest Description

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

Pest 2 Type: W **Code:** AMACH *Amaranthus hybridus*
Common Name: Smooth pigweed

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

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

Site and Design

Treated Plot Width: 10 FT	Site Type: FIELD field
Treated Plot Length: 44 FT	
Treated Plot Area: 440 FT ²	Treatments: 5
Replications: 3	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: WET wet

Closest Weather Station: SPINDLETOP **Distance, Unit:** 2.5 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

	A	B	C
Application Date:	5/29/2013	7/25/2013	8/13/2013
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	-7D	LP	R3
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	SARA CARTER
Air Temperature, Unit:	77 F	72 F	74 F
% Relative Humidity:	70	65	78
Wind Velocity, Unit:	4 MPH	6 MPH	6 MPH
Wind Direction:	S	SW	WSW
Soil Temperature, Unit:	70 F	76 F	75 F
Soil Moisture:	GOOD	WET	WET
% Cloud Cover:	10	20	40
Next Moisture Occurred On:	5/31/2013	7/30/2013	8/20/2013

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 98
Height, Unit:		18 IN	28 IN

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	SETFA	WSETFA	W SETFA
Height, Unit:		5 IN	6 IN
Pest 2 Code, Type, Scale:	AMACH	WAMACH	W AMACH
Height, Unit:		6 IN	7 IN
Pest 3 Code, Type, Scale:	IPOSS	WIPOSS	W IPOSS
Height, Unit:		4 IN	5 IN
Pest 4 Code, Type, Scale:	CHEAL	WCHEAL	W CHEAL
Height, Unit:		6 IN	7 IN

Plant and Soil Science, U of KY
Weed Science Research

Application Equipment

	A		B		C	
Appl. Equipment:	ATV		BACKPACK		BACKPACK	
Equipment Type:	ALTEVE		BELSPR		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	

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN XI

Trial ID: S13035 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: BASF-SOY-PRE Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: GREG STAPLETON

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMACH	IPOSS
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Ipomoea sp.
Pest Name		Giant foxtail	Smooth pigweed	Morning glory
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Crop Variety				
Description	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Part Rated				
Rating Date	5/29/2013	5/29/2013	5/29/2013	5/29/2013
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4
1	ZIDUA	2.5 OZ	WT/A PRE	10	99	99	99
	SHARPEN	1 FL	OZ/A PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
2	ZIDUA	2.5 OZ	WT/A PRE	17	99	99	99
	VERDICT	5 FL	OZ/A PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
3	ZIDUA	2.5 OZ	WT/A PRE	12	99	99	99
	VERDICT	5 FL	OZ/A PRE				
	METRIBUZIN	0.66 LB/A	PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
4	ZIDUA	2.5 OZ	WT/A PRE	13	99	99	99
	SHARPEN	1 FL	OZ/A PRE				
	METRIBUZIN	0.66 LB/A	PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
5	VERDICT	5 FL	OZ/A PRE	5	99	99	99
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
6	VERDICT	5 FL	OZ/A PRE	8	99	99	99
	METRIBUZIN	0.66 LB/A	PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
7	ANTHEM	9 FL	OZ/A PRE	12	99	99	99
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
8	FIERCE	4.5 OZ	WT/A PRE	12	99	99	99
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
9	SONIC	8 OZ	WT/A PRE	10	99	99	99
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
10	AUTHORITY MTZ	16 OZ	WT/A PRE	2	99	99	99
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
11	OPTILL	2 OZ	WT/A PRE	10	99	99	99
	OUTLOOK	10 FL	OZ/A PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
12	CHECK			0	0	0	0
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
LSD (P=.05)				11.2	0.0	0.0	0.0
Standard Deviation				6.6	0.0	0.0	0.0
CV				72.16	0.0	0.0	0.0

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	SETFA	AMACH
Pest Scientific Name	Chenopodium al>	Setaria faberi	Amaranthus hyb>
Pest Name	Common lambsqu>	Giant foxtail	Smooth pigweed
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Crop Variety			
Description	BEFORE POST	BEFORE POST	BEFORE POST
Part Rated			
Rating Date	5/29/2013	6/12/2013	6/12/2013
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	4 WEEK	4 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	5	6	7	8
1	ZIDUA	2.5 OZ	WT/A PRE		13	99	99
	SHARPEN	1 FL	OZ/A PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
2	ZIDUA	2.5 OZ	WT/A PRE	99	17	99	99
	VERDICT	5 FL	OZ/A PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
3	ZIDUA	2.5 OZ	WT/A PRE	99	12	96	99
	VERDICT	5 FL	OZ/A PRE				
	METRIBUZIN	0.66 LB/A	PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
4	ZIDUA	2.5 OZ	WT/A PRE	99	17	89	98
	SHARPEN	1 FL	OZ/A PRE				
	METRIBUZIN	0.66 LB/A	PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
5	VERDICT	5 FL	OZ/A PRE	99	7	60	99
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
6	VERDICT	5 FL	OZ/A PRE	99	8	91	88
	METRIBUZIN	0.66 LB/A	PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
7	ANTHEM	9 FL	OZ/A PRE	99	12	95	96
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
8	FIERCE	4.5 OZ	WT/A PRE	99	12	99	99
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
9	SONIC	8 OZ	WT/A PRE	99	10	95	99
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
10	AUTHORITY MTZ	16 OZ	WT/A PRE	99	2	60	98
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
11	OPTILL	2 OZ	WT/A PRE	99	10	99	99
	OUTLOOK	10 FL	OZ/A PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
12	CHECK			0	0	98	94
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
LSD (P=.05)				0.0	9.3	29.5	5.6
Standard Deviation				0.0	5.5	17.4	3.3
CV				0.0	55.77	19.36	3.4

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	CHEAL	SETFA
Pest Scientific Name	Ipomoea sp.	Chenopodium al>	Setaria faberi
Pest Name	Morning glory	Common lambsqu>	Giant foxtail
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Crop Variety			
Description	BEFORE POST	BEFORE POST	AFTER POST
Part Rated			AFTER POST
Rating Date	6/12/2013	6/12/2013	7/10/2013
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	8 WEEK

Trt No.	Treatment Name	Rate	Growth Stage	9	10	11	12
1	ZIDUA	2.5 OZ	WT/A PRE	99	99	0	99
	SHARPEN	1 FL	OZ/A PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
2	ZIDUA	2.5 OZ	WT/A PRE	93	99	0	99
	VERDICT	5 FL	OZ/A PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
3	ZIDUA	2.5 OZ	WT/A PRE	91	99	0	96
	VERDICT	5 FL	OZ/A PRE				
	METRIBUZIN	0.66 LB/A	PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
4	ZIDUA	2.5 OZ	WT/A PRE	95	98	0	89
	SHARPEN	1 FL	OZ/A PRE				
	METRIBUZIN	0.66 LB/A	PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
5	VERDICT	5 FL	OZ/A PRE	96	99	0	60
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
6	VERDICT	5 FL	OZ/A PRE	95	95	0	91
	METRIBUZIN	0.66 LB/A	PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
7	ANTHEM	9 FL	OZ/A PRE	96	98	0	95
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
8	FIERCE	4.5 OZ	WT/A PRE	99	99	0	99
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
9	SONIC	8 OZ	WT/A PRE	99	99	0	95
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
10	AUTHORITY MTZ	16 OZ	WT/A PRE	96	99	0	60
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
11	OPTILL	2 OZ	WT/A PRE	99	99	0	99
	OUTLOOK	10 FL	OZ/A PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
12	CHECK			93	96	0	88
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
LSD (P=.05)				8.5	3.0	0.0	30.3
Standard Deviation				5.0	1.8	0.0	17.9
CV				5.24	1.8	0.0	20.07

Plant and Soil Science, U of KY
Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	AMACH	IPOSS	CHEAL	
Pest Scientific Name	Amaranthus hyb>	Ipomoea sp.	Chenopodium al>	
Pest Name	Smooth pigweed	Morning glory	Common lambsqu>	
Crop Code				GLXMA
BBCH Scale				BSOY
Crop Scientific Name				Glycine max
Crop Name				Soybean
Crop Variety				
Description	AFTER POST	AFTER POST	AFTER POST	
Part Rated				
Rating Date	7/10/2013	7/10/2013	7/10/2013	10/28/2013
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
Rating Timing	8 WEEK	8 WEEK	8 WEEK	

Trt No.	Treatment Name	Rate	Growth Stage	13	14	15	19
1	ZIDUA	2.5 OZ	WT/A PRE	99	99	99	72
	SHARPEN	1 FL	OZ/A PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
2	ZIDUA	2.5 OZ	WT/A PRE	99	93	99	81
	VERDICT	5 FL	OZ/A PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
3	ZIDUA	2.5 OZ	WT/A PRE	99	91	99	67
	VERDICT	5 FL	OZ/A PRE				
	METRIBUZIN	0.66 LB/A	PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
4	ZIDUA	2.5 OZ	WT/A PRE	98	95	98	76
	SHARPEN	1 FL	OZ/A PRE				
	METRIBUZIN	0.66 LB/A	PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
5	VERDICT	5 FL	OZ/A PRE	99	96	99	77
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
6	VERDICT	5 FL	OZ/A PRE	88	95	95	76
	METRIBUZIN	0.66 LB/A	PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
7	ANTHEM	9 FL	OZ/A PRE	96	96	98	70
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
8	FIERCE	4.5 OZ	WT/A PRE	99	99	99	70
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
9	SONIC	8 OZ	WT/A PRE	99	99	99	82
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
10	AUTHORITY MTZ	16 OZ	WT/A PRE	98	96	99	86
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
11	OPTILL	2 OZ	WT/A PRE	99	99	99	74
	OUTLOOK	10 FL	OZ/A PRE				
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
12	CHECK			94	93	96	76
	ROUNDUP POWERMAX	22 FL	OZ/A MP				
LSD (P=.05)				5.6	8.5	3.0	4.3
Standard Deviation				3.3	5.0	1.8	2.6
CV				3.4	5.24	1.8	3.39

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN XI

Trial ID: S13035	Location: LEXINGTON, KY	Trial Year: 2013
Protocol ID: BASF-SOY-PRE	Investigator: Charles H Slack	
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, = US
 AMACH, Amaranthus hybridus, = US
 IPOSS, Ipomoea sp., = US
 CHEAL, Chenopodium album, = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent
 BU = bushel

ARM Action Codes

TY1 = $3.821053 * [17] * (100 - [18]) / 87$

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN XI

Trial ID: S13035 Location: LEXINGTON, KY Trial Year: 2013
Protocol ID: BASF-SOY-PRE Investigator: Charles H Slack
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: GREG STAPLETON

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: CHARLES SLACK **Title:** RESEARCH SPECIALIST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/13/2013
Completion Date: 10/28/2013

Trial Location

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

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: 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

Other Contacts

Name	Role	Other
SARA LAWSON	RESEARCH ANALYST	sara.carter@uky.edu

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3832

Planting Rate, Unit: 190000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN

Planting Date: 5/13/2013
Planting Method: PLANTD planted
Planting Equipment: PP Plot Planter
Emergence Date: 5/19/2013
Harvest Date: 10/28/2013

Soil Temperature, Unit: 60 F
Soil Moisture: WET wet
Seed Bed: MEDIUM medium

Harvested Width, Unit: 5 FT
Harvested Length, Unit: 38 FT
Harvest Equipment: WINTERSTEIGER
% Standard Moisture: 13.0

Pest Description

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

Pest 2 Type: W **Code:** AMACH Amaranthus hybridus
Common Name: Smooth pigweed

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

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

Site and Design

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

Site Type: FIELD field

Treated Plot Area: 440 FT²
Replications: 3

Treatments: 12

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

Moisture and Weather Conditions

Overall Moisture Conditions: WET wet

Closest Weather Station: SPINDLETOP **Distance, Unit:** 2.5 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

	A		B
Application Date:	5/15/2013	6/18/2013	
Application Method:	SPRAY	SPRAY	
Application Timing:	PRE	MP	
Application Placement:	BROFOL	BROFOL	
Applied By:	C H SLACK	C H SLACK	
Air Temperature, Unit:	75 F	80 F	
% Relative Humidity:	41	40	
Wind Velocity, Unit:	9 MPH	6 MPH	
Wind Direction:	S	SW	
Soil Temperature, Unit:	66 F	75 F	
Soil Moisture:	EXCELL	EXCELL	
% Cloud Cover:	0	10	
Next Moisture Occurred On:	5/16/2013	6/24/2013	

Crop Stage At Each Application

	A		B
Crop 1 Code, BBCH Scale:	GLXMA	BSOY	GLXMA BSOY
Height, Unit:		8	IN

Pest Stage At Each Application

	A		B
Pest 1 Code, Type, Scale:	SETFA	WSETFA	W
Height, Unit:		4	IN
Pest 2 Code, Type, Scale:	AMACH	WAMACH	W
Height, Unit:		4	IN
Pest 3 Code, Type, Scale:	IPOSS	WIPOSS	W
Height, Unit:		2	IN
Pest 4 Code, Type, Scale:	CHEAL	WCHEAL	W
Height, Unit:		4	IN

Plant and Soil Science, U of KY
Weed Science Research

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	

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN XII

Trial ID: S13036
Protocol ID: MON-2013-01-24-04
Project ID:

Location: LEXINGTON, KY Trial Year: 2013
Investigator: Charles H Slack
Study Director: CHARLES SLACK
Sponsor Contact: JOHN WILLIS

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMACH	IPOSS
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Ipomoea sp.
Pest Name		Giant foxtail	Smooth pigweed	Morning glory
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Crop Variety				
Description				
Part Rated				
Rating Date	5/22/2013	5/22/2013	5/22/2013	5/22/2013
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	1 WEEK	1 WEEK	1 WEEK	1 WEEK

Trt Treatment No. Name	Rate	Rate Unit	Growth Stage	1	2	3	4
1 WARRANT	1.12 LB	AI/A PRE		0	99	99	99
2 WARRANT	1.12 LB	AI/A PRE		15	99	99	99
VALOR SX	0.09375 LB	AI/A PRE					
3 VALOR SX	0.09375 LB	AI/A PRE		15	96	99	99
4 AUTHORITY MTZ	0.309 LB	AI/A PRE		18	99	99	99
5 WARRANT	1.12 LB	AI/A PRE		15	96	99	99
AUTHORITY MTZ	0.309 LB	AI/A PRE					
6 VALOR XLT	0.113 LB	AI/A PRE		15	99	99	99
7 WARRANT	1.12 LB	AI/A PRE		10	99	99	99
VALOR XLT	0.113 LB	AI/A PRE					
8 AUTHORITY FIRST	0.28 LB	AI/A PRE		10	99	99	99
9 WARRANT	1.12 LB	AI/A PRE		10	99	99	99
AUTHORITY FIRST	0.28 LB	AI/A PRE					
10 AUTHORITY ASSIST	0.3125 LB	AI/A PRE		10	99	99	99
11 WARRANT	1.12 LB	AI/A PRE		3	99	99	99
AUTHORITY ASSIST	0.3125 LB	AI/A PRE					
12 WARRANT	1.12 LB	AI/A PRE		0	99	95	96
SENCOR	0.25 LB	AI/A PRE					
13 SENCOR	0.25 LB	AI/A PRE		0	99	99	98
14 CHECK UNTREATED				0	0	0	0
LSD (P=.05)				3.7	3.4	2.8	2.6
Standard Deviation				2.2	2.0	1.7	1.5
CV				25.59	2.19	1.85	1.68

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMACH	IPOSS
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Ipomoea sp.
Pest Name		Giant foxtail	Smooth pigweed	Morning glory
Crop Code		GLXMA		
BBCH Scale		BSOY		
Crop Scientific Name		Glycine max		
Crop Name		Soybean		
Crop Variety				
Description				
Part Rated				
Rating Date		5/29/2013	5/29/2013	5/29/2013
Rating Type		INJURY	CONTROL	CONTROL
Rating Unit		PERCENT	PERCENT	PERCENT
Rating Timing		2 WEEK	2 WEEK	2 WEEK

Trt Treatment	Rate	Rate Unit	Growth Stage	5	6	7	8
1 WARRANT	1.12 LB	AI/A PRE		0	93	99	92
2 WARRANT	1.12 LB	AI/A PRE		10	92	99	99
VALOR SX	0.09375 LB	AI/A PRE					
3 VALOR SX	0.09375 LB	AI/A PRE		10	80	99	99
4 AUTHORITY MTZ	0.309 LB	AI/A PRE		10	75	99	99
5 WARRANT	1.12 LB	AI/A PRE		10	88	99	99
AUTHORITY MTZ	0.309 LB	AI/A PRE					
6 VALOR XLT	0.113 LB	AI/A PRE		15	99	99	99
7 WARRANT	1.12 LB	AI/A PRE		10	99	99	99
VALOR XLT	0.113 LB	AI/A PRE					
8 AUTHORITY FIRST	0.28 LB	AI/A PRE		10	99	99	99
9 WARRANT	1.12 LB	AI/A PRE		3	99	99	99
AUTHORITY FIRST	0.28 LB	AI/A PRE					
10 AUTHORITY ASSIST	0.3125 LB	AI/A PRE		10	99	99	99
11 WARRANT	1.12 LB	AI/A PRE		3	99	99	99
AUTHORITY ASSIST	0.3125 LB	AI/A PRE					
12 WARRANT	1.12 LB	AI/A PRE		0	99	99	96
SENCOR	0.25 LB	AI/A PRE					
13 SENCOR	0.25 LB	AI/A PRE		0	60	99	77
14 CHECK UNTREATED				0	0	0	0
LSD (P=.05)				4.2	9.5	0.0	10.7
Standard Deviation				2.5	5.7	0.0	6.4
CV				37.97	6.73	0.0	7.13

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMACH	IPOSS
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Ipomoea sp.
Pest Name		Giant foxtail	Smooth pigweed	Morning glory
Crop Code		GLXMA		
BBCH Scale		BSOY		
Crop Scientific Name		Glycine max		
Crop Name		Soybean		
Crop Variety				
Description				
Part Rated				
Rating Date		6/5/2013	6/5/2013	6/5/2013
Rating Type		INJURY	CONTROL	CONTROL
Rating Unit		PERCENT	PERCENT	PERCENT
Rating Timing		3 WEEK	3 WEEK	3 WEEK

Trt Treatment	Rate	Rate Unit	Growth Stage	9	10	11	12
1 WARRANT	1.12 LB	AI/A PRE		0	93	99	92
2 WARRANT	1.12 LB	AI/A PRE		10	92	99	99
VALOR SX	0.09375 LB	AI/A PRE					
3 VALOR SX	0.09375 LB	AI/A PRE		10	80	99	99
4 AUTHORITY MTZ	0.309 LB	AI/A PRE		10	75	99	99
5 WARRANT	1.12 LB	AI/A PRE		10	88	99	99
AUTHORITY MTZ	0.309 LB	AI/A PRE					
6 VALOR XLT	0.113 LB	AI/A PRE		15	99	99	99
7 WARRANT	1.12 LB	AI/A PRE		10	99	99	99
VALOR XLT	0.113 LB	AI/A PRE					
8 AUTHORITY FIRST	0.28 LB	AI/A PRE		10	99	99	99
9 WARRANT	1.12 LB	AI/A PRE		3	99	99	99
AUTHORITY FIRST	0.28 LB	AI/A PRE					
10 AUTHORITY ASSIST	0.3125 LB	AI/A PRE		10	99	99	99
11 WARRANT	1.12 LB	AI/A PRE		3	99	99	99
AUTHORITY ASSIST	0.3125 LB	AI/A PRE					
12 WARRANT	1.12 LB	AI/A PRE		0	99	99	96
SENCOR	0.25 LB	AI/A PRE					
13 SENCOR	0.25 LB	AI/A PRE		0	60	99	77
14 CHECK UNTREATED				0	0	0	0
LSD (P=.05)				4.2	9.5	0.0	10.7
Standard Deviation				2.5	5.7	0.0	6.4
CV				37.97	6.73	0.0	7.13

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMACH	IPOSS
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Ipomoea sp.
Pest Name		Giant foxtail	Smooth pigweed	Morning glory
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Crop Variety				
Description				
Part Rated				
Rating Date	6/14/2013	6/14/2013	6/14/2013	6/14/2013
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK

Trt Treatment	Rate	Rate Unit	Growth Stage	13	14	15	16
1 WARRANT	1.12 LB	AI/A PRE		0	99	96	92
2 WARRANT	1.12 LB	AI/A PRE		0	96	93	99
VALOR SX	0.09375 LB	AI/A PRE					
3 VALOR SX	0.09375 LB	AI/A PRE		10	70	98	96
4 AUTHORITY MTZ	0.309 LB	AI/A PRE		13	77	96	99
5 WARRANT	1.12 LB	AI/A PRE		10	95	99	96
AUTHORITY MTZ	0.309 LB	AI/A PRE					
6 VALOR XLT	0.113 LB	AI/A PRE		15	70	99	99
7 WARRANT	1.12 LB	AI/A PRE		10	99	99	99
VALOR XLT	0.113 LB	AI/A PRE					
8 AUTHORITY FIRST	0.28 LB	AI/A PRE		10	99	99	99
9 WARRANT	1.12 LB	AI/A PRE		7	99	99	99
AUTHORITY FIRST	0.28 LB	AI/A PRE					
10 AUTHORITY ASSIST	0.3125 LB	AI/A PRE		8	99	99	99
11 WARRANT	1.12 LB	AI/A PRE		7	99	99	99
AUTHORITY ASSIST	0.3125 LB	AI/A PRE					
12 WARRANT	1.12 LB	AI/A PRE		0	83	95	96
SENCOR	0.25 LB	AI/A PRE					
13 SENCOR	0.25 LB	AI/A PRE		0	66	83	77
14 CHECK UNTREATED				0	0	0	0
LSD (P=.05)				4.1	17.9	9.0	11.4
Standard Deviation				2.4	10.7	5.3	6.8
CV				37.66	12.98	5.97	7.65

Plant and Soil Science, U of KY
Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMACH	IPOSS
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Ipomoea sp.
Pest Name		Giant foxtail	Smooth pigweed	Morning glory
Crop Code		GLXMA		
BBCH Scale		BSOY		
Crop Scientific Name		Glycine max		
Crop Name		Soybean		
Crop Variety				
Description				
Part Rated				
Rating Date		6/26/2013	6/26/2013	6/26/2013
Rating Type		INJURY	CONTROL	CONTROL
Rating Unit		PERCENT	PERCENT	PERCENT
Rating Timing		6 WEEK	6 WEEK	6 WEEK

Trt Treatment	Rate	Rate Unit	Growth Stage	17	18	19	20
1 WARRANT	1.12 LB	AI/A PRE		0	93	96	70
2 WARRANT	1.12 LB	AI/A PRE		0	96	96	95
VALOR SX	0.09375 LB	AI/A PRE					
3 VALOR SX	0.09375 LB	AI/A PRE		0	70	96	94
4 AUTHORITY MTZ	0.309 LB	AI/A PRE		0	53	93	99
5 WARRANT	1.12 LB	AI/A PRE		0	93	99	96
AUTHORITY MTZ	0.309 LB	AI/A PRE					
6 VALOR XLT	0.113 LB	AI/A PRE		0	50	99	96
7 WARRANT	1.12 LB	AI/A PRE		0	96	99	99
VALOR XLT	0.113 LB	AI/A PRE					
8 AUTHORITY FIRST	0.28 LB	AI/A PRE		0	70	99	99
9 WARRANT	1.12 LB	AI/A PRE		0	99	99	99
AUTHORITY FIRST	0.28 LB	AI/A PRE					
10 AUTHORITY ASSIST	0.3125 LB	AI/A PRE		0	73	99	99
11 WARRANT	1.12 LB	AI/A PRE		0	98	99	99
AUTHORITY ASSIST	0.3125 LB	AI/A PRE					
12 WARRANT	1.12 LB	AI/A PRE		0	95	90	73
SENCOR	0.25 LB	AI/A PRE					
13 SENCOR	0.25 LB	AI/A PRE		0	50	80	50
14 CHECK UNTREATED				0	0	0	0
LSD (P=.05)				0.0	5.1	5.4	5.8
Standard Deviation				0.0	3.0	3.2	3.5
CV				0.0	4.11	3.61	4.15

Plant and Soil Science, U of KY
Weed Science Research

NO-TILL SOYBEAN XII

Trial ID: S13036	Location: LEXINGTON, KY	Trial Year: 2013
Protocol ID: MON-2013-01-24-04	Investigator: Charles H Slack	
Project ID:	Study Director: CHARLES SLACK	
	Sponsor Contact: JOHN WILLIS	

Pest Type

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

Pest Code

SETFA, Setaria faberi, = US
 AMACH, Amaranthus hybridus, = US
 IPOSS, Ipomoea sp., = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Unit

PERCENT = percent

Plant and Soil Science, U of KY
Weed Science Research

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3832

Planting Rate, Unit: 180000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Soil Temperature, Unit: 60 F
Soil Moisture: WET wet
Seed Bed: MEDIUM medium

Planting Date: 5/13/2013
Planting Method: PLANTDplanted
Planting Equipment: PP Plot Planter
Emergence Date: 5/18/2013

Pest Description

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

Pest 2 Type: W **Code:** AMACH Amaranthus hybridus
Common Name: Smooth pigweed

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
Treatments: 14
Tillage Type: NOTILLno-till
Study Design: RACOBLLRandomized 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: WET wet
Closest Weather Station: SPINDLETOP
Distance, Unit: 2.5 MI

Plant and Soil Science, U of KY
Weed Science Research

Application Description

A

Application Date: 5/14/2013
Application Method: SPRAY
Application Timing: PRE
Application Placement: BROFOL
Applied By: C H SLACK
Air Temperature, Unit: 75 F
% Relative Humidity: 41
Wind Velocity, Unit: 9 MPH
Wind Direction: S
Soil Temperature, Unit: 61 F
Soil Moisture: EXCELL
% Cloud Cover: 0
Next Moisture Occurred On: 5/16/2013

Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: GLXMA BSOY

Pest Stage At Each Application

A

Pest 1 Code, Type, Scale: SETFA W
Pest 2 Code, Type, Scale: AMACH W
Pest 3 Code, Type, Scale: IPOSS W

Application Equipment

A

Appl. Equipment: ATV
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
Propellant: CO2