



## 2012 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	GLYPHOSATE	DUPONT
ACTIVATOR 90	NON-IONIC SURFACTANT	LOVELAND
ALERT	CLOMAZONE	CHEMINOVA
AMS	AMMONIUM SULFATE	CLEAN CROP
ANTHEM	PYROXASULFONE + FLUTHIACET-METHYL	FMC
ANTHEM ATZ	PYROXASULFONE + FLUTHIACET-METHYL + ATRAZINE	FMC
AUTHORITY FIRST	SULFENTRAZONE + CLORANSULAM	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
BREAKFREE ATZ	ACETOCHLOR + ATRAZINE	DUPONT
CADET	FLUTHIACET-METHYL	FMC
CANOPY	METRIBUZIN + CHLORIMURON ETHYL	DUPONT
CANOPY EX	CHLORIMURON + TRIBENURON	DUPONT
CAPRENO HERBICIDE	TEMBOTRIONE + THIENCARBAZONE-METHYL	BAYER
CHA-044	FOMESAFEN + METOLACHLOR	CHEMINOVA
CINCH	S-METOLACHLOR	DUPONT
CINCH ATZ	S-METOLACHLOR + ATRAZINE	DUPONT
CLARITY	DIGLYCOLAMINE SALT OF DICAMBA	BASF
CLASSIC	CHLORIMURON	DUPONT
COBRA	LACTOFEN	VALENT
CORVUS HERBICIDE	ISOXAFLUTOLE + THIENCARBAZONE-METHYL	BAYER
CROP OIL CONCENTRATE (COC)		LOVELAND
DAWN	FOMESAFEN	CHEMINOVA
DEGREE EXTRA	ACETOCHLOR + ATRAZINE	MONSANTO
DUAL II MAGNUM	S-METOLACHLOR + BENOXACOR	SYNGENTA
DURANGO DMA	GLYPHOSATE	DOW AGROSCIENCE

## HERBICIDES IN REPORT CONTINUED

<u>TRADE NAME</u>	<u>COMMON NAME</u>	<u>COMPANY</u>
ENDIGO ZC	LAMBDA-CYHALOTHRIN + THIAMETHOXAM	SYNGENTA
ENVIVE F9324	FLUMIOXAZIN + THIFENSULFURON	DUPONT FMC
FIERCE	FLUMIOXAZIN + PYROXASULFONE	VALENT
FIERCE XLT	FLUMIOXAZIN + PYROXASULFONE + CHLORIMURON	VALENT
FIRSTRATE	CLORANSULAM	DOW AGROSCIENCE
FIRSTSHOT	THIFENSULFURON-METHYL + TRIBENURON-METHYL	DUPONT
FLEXSTAR GT	FOMESAFEN + GLYPHOSATE	SYNGENTA
GANGSTER FR	CLORANSULAM	VALENT
GANGSTER V	FLUMIOXAZIN	VALENT
GLYFOS X-TRA	GLYPHOSATE	CHEMINOVA
GRAMOXONE INTEON	PARAQUAT	SYNGENTA
HALEX GT	GLYPHOSATE (PS)+ MESOTRIONE + S-METOLACHLOR	SYNGENTA
HARNESS	ACETOCLOR	MONSANTO
HARNESS XTRA	ACETOCLOR + ATRAZINE	MONSANTO
HASSLE	FOMESAFEN	MANA
HEADLINE	PYRACLOSTROBIN	BASF
HEADLINE AMP	PYRACLOSTROBIN + METCONAZOLE	BASF
HORNET	FLUMETSULAM + CLOPYRALID	DOW
IGNITE 280	GLUFOSINATE AMMONIUM	BAYER
IMPACT	TOPRAMEZONE	AMVAC
INSTIGATE	RIMSULFURON + MESOTRIONE	DUPONT
KEYSTONE	ACETOCHLOR + ATRAZINE	DOW
LAUDIS	TEMBOTRIONE	BAYER
LEADOFF	RIMSULFURON + THIFENSULFURON	DUPONT
LEXAR EZ	S-METOLACHLOR + MESOTRIONE + ATRAZINE	SYNGENTA
LUMAX	S-METOLACHLOR + MESOTRIONE + ATRAZINE	SYNGENTA
MANA 25311		MANA
MSO	METHYLATED SEED OIL	LOVELAND
NIS	NON-IONIC SURFACTANT	
NPAK AMS LIQUID	AMMONIUM SULFATE	WINFIELD
PEAK	PROSULFURON	SYNGENTA
PREFIX	S-METOLACHLOR + BENOXACOR	SYNGENTA
PREQUEL	RIMSULFURON + ISOXAFULTOLE	DUPONT
PRINCEP	SIMAZINE	SYNGENTA
PRIAXOR	FLUXAPYROXAD + PYRACLOSTROBIN	BASF
QUADRIS TOP	AZOXYSTROBIN + DIFENOCONAZOL	SYNGENTA
QUILT XCEL	AZOXYSTROBIN + PROPOCONAZOLE	SYNGENTA

## 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
REFLEX	FOMESAFEN	SYNGENTA
RESOURCE	FLUMICLORAC PENTYL ESTER	VALENT
RHYTHM	FOMESAFEN	CHEMINOVA
ROUNDUP ORIGINAL MAX	GLYPHOSATE (ISOPROPYLAMINE SALT)	MONSANTO
ROUNDUP POWERMAX	GLYPHOSATE (POTASSIUM SALT)	MONSANTO
SEQUENCE	GLYPHOSATE + S-METOLACHLOR	SYNGENTA
SHARPEN	SAFLUFENACIL	BASF
SONIC	SULFENTRAZONE + CLORANSULAM-METHYL	DOW AGROSCIENCE
STALWART LITE	METOLACHLOR + ATRAZINE	SIPCAM
STALWART MTZ	METOLACHLOR	SIPCAM
SURESTART	ACETOCHLOR + FLUMETSULAM + CLOPYRALID	DOW AGROSCIENCE
TAILWIND	METOLACHLOR + METRIBUZIN	MANA
TORMENT	FOMESAFEN + IMAZETHAPYR	MANA
TOUCHDOWN TOTAL	GLYPHOSATE	SYNGENTA
V-10206	PUROXASULFONE	VALENT
VALOR SX	FLUMIOXAZIN (V-53482)	VALENT
VALOR XLT	FLUMIOXAZIN + CHLORIMURON	VALENT
VERDICT	SAFLUFENACIL + DIMETHENAMID-P	BASF
VICE	METOLACHLOR + FOMESAFEN	MANA
WARRANT	ACETOCHOLOR	MONSANTO
WARRIOR II	LAMBDA-CYHALOTHRIN	SYNGENTA
WEEDONE LV4	2,4-D ESTER	NUFARM AMERICAS INC

## DEFINITIONS FOR METHODS OF APPLICATION

### PREEMERGENCE

30D EPP	30 DAYS BEFORE PLANTING
14 D EPP	14 DAYS BEFORE PLANTING
-1 WEEK	1 WEEK BEFORE PLANTING
PRE	PREEMERGENCE

### POSTEMERGENCE

EP	EARLY POSTEMERGENCE, WEEDS 0-2"
MP	MID-POSTEMERGENCE, WEEDS 2-4"
4"	FOUR INCH WEEDS
LP, 4-6"WEEDS	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
V5	LATE POSTEMERGENCE, 20 INCH CORN
R1	SILKING IN CORN
R3	BEGINNING POD ON SOYBEAN
2-3 WAP	2-3 WEEKS AFTER PLANTING
2-4" REGROW	2-4 INCH REGROWTH
+21D	21 DAYS FOLLOWING PREVIOUS APPLICATION
28 DAP	28 DAYS AFTER PLANTING
42 DAP	42 DAYS AFTER PLANTING
V10	42 INCH CORN, PRE TASSLE
TASSLE	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	
03-01-2012	60	40	50		75	40	56	49	52	49	
03-02-2012	70	42	56	0.63	92	59	77	74	53	48	
03-03-2012	50	32	41		93	40	56	48	51	47	
03-04-2012	42	25	33	0.01	99	43	52	43	47	44	
03-05-2012	34	20	27	0.64	100	64	47	43	44	43	
03-06-2012	66	23	44		94	26	50	41	43	42	
03-07-2012	67	48	57		58	41	54	46	49	43	
03-08-2012	60	36	48	1.25	98	60	54	52	51	49	
03-09-2012	51	33	42		92	35	52	46	49	46	
03-10-2012	54	26	40		79	29	52	44	49	43	
03-11-2012	68	38	53		57	19	55	46	51	44	
03-12-2012	64	53	58	0.25	94	47	55	53	53	50	
03-13-2012	73	57	65		93	56	63	55	58	53	
03-14-2012	77	54	65		97	40	65	59	59	54	
03-15-2012	81	58	69	0.72	97	54	66	60	60	56	
03-16-2012	68	57	62	0.06	98	71	66	60	59	57	
03-17-2012	75	57	66	1.23	98	61	67	60	62	57	
03-18-2012	76	59	67		99	56	67	63	63	60	
03-19-2012	80	61	70		84	44	69	63	64	60	
03-20-2012	84	62	73		83	39	70	65	64	61	
03-21-2012	84	61	72		84	41	70	56	65	61	
03-22-2012	81	61	71		80	47	70	66	64	62	
03-23-2012	72	56	64	0.54	95	69	68	66	64	62	
03-24-2012	63	48	55		97	50	67	62	63	61	
03-25-2012	70	46	58		96	55	73	61	61	58	
03-26-2012	61	40	50		100	33	65	60	60	58	
03-27-2012	66	34	50		79	33	66	58	59	55	
03-28-2012	79	58	68	0.01	75	50	65	61	60	57	
03-29-2012	66	47	56		86	50	67	62	60	57	
03-30-2012	77	49	63	0.27	92	53	67	63	61	58	
03-31-2012	59	43	51	0.03	99	80	65	63	61	59	

Summary for Spindletop for the period 3-1-2012 through 3-31-2012:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP			TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	
	67	46	56	5.64	89	48	62	56	57	53
(Deviation from normal)	+13	+12	+12	+1.24						

# APRIL CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
04-01-2012	70	41	55	0.26	99	68	67	60	59	57	
04-02-2012	68	54	61		95	50	67	63	60	59	
04-03-2012	83	50	66		77	55	70	64	62	58	
04-04-2012	76	55	65	0.86	97	66	71	67	63	61	
04-05-2012	59	43	51	0.02	86	42	72	65	62	59	
04-06-2012	59	34	46		86	38	66	59	59	57	
04-07-2012	66	34	50		78	26	66	59	58	54	
04-08-2012	65	43	54		86	32	68	62	58	56	
04-09-2012	66	41	53		68	27	66	60	56	53	
04-10-2012	57	35	46		71	29	65	59	55	53	
04-11-2012	51	29	40		83	43	64	57	54	51	
04-12-2012	61	29	45		99	32	65	55	53	48	
04-13-2012	66	33	49		94	31	64	58	54	49	
04-14-2012	73	51	62	0.04	80	48	64	60	56	53	
04-15-2012	80	60	70		71	41	66	61	60	56	
04-16-2012	74	54	64	0.09	92	45	67	64	61	59	
04-17-2012	61	46	53		92	52	68	62	60	57	
04-18-2012	70	49	59		93	41	69	61	60	57	
04-19-2012	73	44	58		99	40	70	62	60	56	
04-20-2012	75	53	64		85	42	70	63	61	57	
04-22-2012	49	38	43		94	59	61	59	57	54	
04-23-2012	58	37	47		82	27	61	55	55	53	
04-24-2012	62	35	48	0.06	93	29	60	56	55	51	
04-25-2012	74	49	61	0.24	99	60	65	58	59	54	
04-26-2012	77	50	63	0.03	90	48	68	62	62	58	
04-27-2012	62	38	50		78	37	69	61	60	56	
04-28-2012	77	47	62	0.04	96	55	68	63	60	56	
04-29-2012	75	47	61	0.30	99	66	71	65	62	58	
04-30-2012	81	56	68	0.13	97	47	71	68	64	60	

Summary for Spindletop for the period 4-1-2012 through 4-30-2012:

AIR TEMP				TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
MX	MN	AV	MX		MN	MX	MN	MX	MN		
67	44	56	3.26	89	46	67	61	59	56		
(Deviation from normal)+2		-1	+0	-0.62							

## MAY CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS		BARE		
05-01-2012	81	62	71	0.01	99	56	72	68	65	62	
05-02-2012	87	68	77		83	46	74	69	68	64	
05-03-2012	82	65	73		89	58	76	73	67	65	
05-04-2012	85	64	74	0.42	96	53	66	59	68	65	
05-05-2012	80	63	71	0.86	99	66	75	70	69	66	
05-06-2012	84	58	71		100	50	77	72	70	65	
05-07-2012	83	64	73	0.28	95	55	76	74	70	66	
05-08-2012	73	61	67	0.45	99	53	77	73	69	67	
05-09-2012	70	51	60		90	37	75	70	67	64	
05-10-2012	68	45	56		99	33	74	68	64	61	
05-11-2012	73	44	58		92	29	74	67	64	59	
05-12-2012	74	50	62	0.07	98	38	73	69	63	60	
05-13-2012	63	59	61	1.67	100	96	69	67	63	63	
05-14-2012	70	55	62	0.17	100	72	70	67	64	63	
05-15-2012	79	49	64	0.01	100	41	72	67	65	61	
05-16-2012	82	58	70		90	34	75	68	66	62	
05-17-2012	74	53	63		83	47	76	69	66	64	
05-18-2012	81	49	65		85	42	77	69	67	62	
05-19-2012	86	53	69		94	40	78	71	68	63	
05-20-2012	85	59	72		95	44	80	73	69	65	
05-21-2012	80	59	69		90	57	80	74	68	65	
05-22-2012	75	59	67		94	62	79	73	67	66	
05-23-2012	78	55	66		99	56	78	73	68	65	
05-24-2012	83	60	71		99	41	78	73	69	66	
05-25-2012	89	66	77		84	39	79	73	71	67	
05-26-2012	93	67	80		94	36	81	75	72	68	
05-27-2012	94	67	80		93	34	82	76	73	69	
05-28-2012	92	71	81	0.02	89	44	83	79	73	70	
05-29-2012	80	65	72		97	62	83	79	72	71	
05-30-2012	85	59	72	0.01	100	38	79	75	71	68	
05-31-2012	85	51	68	0.05	98	28	79	72	70	66	

Summary for Spindletop for the period 5-1-2012 through 5-31-2012:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS		BARE		
	80	58	69	4.02	94	48	76	71	68	65	
(Deviation from normal)	+4	+3	+4	-0.45							

# JUNE CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS MX	GRASS MN	BARE MX	BARE MN	
06-01-2012	65	51	58	0.35	98	73	78	70	69	66	
06-02-2012	70	48	59	0.24	98	39	70	66	66	64	
06-03-2012	81	57	69	0.11	92	33	75	68	67	64	
06-04-2012	75	58	66		99	48	75	71	67	65	
06-05-2012	74	54	64		100	39	76	70	67	64	
06-06-2012	75	51	63		97	40	77	71	66	64	
06-07-2012	81	49	65		98	29	77	70	67	63	
06-08-2012	87	53	70		94	26	78	71	69	64	
06-09-2012	89	58	73		83	26	78	72	70	65	
06-10-2012	84	63	73		82	42	83	78	70	67	
06-11-2012	82	67	74	0.85	99	65	78	74	71	68	
06-12-2012	84	66	75		99	50	78	75	72	69	
06-13-2012	81	57	69		70	41	80	73	72	68	
06-14-2012	83	54	68		81	28	80	74	71	67	
06-15-2012	89	57	73		83	39	81	75	72	67	
06-16-2012	86	68	77		89	48	80	75	73	69	
06-17-2012	78	69	73	0.87	95	67	77	75	72	71	
06-18-2012	87	70	78		83	43	77	74	74	70	
06-19-2012	91	71	81		72	40	82	76	75	71	
06-20-2012	92	70	81		78	36	83	78	76	71	
06-21-2012	91	70	80		87	37	83	78	76	72	
06-22-2012	87	66	76		96	33	85	79	77	72	
06-23-2012	90	61	75		91	27	85	79	76	71	
06-24-2012	93	67	80		76	28	86	79	78	72	
06-25-2012	88	63	75		89	32	86	80	77	73	
06-26-2012	81	53	67		71	26	85	76	75	70	
06-27-2012	91	52	71		89	21	77	60	76	69	
06-28-2012	101	68	84		55	20	84	78	77	71	
06-29-2012	102	73	87		77	31	87	79	80	73	
06-30-2012	102	67	84		88	26	89	81	81	75	

Summary for Spindletop for the period 6-1-2012 through 6-30-2012:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS MX	GRASS MN	BARE MX	BARE MN	
(Deviation from normal)+2	85	61	73	2.42	87	38	80	74	73	68	
	-1	+1		-1.24							

# JULY CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS		BARE		
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
07-01-2012	102	69	85	0.33	90	23	89	83	81	76	
07-02-2012	96	68	82	0.01	91	33	89	83	81	76	
07-03-2012	95	70	82		85	30	88	81	80	76	
07-04-2012	99	74	86		83	30	88	81	82	76	
07-05-2012	97	73	85		80	39	88	83	80	78	
07-06-2012	103	68	85		82	26	90	82	82	76	
07-07-2012	106	74	90		83	20	90	84	84	78	
07-08-2012	101	73	87	0.28	94	33	91	85	84	80	
07-09-2012	79	69	74	0.07	96	62	88	84	81	77	
07-10-2012	92	64	78		92	28	87	81	80	75	
07-11-2012	94	66	80		87	28	87	82	81	75	
07-12-2012	87	67	77	0.12	96	46	87	82	80	76	
07-13-2012	78	69	73	0.14	97	76	84	81	78	76	
07-14-2012	90	71	80	0.16	97	48	82	79	79	76	
07-15-2012	86	69	77	0.31	98	59	83	79	79	75	
07-16-2012	91	72	81	0.01	94	47	84	81	82	76	
07-17-2012	94	76	85		88	40	87	80	83	77	
07-18-2012	98	69	83	0.21	97	39	89	83	83	79	
07-19-2012	89	69	79	0.01	98	64	89	82	80	77	
07-20-2012	86	69	77	0.03	93	62	85	83	79	76	
07-21-2012	83	67	75		91	54	81	77	80	76	
07-22-2012	91	64	77		98	31	88	79	81	74	
07-23-2012	94	75	84		89	43	88	82	82	77	
07-24-2012	89	77	83		82	59	77	74	82	78	
07-25-2012	99	72	85		95	39	90	84	84	78	
07-26-2012	97	71	84	0.21	97	43	90	85	84	80	
07-27-2012	90	67	78	0.14	99	48	90	82	83	78	
07-28-2012	84	66	75		98	54	89	80	81	77	
07-29-2012	86	63	74	0.47	98	46	85	80	81	76	
07-30-2012	88	64	76		96	42	86	80	81	76	
07-31-2012	91	67	79		93	41	88	82	82	77	

Summary for Spindletop for the period 7-1-2012 through 7-31-2012:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS		BARE		
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
(Deviation from normal)+6	+6	+5	+5	-2.50	92	43	87	81	81	77	

# AUGUST CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
08-01-2012	92	71	81		90	37	88	83	82	78	
08-02-2012	93	66	79		95	36	88	81	82	77	
08-03-2012	82	73	77	0.52	96	61	89	83	79	78	
08-04-2012	88	74	81	0.01	95	64	86	82	82	77	
08-05-2012	82	75	78	0.06	96	75	85	82	80	78	
08-06-2012	87	70	78	0.07	98	49	86	80	82	77	
08-07-2012	91	67	79		97	32	88	81	82	77	
08-08-2012	94	71	82		89	32	88	82	83	77	
08-09-2012	90	68	79	0.23	92	54	89	83	82	78	
08-10-2012	78	62	70	0.26	99	51	87	81	79	77	
08-11-2012	77	56	66		92	46	84	77	77	73	
08-12-2012	83	54	68		98	30	82	76	77	71	
08-13-2012	81	60	70		89	38	83	78	76	73	
08-14-2012	83	67	75		90	46	81	77	77	74	
08-15-2012	86	65	75		94	36	83	78	79	74	
08-16-2012	90	60	75		93	32	77	74	80	74	
08-17-2012	83	63	73		95	39	84	78	78	75	
08-18-2012	83	56	69		92	28	77	74	78	73	
08-19-2012	84	59	71		87	25	82	76	77	73	
08-20-2012	83	54	68		87	26	82	75	77	72	
08-21-2012	83	54	68	0.23	99	29	80	75	76	71	
08-22-2012	86	52	69		100	25	78	68	76	70	
08-23-2012	91	58	74		90	25	80	70	78	71	
08-24-2012	93	61	77		86	21	81	72	79	72	
08-25-2012	93	66	79		81	25	81	74	79	74	
08-26-2012	94	63	78		89	27	82	74	80	74	
08-27-2012	92	70	81	0.15	97	37	84	79	80	75	
08-28-2012	84	71	77	0.15	96	46	86	80	78	77	
08-29-2012	87	63	75		86	70	86	79	77	74	
08-30-2012	91	64	77		76	33	85	78			
08-31-2012 E	92	66	79		96	50	85	80			

Summary for Spindletop for the period 8-1-2012 through 8-31-2012:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
	87	64	75	1.68	92	40	84	78	79	75	
(Deviation from normal)	+3	+2	+2	-2.25							

# SEPTEMBER CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS MX	GRASS MN	BARE MX	BARE MN	
09-01-2012 E	92	66	79		96	50	84	80			
09-02-2012 E	79	73	76	0.85	97	58	84	78			
09-03-2012 E	80	71	75	0.50	97	56	79	78			
09-04-2012	87	70	78		98	58	82	78	80	76	
09-05-2012	92	68	80	0.35	99	45	84	80	80	77	
09-06-2012	86	69	77		99	53	84	79	81	76	
09-07-2012 E	92	66	79		96	49	85	80			
09-08-2012 E	73	61	67	1.17	96	47	86	78			
09-09-2012 E	76	51	63		96	47	78	73			
09-10-2012 E	75	54	64		95	40	78	72	72	70	
09-11-2012 E	79	49	64		96	47	79	72			
09-12-2012 E	82	58	70		96	49	77	74			
09-13-2012	82	65	73		92	41	80	75	75	72	
09-14-2012	83	57	70		94	43	80	75	74	71	
09-15-2012	76	52	64		90	31	78	73	73	70	
09-16-2012	79	57	68		85	34	78	73	74	70	
09-17-2012	71	61	66	0.81	99	79	78	73	72	71	
09-18-2012	66	51	58	0.29	100	57	74	72	71	69	
09-19-2012	68	41	54		99	30	74	67	69	65	
09-20-2012	77	44	60		87	32	74	67	68	64	
09-21-2012	76	59	67		81	52	74	69	69	66	
09-22-2012	73	42	57		82	29	74	70	70	67	
09-23-2012	65	36	50		95	34	73	66	67	63	
09-24-2012	68	37	52		99	29	73	65	66	61	
09-25-2012	70	51	60	0.88	99	58	73	65	64	63	
09-26-2012	79	61	70	0.20	96	62	71	60	68	64	
09-27-2012	76	63	69	0.06	98	65	72	70	69	67	
09-28-2012	69	62	65	1.29	100	89	72	71	69	68	
09-29-2012	72	54	63		99	50	73	70	70	68	
09-30-2012	72	49	60		100	46	74	68	67	65	

Summary for Spindletop for the period 9-1-2012 through 9-30-2012:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS MX	GRASS MN	BARE MX	BARE MN	
(Deviation from normal)	-0	+1	+1	+3.20	95	49	78	72	71	68	



# OCTOBER CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS	BARE	MX	MN	
10-01-2012	61	54	57	0.42	98	78	72	68	67	65	
10-02-2012	75	61	68	0.19	99	68	69	67	69	66	
10-03-2012	71	54	62		96	53	71	67	68	66	
10-04-2012	76	55	65		96	52	72	67	68	65	
10-05-2012	78	48	63		93	49	72	67	68	65	
10-06-2012	59	41	50	0.06	96	39	72	67	67	64	
10-07-2012	55	39	47		86	50	69	65	64	61	
10-08-2012	56	39	47		96	56	67	62	62	60	
10-09-2012	62	34	48		100	42	65	60	62	58	
10-10-2012	59	36	47		95	42	66	61	61	59	
10-11-2012	63	30	46		95	34	65	59	60	56	
10-12-2012	67	43	55		92	43	66	60	61	57	
10-13-2012	76	40	58		95	53	67	61	62	57	
10-14-2012	74	60	67	0.33	95	61	66	65	63	61	
10-15-2012	62	43	52		94	47	66	63	63	60	
10-16-2012	68	37	52		99	33	65	60	61	57	
10-17-2012	75	51	63		88	36	66	62	62	59	
10-18-2012	65	50	57	0.13	94	23	65	63	62	60	
10-19-2012	60	47	53	0.06	88	45	0	64	60	58	
10-20-2012	52	41	46		98	70	60	58	58	57	
10-21-2012	69	42	55		98	43	63	57	60	56	
10-22-2012	75	55	65		76	46	65	61	62	58	
10-23-2012	78	56	67		78	34	66	62	63	59	
10-24-2012	79	59	69		79	37	68	63	65	61	
10-25-2012	79	54	66		79	38	69	63	64	60	
10-26-2012	66	47	56	0.03	95	62	68	63	64	61	
10-27-2012	48	44	46	0.41	98	84	63	58	62	58	
10-28-2012	47	44	45		88	68	59	56	58	56	
10-29-2012	45	33	39		89	36	57	53	56	54	
10-30-2012	45	38	41	0.37	96	41	56	52	53	51	
10-31-2012	40	39	39		94	92	55	51	52	52	

Summary for Spindletop for the period 10-1-2012 through 10-31-2012:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS	BARE	MX	MN	
	64	46	55	2.00	92	50	64	61	62	59	
(Deviation from normal)	-3	+1	-1	-0.57							

# MARCH –OCTOBER SUMMARY

## CLIMATOLOGICAL DATA, SPINDLETOP

Spindletop Monthly Climate Data(03-2012 to 10-2012)

----- AIR TEMPERATURE -----											-- SOD --	
YEAR	MONTH	AVERAGE			EXTREME		AVG DEPART FROM NORM	NO. OF DAYS		4" TEMP AVERAGE		
		MAX	MIN	AVG	MAX	MIN		>=90	<=32	MAX	MIN	
2012	Mar	67	46	56	84	20	+12	0	5	62	56	
2012	Apr	67	44	56	83	29	+1	0	2	67	61	
2012	May	80	58	69	94	44	+5	3	0	76	71	
2012	Jun	85	61	73	102	48	+1	9	0	80	74	
2012	Jul	92	69	81	106	63	+5	20	0	87	81	
2012	Aug	87	64	75	94	52	+0	13	0	84	78	
2012	Sep	77	57	67	92	36	-1	3	0	78	72	
2012	Oct	64	46	55	79	30	-2	0	1	64	61	

----- PRECIPITATION -----										
YEAR	MONTH	DEPARTURE		CUMULATIVE		GREATEST		% RAIN DAYS	NO. DAYS >=.01	
		TOTAL	FROM NORMAL	TOTAL	DEPARTURE	24 HOUR TOTAL	TOTAL			
2012	Mar	5.64	+1.24	5.64	+1.24	1.25	39	12		
2012	Apr	3.26	-0.62	8.90	+0.62	1.19	40	12		
2012	May	4.02	-0.45	12.92	+0.17	1.67	39	12		
2012	Jun	2.42	-1.24	15.34	-1.07	0.87	17	5		
2012	Jul	2.50	-2.50	17.84	-3.57	0.47	48	15		
2012	Aug	1.68	-2.25	19.52	-5.82	0.52	29	9		
2012	Sep	6.40	+3.20	25.92	-2.62	1.29	33	10		
2012	Oct	2.00	-0.57	27.92	-3.19	0.42	29	9		

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL CORN EARLY PREPLANT

Trial ID: C12001                      Protocol ID: VAL-CORN-FIERCE  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK & SARA CARTER  
 Project ID:                              Investigator: Charles H 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	ZEAMX				ZEAMX
BBCH Scale	BCOR				BCOR
Crop Scientific Name	Zea mays				Zea mays
Crop Name	Corn				Corn
Description					
Rating Date	5-9-2012	5-9-2012	5-9-2012	5-9-2012	5-9-2012
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK
Days After First/Last Applic.	20 14	20 14	20 14	20 14	20 14
Plant-Eval Interval	14 DP-1	14 DP-1	14 DP-1	14 DP-1	14 DP-1
Days After Emergence	6 DE-1	6 DE-1	6 DE-1	6 DE-1	6 DE-1
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0

Trt	Treatment	Rate	Growth					
No.	Name	Rate Unit	Stage	1	2	3	4	5
1	UNTREATED			0	0	0	0	0
2	ROUNDUP POWERMAX	22 fl oz/a	-1WK	0	96	91	93	0
	FIERCE	3 oz wt/a	-1WK					
	AMS	3.7 % v/v	-1WK					
	ROUNDUP POWERMAX	22 fl oz/a	42 DAP					
	AMS	3.7 % v/v	42 DAP					
3	ROUNDUP POWERMAX	22 fl oz/a	-1WK	0	99	89	93	0
	FIERCE	3 oz wt/a	-1WK					
	AMS	3.7 % v/v	-1WK					
	AATREX	1 qt/a	-1WK					
	ROUNDUP POWERMAX	22 fl oz/a	42 DAP					
	AMS	3.7 % v/v	42 DAP					
4	ROUNDUP POWERMAX	22 fl oz/a	-1WK	0	80	87	93	0
	AMS	3.7 % v/v	-1WK					
	ROUNDUP POWERMAX	22 fl oz/a	42 DAP					
	AMS	3.7 % v/v	42 DAP					
5	ROUNDUP POWERMAX	22 fl oz/a	PRE	0	99	99	99	0
	LEXAR	3 qt/a	PRE					
	AMS	3.7 % v/v	PRE					
6	STALWART XTRA LITE	2.1 qt/a	PRE	0	99	99	99	0
	ROUNDUP POWERMAX	22 oz/a	PRE					
	AMS	3.7 % v/v	PRE					

# 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	ZEAMX				ZEAMX
BBCH Scale	BCOR				BCOR
Crop Scientific Name	Zea mays				Zea mays
Crop Name	Corn				Corn
Description					
Rating Date	5-9-2012	5-9-2012	5-9-2012	5-9-2012	5-9-2012
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK
Days After First/Last Applic.	20 14	20 14	20 14	20 14	20 14
Plant-Eval Interval	14 DP-1	14 DP-1	14 DP-1	14 DP-1	14 DP-1
Days After Emergence	6 DE-1	6 DE-1	6 DE-1	6 DE-1	6 DE-1
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0

  

Trt	Treatment	Rate	Growth					
No.	Name	Rate Unit	Stage	1	2	3	4	5
7	VERDICT	13 oz/a	PRE	0	96	95	98	0
	ROUNDUP POWERMAX	22 oz/a	PRE					
	AMS	3.7 % v/v	PRE					
	ROUNDUP POWERMAX	22 oz/a	42 DAP					
	AMS	3.7 % v/v	42 DAP					
	LSD (P=.05)			0.0	12.5	5.0	9.0	0.0
	Standard Deviation			0.0	7.0	2.8	5.1	0.0
	CV			0.0	8.63	3.53	6.17	0.0
	Replicate F			0.000	0.750	2.559	0.280	0.000
	Replicate Prob(F)			1.0000	0.4935	0.1186	0.7602	1.0000
	Treatment F			0.000	81.170	477.670	154.294	0.000
	Treatment Prob(F)			1.0000	0.0001	0.0001	0.0001	1.0000

# 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				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Description				
Rating Date	5-23-2012	5-23-2012	5-23-2012	5-23-2012
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	4 WEEK	4 WEEK	4 WEEK	6 WEEK
Days After First/Last Applic.	34 28	34 28	34 28	34 28
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1
Days After Emergence	20 DE-1	20 DE-1	20 DE-1	20 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt	Treatment	Rate	Growth	6	7	8	9
No.	Name	Rate Unit	Stage				
1	UNTREATED			0	0	0	0
2	ROUNDUP POWERMAX	22 fl oz/a	-1WK	96	91	93	0
	FIERCE	3 oz wt/a	-1WK				
	AMS	3.7 % v/v	-1WK				
	ROUNDUP POWERMAX	22 fl oz/a	42 DAP				
	AMS	3.7 % v/v	42 DAP				
3	ROUNDUP POWERMAX	22 fl oz/a	-1WK	99	89	93	0
	FIERCE	3 oz wt/a	-1WK				
	AMS	3.7 % v/v	-1WK				
	AATREX	1 qt/a	-1WK				
	ROUNDUP POWERMAX	22 fl oz/a	42 DAP				
	AMS	3.7 % v/v	42 DAP				
4	ROUNDUP POWERMAX	22 fl oz/a	-1WK	80	87	93	0
	AMS	3.7 % v/v	-1WK				
	ROUNDUP POWERMAX	22 fl oz/a	42 DAP				
	AMS	3.7 % v/v	42 DAP				
5	ROUNDUP POWERMAX	22 fl oz/a	PRE	99	99	99	0
	LEXAR	3 qt/a	PRE				
	AMS	3.7 % v/v	PRE				
6	STALWART XTRA LITE	2.1 qt/a	PRE	99	99	99	0
	ROUNDUP POWERMAX	22 oz/a	PRE				
	AMS	3.7 % v/v	PRE				

# 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				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Description				
Rating Date	5-23-2012	5-23-2012	5-23-2012	5-23-2012
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	4 WEEK	4 WEEK	4 WEEK	6 WEEK
Days After First/Last Applic.	34 28	34 28	34 28	34 28
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1
Days After Emergence	20 DE-1	20 DE-1	20 DE-1	20 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	6	7
7 VERDICT	13 oz/a	PRE	96	95
ROUNDUP POWERMAX	22 oz/a	PRE		98
AMS	3.7 % v/v	PRE		0
ROUNDUP POWERMAX	22 oz/a	42 DAP		
AMS	3.7 % v/v	42 DAP		
LSD (P=.05)			12.5	5.0
Standard Deviation			7.0	2.8
CV			8.63	3.53
				6.17
				0.0
Replicate F			0.750	2.559
Replicate Prob(F)			0.4935	0.1186
Treatment F			81.170	477.670
Treatment Prob(F)			0.0001	0.0001
				0.280
				0.7602
				154.294
				0.0001
				0.000
				1.0000
				0.000
				1.0000

# 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			
Description	BEFORE POST	BEFORE POST	BEFORE POST
Rating Date	6-6-2012	6-6-2012	6-6-2012
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	6 WEEK	6 WEEK	6 WEEK
Days After First/Last Applic.	48 42	48 42	48 42
Plant-Eval Interval	42 DP-1	42 DP-1	42 DP-1
Days After Emergence	34 DE-1	34 DE-1	34 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt	Treatment	Rate	Growth	10	11	12
No.	Name	Rate Unit	Stage			
1	UNTREATED			0	0	0
2	ROUNDUP POWERMAX	22 fl oz/a	-1WK	96	91	93
	FIERCE	3 oz wt/a	-1WK			
	AMS	3.7 % v/v	-1WK			
	ROUNDUP POWERMAX	22 fl oz/a	42 DAP			
	AMS	3.7 % v/v	42 DAP			
3	ROUNDUP POWERMAX	22 fl oz/a	-1WK	99	89	93
	FIERCE	3 oz wt/a	-1WK			
	AMS	3.7 % v/v	-1WK			
	AATREX	1 qt/a	-1WK			
	ROUNDUP POWERMAX	22 fl oz/a	42 DAP			
	AMS	3.7 % v/v	42 DAP			
4	ROUNDUP POWERMAX	22 fl oz/a	-1WK	80	87	93
	AMS	3.7 % v/v	-1WK			
	ROUNDUP POWERMAX	22 fl oz/a	42 DAP			
	AMS	3.7 % v/v	42 DAP			
5	ROUNDUP POWERMAX	22 fl oz/a	PRE	99	99	99
	LEXAR	3 qt/a	PRE			
	AMS	3.7 % v/v	PRE			
6	STALWART XTRA LITE	2.1 qt/a	PRE	99	99	99
	ROUNDUP POWERMAX	22 oz/a	PRE			
	AMS	3.7 % v/v	PRE			

# 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 trifida	Ipomoea sp.
Pest Name	Giant foxtail	Giant ragweed	Morning glory
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Description	BEFORE POST	BEFORE POST	BEFORE POST
Rating Date	6-6-2012	6-6-2012	6-6-2012
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	6 WEEK	6 WEEK	6 WEEK
Days After First/Last Applic.	48 42	48 42	48 42
Plant-Eval Interval	42 DP-1	42 DP-1	42 DP-1
Days After Emergence	34 DE-1	34 DE-1	34 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0
Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	
7 VERDICT	13 oz/a	PRE	10 96 11 95 12 98
ROUNDUP POWERMAX	22 oz/a	PRE	
AMS	3.7 % v/v	PRE	
ROUNDUP POWERMAX	22 oz/a	42 DAP	
AMS	3.7 % v/v	42 DAP	
LSD (P=.05)			12.5 5.0 9.0
Standard Deviation			7.0 2.8 5.1
CV			8.63 3.53 6.17
Replicate F			0.750 2.559 0.280
Replicate Prob(F)			0.4935 0.1186 0.7602
Treatment F			81.170 477.670 154.294
Treatment Prob(F)			0.0001 0.0001 0.0001



# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL CORN EARLY PREPLANT

Trial ID: C12001                      Protocol ID: VAL-CORN-FIERCE  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK & SARA CARTER  
Project ID:                              Investigator: Charles H 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

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Unit

PERCENT = percent

#### Plant-Eval Interval

14 DP-1 = 1 ZEAMX 4-25-2012  
28 DP-1 = 1 ZEAMX 4-25-2012  
42 DP-1 = 1 ZEAMX 4-25-2012

#### ARM Action Codes

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

# Plant and Soil Science, U of KY Weed Science Research

## NO TILL CORN EARLY PREPLANT

Trial ID: C12001                      Protocol ID: VAL-CORN-FIERCE  
 Location: LEXINGTON, KY        Study Director: CHARLES SLACK & SARA CARTER  
 Project ID:                            Investigator: Charles H Slack  
    Sponsor Contact: JOHN CRANMER

### General Trial Information

**Study Director:** CHARLES SLACK & SARA CARTER  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-19-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK & SARA CARTER  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Address:** 105 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546

**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312        **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** ZEAMX Zea mays  
**Variety:** DKC 61-88  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** COMPAC  
**Soil Moisture:** NORMAL normal, adequate

Corn

**Planting Date:** 4-25-2012  
**Rate, Unit:** 32000 S/A

**Soil Temperature, Unit:** 63 F  
**Emergence Date:** 5-3-2012

### Pest Description

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

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

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

### Site and Design

**Plot Width, Unit:** 10 FT  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 440 FT<sup>2</sup>  
**Replications:** 3

**Site Type:** FIELD field

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

### Soil Description

**Description Name:** MAURY

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

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP  
**Distance, Unit:** 1.25 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

	A	B	C
<b>Application Date:</b>	4-19-2012	4-25-2012	6-6-2012
<b>Time of Day:</b>	3 PM	4 PM	3 PM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	1 WK	PRE	42DAP
<b>Application Placement:</b>	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	71 F	72 F	81 F
<b>% Relative Humidity:</b>	50	50	44
<b>Wind Velocity, Unit:</b>	3 MPH	7 MPH	8 MPH
<b>Wind Direction:</b>	ESE	W	WNW
<b>Soil Temperature, Unit:</b>	65 F	61 F	75 F
<b>Soil Moisture:</b>	SLIDRY	GOOD	GOOD
<b>% Cloud Cover:</b>	0	15	50
<b>Next Rain Occurred On:</b>	4-21-2012	4-26-2012	6-11-2012

### Crop Stage At Each Application

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Height, Unit:</b>			8 IN

### Pest Stage At Each Application

	A	B	C
<b>Pest 1 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W
<b>Height, Unit:</b>		1 IN	4 IN
<b>Pest 2 Code, Type, Scale:</b>	AMBTR W	AMBTR W	AMBTR W
<b>Height, Unit:</b>		2 IN	6 IN
<b>Pest 3 Code, Type, Scale:</b>	IPOSS W	IPOSS W	IPOSS W
<b>Height, Unit:</b>		0.5 IN	3 IN

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

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

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL CORN

Trial ID: C12002                      Protocol ID: SYN-HSC002A4  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK & SARA CARTER  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: SCOTT CULLY

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	ZEAMX		
BBCH Scale	BCOR		
Crop Scientific Name	Zea mays		
Crop Name	Corn		
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
1 LEXAR EZ	3 qt/a	PRE	0	99	99	99
PRINCEP	1 qt/a	PRE				
TOUCHDOWN TOTAL	24 oz/a	PRE				
2 LEXAR EZ	1.5 qt/a	PRE	0	99	99	99
TOUCHDOWN TOTAL	24 oz/a	PRE				
LEXAR EZ	1.5 qt/a	V5				
3 LEXAR EZ	1.5 qt/a	PRE	0	99	99	99
TOUCHDOWN TOTAL	24 oz/a	PRE				
HALEX GT	3.6 pt/a	V5				
NIS	0.25 % v/v	V5				
AMS	2.5 % v/v	V5				
AATREX	1 qt/a	V5				
4 TOUCHDOWN TOTAL	24 oz/a	PRE	0	99	99	96
HALEX GT	3.6 pt/a	V5				
AATREX	1 qt/a	V5				
NIS	0.25 % v/v	V5				
AMS	2.5 % v/v	V5				
5 LEXAR EZ	1.5 qt/a	PRE	0	99	99	99
TOUCHDOWN TOTAL	24 oz/a	PRE				
HALEX GT	3.6 pt/a	V5				
PEAK	0.25 oz/a	V5				
NIS	0.25 % v/v	V5				
AMS	2.5 % v/v	V5				
6 KEYSTONE	2.6 qt/a	PRE	0	99	94	91
HORNET	3 oz/a	PRE				
DURANGO DMA	1.5 pt/a	PRE				
AMS	2.5 % v/v	PRE				
7 SURESTART	2 pt/a	PRE	0	99	99	93
DURANGO DMA	1.5 pt/a	LP				
AMS	2.5 % v/v	LP				
8 SURESTART	2.5 pt/a	PRE	0	99	99	88
DURANGO DMA	1.5 pt/a	LP				
AMS	2.5 % v/v	LP				

# 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	ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4
9	SURESTART	2.5	pt/a	PRE	0	99	99	99
	AATREX	1	lb ai/a	PRE				
	DURANGO DMA	1.5	pt/a	PRE				
	AMS	2.5	% v/v	PRE				
	DURANGO DMA	1.5	pt/a	LP				
	AMS	2.5	% v/v	LP				
10	DURANGO DMA	1.5	pt/a	PRE	0	99	99	99
	AMS	2.5	% v/v	PRE				
	SURESTART	2	pt/a	EP				
	DURANGO DMA	1.5	pt/a	EP				
	AMS	2.5	% v/v	EP				
11	ANTHEM	8	oz/a	PRE	0	99	99	89
	ROUNDUP POWERMAX	22	oz/a	PRE				
	AMS	3.7	% v/v	PRE				
	ROUNDUP POWERMAX	22	oz/a	V5				
	AMS	3.7	% v/v	V5				
12	BALANCE FLEXX HERBICIDE	3	oz/a	PRE	0	99	99	99
	AATREX	1	qt/a	PRE				
	ROUNDUP POWERMAX	22	oz/a	PRE				
	AMS	3.7	% v/v	PRE				
	ROUNDUP POWERMAX	22	oz/a	V5				
	LAUDIS	3	oz/a	V5				
	CLARITY	8	oz/a	V5				
	AMS	3.7	% v/v	V5				
13	CORVUS HERBICIDE	3	oz/a	PRE	0	99	99	99
	AATREX	1	qt/a	PRE				
	ROUNDUP POWERMAX	22	oz/a	PRE				
	AMS	3.7	% v/v	PRE				
	ROUNDUP POWERMAX	22	oz/a	V5				
	LAUDIS	3	oz/a	V5				
	CLARITY	8	oz/a	V5				
	AMS	3.7	% v/v	V5				

# 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	ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4
14	INSTIGATE	6 oz/a		PRE	0	99	99	99
	AATREX	1 lb ai/a		PRE				
	ROUNDUP POWERMAX	22 oz/a		PRE				
	AMS	3.7 % v/v		PRE				
	REALM Q	4 oz/a		V5				
	AATREX	1 lb ai/a		V5				
	ABUNDIT	32 fl oz/a		V5				
	AMS	3.7 % v/v		V5				
	LSD (P=.05)				0.0	0.0	3.6	4.9
	Standard Deviation				0.0	0.0	2.2	2.9
	CV				0.0	0.0	2.19	3.03
	Replicate F				0.000	0.000	1.000	0.171
	Replicate Prob(F)				1.0000	1.0000	0.3816	0.8439
	Treatment F				0.000	0.000	1.000	6.351
	Treatment Prob(F)				1.0000	1.0000	0.4786	0.0001



# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	SETFA	AMBTR
Pest Scientific Name	Chenopodium al>	Setaria faberi	Ambrosia trifi>
Pest Name	Common lambsqu>	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	4 WEEK	4 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt	Treatment	Rate	Growth	5	6	7	8
No.	Name	Rate Unit	Stage				
1	LEXAR EZ	3 qt/a	PRE	99	0	99	98
	PRINCEP	1 qt/a	PRE				
	TOUCHDOWN TOTAL	24 oz/a	PRE				
2	LEXAR EZ	1.5 qt/a	PRE	99	0	99	99
	TOUCHDOWN TOTAL	24 oz/a	PRE				
	LEXAR EZ	1.5 qt/a	V5				
3	LEXAR EZ	1.5 qt/a	PRE	99	0	99	99
	TOUCHDOWN TOTAL	24 oz/a	PRE				
	HALEX GT	3.6 pt/a	V5				
	NIS	0.25 % v/v	V5				
	AMS	2.5 % v/v	V5				
	AATREX	1 qt/a	V5				
4	TOUCHDOWN TOTAL	24 oz/a	PRE	99	0	99	98
	HALEX GT	3.6 pt/a	V5				
	AATREX	1 qt/a	V5				
	NIS	0.25 % v/v	V5				
	AMS	2.5 % v/v	V5				
5	LEXAR EZ	1.5 qt/a	PRE	99	0	99	99
	TOUCHDOWN TOTAL	24 oz/a	PRE				
	HALEX GT	3.6 pt/a	V5				
	PEAK	0.25 oz/a	V5				
	NIS	0.25 % v/v	V5				
	AMS	2.5 % v/v	V5				
6	KEYSTONE	2.6 qt/a	PRE	99	0	99	94
	HORNET	3 oz/a	PRE				
	DURANGO DMA	1.5 pt/a	PRE				
	AMS	2.5 % v/v	PRE				
7	SURESTART	2 pt/a	PRE	99	0	99	96
	DURANGO DMA	1.5 pt/a	LP				
	AMS	2.5 % v/v	LP				
8	SURESTART	2.5 pt/a	PRE	99	0	99	99
	DURANGO DMA	1.5 pt/a	LP				
	AMS	2.5 % v/v	LP				

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	SETFA	AMBTR
Pest Scientific Name	Chenopodium al>	Setaria faberi	Ambrosia trifi>
Pest Name	Common lambsqu>	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	4 WEEK	4 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate Unit	Growth Stage	5	6	7	8
9	SURESTART	2.5 pt/a	PRE	99	0	99	99
	AATREX	1 lb ai/a	PRE				
	DURANGO DMA	1.5 pt/a	PRE				
	AMS	2.5 % v/v	PRE				
	DURANGO DMA	1.5 pt/a	LP				
	AMS	2.5 % v/v	LP				
10	DURANGO DMA	1.5 pt/a	PRE	99	0	99	96
	AMS	2.5 % v/v	PRE				
	SURESTART	2 pt/a	EP				
	DURANGO DMA	1.5 pt/a	EP				
	AMS	2.5 % v/v	EP				
11	ANTHEM	8 oz/a	PRE	99	0	99	99
	ROUNDUP POWERMAX	22 oz/a	PRE				
	AMS	3.7 % v/v	PRE				
	ROUNDUP POWERMAX	22 oz/a	V5				
	AMS	3.7 % v/v	V5				
12	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	99	0	99	99
	AATREX	1 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	PRE				
	AMS	3.7 % v/v	PRE				
	ROUNDUP POWERMAX	22 oz/a	V5				
	LAUDIS	3 oz/a	V5				
	CLARITY	8 oz/a	V5				
	AMS	3.7 % v/v	V5				
13	CORVUS HERBICIDE	3 oz/a	PRE	99	0	99	99
	AATREX	1 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	PRE				
	AMS	3.7 % v/v	PRE				
	ROUNDUP POWERMAX	22 oz/a	V5				
	LAUDIS	3 oz/a	V5				
	CLARITY	8 oz/a	V5				
	AMS	3.7 % v/v	V5				

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type			W Weed		W Weed		W Weed
Pest Code			CHEAL		SETFA		AMBTR
Pest Scientific Name			Chenopodium al>		Setaria faberi		Ambrosia trifi>
Pest Name			Common lambsqu>		Giant foxtail		Giant ragweed
Crop Code					ZEAMX		
BBCH Scale					BCOR		
Crop Scientific Name					Zea mays		
Crop Name					Corn		
Rating Type			CONTROL	INJURY	CONTROL		CONTROL
Rating Unit			PERCENT	PERCENT	PERCENT		PERCENT
Number of Subsamples			1	1	1		1
Rating Timing			2 WEEK	4 WEEK	4 WEEK		4 WEEK
ARM Action Codes			P	P	P		P
Number of Decimals			0	0	0		0
Trt Treatment		Rate	Growth				
No. Name		Rate Unit	Stage	5	6	7	8
14 INSTIGATE		6 oz/a	PRE				
AATREX		1 lb ai/a	PRE	99	0	99	99
ROUNDUP POWERMAX		22 oz/a	PRE				
AMS		3.7 % v/v	PRE				
REALM Q		4 oz/a	V5				
AATREX		1 lb ai/a	V5				
ABUNDIT		32 fl oz/a	V5				
AMS		3.7 % v/v	V5				
LSD (P=.05)				0.0	0.0	0.0	4.9
Standard Deviation				0.0	0.0	0.0	2.9
CV				0.0	0.0	0.0	2.99
Replicate F				0.000	0.000	0.000	2.112
Replicate Prob(F)				1.0000	1.0000	1.0000	0.1413
Treatment F				0.000	0.000	0.000	0.822
Treatment Prob(F)				1.0000	1.0000	1.0000	0.6348

# 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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	4 WEEK	4 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	9	10	11	12
		Rate Unit					
1	LEXAR EZ	3 qt/a	PRE	95	99	0	99
	PRINCEP	1 qt/a	PRE				
	TOUCHDOWN TOTAL	24 oz/a	PRE				
2	LEXAR EZ	1.5 qt/a	PRE	99	99	0	99
	TOUCHDOWN TOTAL	24 oz/a	PRE				
	LEXAR EZ	1.5 qt/a	V5				
3	LEXAR EZ	1.5 qt/a	PRE	99	99	0	99
	TOUCHDOWN TOTAL	24 oz/a	PRE				
	HALEX GT	3.6 pt/a	V5				
	NIS	0.25 % v/v	V5				
	AMS	2.5 % v/v	V5				
	AATREX	1 qt/a	V5				
4	TOUCHDOWN TOTAL	24 oz/a	PRE	96	99	0	99
	HALEX GT	3.6 pt/a	V5				
	AATREX	1 qt/a	V5				
	NIS	0.25 % v/v	V5				
	AMS	2.5 % v/v	V5				
5	LEXAR EZ	1.5 qt/a	PRE	99	99	0	99
	TOUCHDOWN TOTAL	24 oz/a	PRE				
	HALEX GT	3.6 pt/a	V5				
	PEAK	0.25 oz/a	V5				
	NIS	0.25 % v/v	V5				
	AMS	2.5 % v/v	V5				
6	KEYSTONE	2.6 qt/a	PRE	83	99	0	99
	HORNET	3 oz/a	PRE				
	DURANGO DMA	1.5 pt/a	PRE				
	AMS	2.5 % v/v	PRE				
7	SURESTART	2 pt/a	PRE	92	99	0	99
	DURANGO DMA	1.5 pt/a	LP				
	AMS	2.5 % v/v	LP				
8	SURESTART	2.5 pt/a	PRE	95	99	0	99
	DURANGO DMA	1.5 pt/a	LP				
	AMS	2.5 % v/v	LP				

# 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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	4 WEEK	4 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	9	10	11	12	
9	SURESTART	2.5	pt/a	PRE	98		99	0	99
	AATREX	1	lb ai/a	PRE					
	DURANGO DMA	1.5	pt/a	PRE					
	AMS	2.5	% v/v	PRE					
	DURANGO DMA	1.5	pt/a	LP					
	AMS	2.5	% v/v	LP					
10	DURANGO DMA	1.5	pt/a	PRE	99		99	0	99
	AMS	2.5	% v/v	PRE					
	SURESTART	2	pt/a	EP					
	DURANGO DMA	1.5	pt/a	EP					
	AMS	2.5	% v/v	EP					
11	ANTHEM	8	oz/a	PRE	96		99	0	99
	ROUNDUP POWERMAX	22	oz/a	PRE					
	AMS	3.7	% v/v	PRE					
	ROUNDUP POWERMAX	22	oz/a	V5					
	AMS	3.7	% v/v	V5					
12	BALANCE FLEXX HERBICIDE	3	oz/a	PRE	99		99	0	99
	AATREX	1	qt/a	PRE					
	ROUNDUP POWERMAX	22	oz/a	PRE					
	AMS	3.7	% v/v	PRE					
	ROUNDUP POWERMAX	22	oz/a	V5					
	LAUDIS	3	oz/a	V5					
	CLARITY	8	oz/a	V5					
	AMS	3.7	% v/v	V5					
13	CORVUS HERBICIDE	3	oz/a	PRE	99		99	0	99
	AATREX	1	qt/a	PRE					
	ROUNDUP POWERMAX	22	oz/a	PRE					
	AMS	3.7	% v/v	PRE					
	ROUNDUP POWERMAX	22	oz/a	V5					
	LAUDIS	3	oz/a	V5					
	CLARITY	8	oz/a	V5					
	AMS	3.7	% v/v	V5					

# 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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	4 WEEK	4 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	9	10	11	12	
14	INSTIGATE	6 oz/a		PRE	99		99	0	99
	AATREX	1 lb ai/a		PRE					
	ROUNDUP POWERMAX	22 oz/a		PRE					
	AMS	3.7 % v/v		PRE					
	REALM Q	4 oz/a		V5					
	AATREX	1 lb ai/a		V5					
	ABUNDIT	32 fl oz/a		V5					
	AMS	3.7 % v/v		V5					
	LSD (P=.05)				5.0		0.0	0.0	0.0
	Standard Deviation				3.0		0.0	0.0	0.0
	CV				3.1		0.0	0.0	0.0
	Replicate F				0.451		0.000	0.000	0.000
	Replicate Prob(F)				0.6419		1.0000	1.0000	1.0000
	Treatment F				6.412		0.000	0.000	0.000
	Treatment Prob(F)				0.0001		1.0000	1.0000	1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	CHEAL
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.	Chenopodium album
Pest Name	Giant ragweed	Morning glory	Common lambsquarters
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trit No.	Treatment Name	Rate Unit	Growth Stage	13	14	15
1	LEXAR EZ	3 qt/a	PRE	98	95	99
	PRINCEP	1 qt/a	PRE			
	TOUCHDOWN TOTAL	24 oz/a	PRE			
2	LEXAR EZ	1.5 qt/a	PRE	99	99	99
	TOUCHDOWN TOTAL	24 oz/a	PRE			
	LEXAR EZ	1.5 qt/a	V5			
3	LEXAR EZ	1.5 qt/a	PRE	99	99	99
	TOUCHDOWN TOTAL	24 oz/a	PRE			
	HALEX GT	3.6 pt/a	V5			
	NIS	0.25 % v/v	V5			
	AMS	2.5 % v/v	V5			
	AATREX	1 qt/a	V5			
4	TOUCHDOWN TOTAL	24 oz/a	PRE	98	96	99
	HALEX GT	3.6 pt/a	V5			
	AATREX	1 qt/a	V5			
	NIS	0.25 % v/v	V5			
	AMS	2.5 % v/v	V5			
5	LEXAR EZ	1.5 qt/a	PRE	99	99	99
	TOUCHDOWN TOTAL	24 oz/a	PRE			
	HALEX GT	3.6 pt/a	V5			
	PEAK	0.25 oz/a	V5			
	NIS	0.25 % v/v	V5			
	AMS	2.5 % v/v	V5			
6	KEYSTONE	2.6 qt/a	PRE	94	83	99
	HORNET	3 oz/a	PRE			
	DURANGO DMA	1.5 pt/a	PRE			
	AMS	2.5 % v/v	PRE			
7	SURESTART	2 pt/a	PRE	96	92	99
	DURANGO DMA	1.5 pt/a	LP			
	AMS	2.5 % v/v	LP			
8	SURESTART	2.5 pt/a	PRE	99	95	99
	DURANGO DMA	1.5 pt/a	LP			
	AMS	2.5 % v/v	LP			

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	CHEAL
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	Chenopodium al>
Pest Name	Giant ragweed	Morning glory	Common lambsqu>
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	13	14	15
9	SURESTART	2.5	pt/a	PRE	99	98	99
	AATREX	1	lb ai/a	PRE			
	DURANGO DMA	1.5	pt/a	PRE			
	AMS	2.5	% v/v	PRE			
	DURANGO DMA	1.5	pt/a	LP			
	AMS	2.5	% v/v	LP			
10	DURANGO DMA	1.5	pt/a	PRE	96	99	99
	AMS	2.5	% v/v	PRE			
	SURESTART	2	pt/a	EP			
	DURANGO DMA	1.5	pt/a	EP			
	AMS	2.5	% v/v	EP			
11	ANTHEM	8	oz/a	PRE	99	96	99
	ROUNDUP POWERMAX	22	oz/a	PRE			
	AMS	3.7	% v/v	PRE			
	ROUNDUP POWERMAX	22	oz/a	V5			
	AMS	3.7	% v/v	V5			
12	BALANCE FLEXX HERBICIDE	3	oz/a	PRE	99	99	99
	AATREX	1	qt/a	PRE			
	ROUNDUP POWERMAX	22	oz/a	PRE			
	AMS	3.7	% v/v	PRE			
	ROUNDUP POWERMAX	22	oz/a	V5			
	LAUDIS	3	oz/a	V5			
	CLARITY	8	oz/a	V5			
	AMS	3.7	% v/v	V5			
13	CORVUS HERBICIDE	3	oz/a	PRE	99	99	99
	AATREX	1	qt/a	PRE			
	ROUNDUP POWERMAX	22	oz/a	PRE			
	AMS	3.7	% v/v	PRE			
	ROUNDUP POWERMAX	22	oz/a	V5			
	LAUDIS	3	oz/a	V5			
	CLARITY	8	oz/a	V5			
	AMS	3.7	% v/v	V5			



# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type		W Weed	W Weed	W Weed	
Pest Code		AMBTR	IPOSS	CHEAL	
Pest Scientific Name		Ambrosia trifi>	Ipomoea sp.	Chenopodium al>	
Pest Name		Giant ragweed	Morning glory	Common lambsqu>	
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Type		CONTROL	CONTROL	CONTROL	
Rating Unit		PERCENT	PERCENT	PERCENT	
Number of Subsamples		1	1	1	
Rating Timing		8 WEEK	8 WEEK	8 WEEK	
ARM Action Codes		P	P	P	
Number of Decimals		0	0	0	
Trt Treatment					
No. Name	Rate Unit	Growth Stage	13	14	15
14 INSTIGATE	6 oz/a	PRE	99	99	99
AATREX	1 lb ai/a	PRE			
ROUNDUP POWERMAX	22 oz/a	PRE			
AMS	3.7 % v/v	PRE			
REALM Q	4 oz/a	V5			
AATREX	1 lb ai/a	V5			
ABUNDIT	32 fl oz/a	V5			
AMS	3.7 % v/v	V5			
LSD (P=.05)			4.9	5.0	0.0
Standard Deviation			2.9	3.0	0.0
CV			2.99	3.1	0.0
Replicate F			2.112	0.451	0.000
Replicate Prob(F)			0.1413	0.6419	1.0000
Treatment F			0.822	6.412	0.000
Treatment Prob(F)			0.6348	0.0001	1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL CORN

Trial ID: C12002                      Protocol ID: SYN-HSC002A4  
Location: LEXINGTON, KY      Study Director: CHARLES SLACK & SARA CARTER  
Project ID:                              Investigator: Charles H 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  
IPOSS, Ipomoea sp., = US  
CHEAL, Chenopodium album, = US

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Unit

PERCENT = percent

#### ARM Action Codes

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

# Plant and Soil Science, U of KY Weed Science Research

## NO TILL CORN

Trial ID: C12002                      Protocol ID: SYN-HSC002A4  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK & SARA CARTER  
Project ID:                              Investigator: Charles H Slack  
Sponsor Contact: SCOTT CULLY

### General Trial Information

**Study Director:** CHARLES SLACK & SARA CARTER  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
  
**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-26-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK & SARA CARTER  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Address:** 105 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747                      **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** DKC 61-88  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** SMOOTH smooth  
**Soil Moisture:** NORMAL normal, adequate

**Planting Date:** 4-26-2012  
**Rate, Unit:** 32000 S/A

**Soil Temperature, Unit:** 66 F  
**Emergence Date:** 5-2-2012

### 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

**Plot Width, Unit:** 10 FT  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 440 FT<sup>2</sup>  
**Replications:** 3

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

### Soil Description

**Description Name:** MAURY

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

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.25 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

	A	B	C
<b>Application Date:</b>	4-26-2012	5-24-2012	6-1-2012
<b>Time of Day:</b>	2 PM	3 PM	10 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	EP	V5/LP
<b>Application Placement:</b>	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	78 F	82 F	62 F
<b>% Relative Humidity:</b>	60	70	75
<b>Wind Velocity, Unit:</b>	10 MPH	8 MPH	6 MPH
<b>Wind Direction:</b>	W	S	WSW
<b>Soil Temperature, Unit:</b>	66 F	75 F	74 F
<b>Soil Moisture:</b>	GOOD	DRY	GOOD
<b>% Cloud Cover:</b>	50	30	45
<b>Next Rain Occurred On:</b>	4-29-2012	5-28-2012	6-2-2012

### Crop Stage At Each Application

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>		BBCH	BBCH
<b>Stage Majority, Percent:</b>		V3	V5
<b>Height, Unit:</b>		10 IN	12 IN

### Pest Stage At Each Application

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

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

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL CORN II

Trial ID: C12003                      Protocol ID: FMC-ANTH-CORN  
 Location: LEXINGTON, KY            Study Director: CHARLES SLACK & SARA CARTER  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: RUSTY MITCHELL

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				ZEAMX
BBCH Scale	BCOR				BCOR
Crop Scientific Name	Zea mays				Zea mays
Crop Name	Corn				Corn
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4	5
1	ANTHEM	8 oz/a	PRE	0	99	99	99	0
	ROUNDUP POWERMAX	22 oz/a	LP					
	AMS	3.7 % v/v	LP					
2	ANTHEM ATZ	32 oz/a	PRE	0	99	99	99	0
	ROUNDUP POWERMAX	22 oz/a	LP					
	AMS	3.7 % v/v	LP					
3	DUAL II MAGNUM	22 oz/a	PRE	0	99	99	55	0
	ROUNDUP POWERMAX	22 oz/a	LP					
	AMS	3.7 % v/v	LP					
4	BICEP II MAGNUM	75 oz/a	PRE	0	99	99	99	0
	ROUNDUP POWERMAX	22 oz/a	LP					
	AMS	3.7 % v/v	LP					
5	LUMAX	3 qt/a	PRE	0	99	99	99	0
	ROUNDUP POWERMAX	22 oz/a	LP					
	AMS	3.7 % v/v	LP					
6	ANTHEM	8 oz/a	EP	0	99	99	99	0
	ROUNDUP POWERMAX	22 oz/a	EP					
	AMS	3.7 % v/v	EP					
7	ANTHEM ATZ	28 oz/a	EP	0	99	99	99	0
	ROUNDUP POWERMAX	22 oz/a	EP					
	AMS	3.7 % v/v	EP					
8	HALEX GT	58 oz/a	EP	0	99	99	99	0
	AMS	3.7 % v/v	EP					
9	LEXAR	96 oz/a	EP	0	99	99	99	0
	AMS	3.7 % v/v	EP					
10	ROUNDUP POWERMAX	22 oz/a	EP	0	99	99	99	0
	AMS	3.7 % v/v	EP					
11	ROUNDUP POWERMAX	22 oz/a	EP	0	99	99	99	0
	AMS	3.7 % v/v	EP					
	ROUNDUP POWERMAX	22 oz/a	LP					
	AMS	3.7 % v/v	LP					

# 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				ZEAMX
BBCH Scale	BCOR				BCOR
Crop Scientific Name	Zea mays				Zea mays
Crop Name	Corn				Corn
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0

  

Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	1	2	3	4	5
12 CHECK UNTREATED			0	0	0	0	0
LSD (P=.05)			0.0	0.0	0.0	2.4	0.0
Standard Deviation			0.0	0.0	0.0	1.7	0.0
CV			0.0	0.0	0.0	1.91	0.0
Replicate F			0.000	0.000	0.000	1.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	0.4051	1.0000
Treatment F			0.000	0.000	0.000	1313.400	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	0.0001	1.0000



# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed		W Weed
Pest Code	SETFA	AMACH	IPOSS		SETFA
Pest Scientific Name	Setaria faberi	Amaranthus hyb>	Ipomoea sp.		Setaria faberi
Pest Name	Giant foxtail	Smooth pigweed	Morning glory		Giant foxtail
Crop Code					ZEAMX
BBCH Scale					BCOR
Crop Scientific Name					Zea mays
Crop Name					Corn
Rating Type	CONTROL	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Growth Unit Stage	6	7	8	9	10
1	ANTHEM	8 oz/a	PRE	99	99	99	0	99
	ROUNDUP POWERMAX	22 oz/a	LP					
	AMS	3.7 % v/v	LP					
2	ANTHEM ATZ	32 oz/a	PRE	99	99	99	0	99
	ROUNDUP POWERMAX	22 oz/a	LP					
	AMS	3.7 % v/v	LP					
3	DUAL II MAGNUM	22 oz/a	PRE	99	99	55	0	99
	ROUNDUP POWERMAX	22 oz/a	LP					
	AMS	3.7 % v/v	LP					
4	BICEP II MAGNUM	75 oz/a	PRE	99	99	99	0	99
	ROUNDUP POWERMAX	22 oz/a	LP					
	AMS	3.7 % v/v	LP					
5	LUMAX	3 qt/a	PRE	99	99	99	0	99
	ROUNDUP POWERMAX	22 oz/a	LP					
	AMS	3.7 % v/v	LP					
6	ANTHEM	8 oz/a	EP	99	99	99	0	99
	ROUNDUP POWERMAX	22 oz/a	EP					
	AMS	3.7 % v/v	EP					
7	ANTHEM ATZ	28 oz/a	EP	99	99	99	0	99
	ROUNDUP POWERMAX	22 oz/a	EP					
	AMS	3.7 % v/v	EP					
8	HALEX GT	58 oz/a	EP	99	99	99	0	99
	AMS	3.7 % v/v	EP					
9	LEXAR	96 oz/a	EP	99	99	99	0	99
	AMS	3.7 % v/v	EP					
10	ROUNDUP POWERMAX	22 oz/a	EP	99	99	99	0	99
	AMS	3.7 % v/v	EP					
11	ROUNDUP POWERMAX	22 oz/a	EP	99	99	99	0	99
	AMS	3.7 % v/v	EP					
	ROUNDUP POWERMAX	22 oz/a	LP					
	AMS	3.7 % v/v	LP					

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMACH	IPOSS	SETFA	SETFA
Pest Scientific Name	Setaria faberi	Amaranthus hyb>	Ipomoea sp.	Setaria faberi	Setaria faberi
Pest Name	Giant foxtail	Smooth pigweed	Morning glory	Giant foxtail	Giant foxtail
Crop Code				ZEAMX	
BBCH Scale				BCOR	
Crop Scientific Name				Zea mays	
Crop Name				Corn	
Rating Type	CONTROL	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	6	7	8
12 CHECK UNTREATED			0	0	0
LSD (P=.05)			0.0	0.0	2.4
Standard Deviation			0.0	0.0	1.7
CV			0.0	0.0	1.91
Replicate F			0.000	0.000	1.000
Replicate Prob(F)			1.0000	1.0000	0.4051
Treatment F			0.000	0.000	1313.400
Treatment Prob(F)			1.0000	1.0000	0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	AMACH	IPOSS	
Pest Scientific Name	Amaranthus hyb>	Ipomoea sp.	
Pest Name	Smooth pigweed	Morning glory	
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Rating Type	CONTROL	CONTROL	
Rating Unit	PERCENT	PERCENT	
Number of Subsamples	1	1	
Rating Timing	8 WEEK	8 WEEK	
ARM Action Codes	P	P	
Number of Decimals	0	0	

Trt No.	Treatment Name	Rate	Growth Stage	11	12
1	ANTHEM	8 oz/a	PRE	99	99
	ROUNDUP POWERMAX	22 oz/a	LP		
	AMS	3.7 % v/v	LP		
2	ANTHEM ATZ	32 oz/a	PRE	99	99
	ROUNDUP POWERMAX	22 oz/a	LP		
	AMS	3.7 % v/v	LP		
3	DUAL II MAGNUM	22 oz/a	PRE	99	99
	ROUNDUP POWERMAX	22 oz/a	LP		
	AMS	3.7 % v/v	LP		
4	BICEP II MAGNUM	75 oz/a	PRE	99	99
	ROUNDUP POWERMAX	22 oz/a	LP		
	AMS	3.7 % v/v	LP		
5	LUMAX	3 qt/a	PRE	99	99
	ROUNDUP POWERMAX	22 oz/a	LP		
	AMS	3.7 % v/v	LP		
6	ANTHEM	8 oz/a	EP	99	99
	ROUNDUP POWERMAX	22 oz/a	EP		
	AMS	3.7 % v/v	EP		
7	ANTHEM ATZ	28 oz/a	EP	99	99
	ROUNDUP POWERMAX	22 oz/a	EP		
	AMS	3.7 % v/v	EP		
8	HALEX GT	58 oz/a	EP	99	99
	AMS	3.7 % v/v	EP		
9	LEXAR	96 oz/a	EP	99	99
	AMS	3.7 % v/v	EP		
10	ROUNDUP POWERMAX	22 oz/a	EP	99	99
	AMS	3.7 % v/v	EP		
11	ROUNDUP POWERMAX	22 oz/a	EP	99	99
	AMS	3.7 % v/v	EP		
	ROUNDUP POWERMAX	22 oz/a	LP		
	AMS	3.7 % v/v	LP		

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed
Pest Code	AMACH	IPOSS
Pest Scientific Name	Amaranthus hyb>	Ipomoea sp.
Pest Name	Smooth pigweed	Morning glory
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
Number of Subsamples	1	1
Rating Timing	8 WEEK	8 WEEK
ARM Action Codes	P	P
Number of Decimals	0	0

---

Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	11	12
12 CHECK UNTREATED			0	0
LSD (P=.05)			0.0	0.0
Standard Deviation			0.0	0.0
CV			0.0	0.0
Replicate F			0.000	0.000
Replicate Prob(F)			1.0000	1.0000
Treatment F			0.000	0.000
Treatment Prob(F)			1.0000	1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL CORN II

Trial ID: C12003                      Protocol ID: FMC-ANTH-CORN  
Location: LEXINGTON, KY      Study Director: CHARLES SLACK & SARA CARTER  
Project ID:                              Investigator: Charles H Slack  
   Sponsor Contact: RUSTY MITCHELL

#### 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

ZEAMX, BCOR, *Zea mays*, = US

#### Rating Unit

PERCENT = percent

#### ARM Action Codes

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

# Plant and Soil Science, U of KY Weed Science Research

## NO TILL CORN II

Trial ID: C12003                      Protocol ID: FMC-ANTH-CORN  
 Location: LEXINGTON, KY        Study Director: CHARLES SLACK & SARA CARTER  
 Project ID:                            Investigator: Charles H Slack  
    Sponsor Contact: RUSTY MITCHELL

### General Trial Information

**Study Director:** CHARLES SLACK & SARA CARTER  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-24-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK & SARA CARTER  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Address:** 105 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546

**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312        **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** DKC 61-88  
**BBCH Scale:** BCOR **Planting Date:** 5-2-2012  
**Planting Method:** DRILLE drilled **Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** SMOOTH smooth **Soil Temperature, Unit:** 71 F  
**Soil Moisture:** NORMAL normal, adequate **Emergence Date:** 5-8-2012

### 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

**Plot Width, Unit:** 10 FT **Site Type:** FIELD field  
**Plot Length, Unit:** 33 FT  
**Plot Area, Unit:** 330 FT2 **Tillage Type:** NOTILL no-till  
**Replications:** 4 **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:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2.25 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

	<b>A</b>	<b>B</b>	<b>C</b>
<b>Application Date:</b>	4-24-2012	5-18-2012	6-1-2012
<b>Time of Day:</b>	4 PM	10 AM	2 PM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	EP	LP
<b>Application Placement:</b>	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	62 F	67 F	64 F
<b>% Relative Humidity:</b>	40	40	55
<b>Wind Velocity, Unit:</b>	8 MPH	4 MPH	3 MPH
<b>Wind Direction:</b>	W	SW	SW
<b>Soil Temperature, Unit:</b>	58 F	73 F	74 F
<b>Soil Moisture:</b>	GOOD	GOOD	GOOD
<b>% Cloud Cover:</b>	50	10	40
<b>Next Rain Occurred On:</b>	4-25-2012	5-28-2012	6-2-2012

### Crop Stage At Each Application

	<b>A</b>	<b>B</b>	<b>C</b>
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Height, Unit:</b>	3 IN	6 IN	6 IN

### Pest Stage At Each Application

	<b>A</b>	<b>B</b>	<b>C</b>
<b>Pest 1 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W
<b>Height, Unit:</b>	1 IN	3 IN	3 IN
<b>Pest 2 Code, Type, Scale:</b>	AMACH W	AMACH W	AMACH W
<b>Height, Unit:</b>	2 IN	6 IN	6 IN
<b>Pest 3 Code, Type, Scale:</b>	IPOSS W	IPOSS W	IPOSS W
<b>Height, Unit:</b>	1 IN	2.5 IN	2.5 IN



# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

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

# Plant and Soil Science, U of KY Weed Science Research

## CORN PREEMERGENCE

Trial ID: C12010                      Protocol ID: DUPONT-USA-12-006  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK & SARA CARTER  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: DAN SMITH

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	ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Description	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Rating Date	5-21-2012	5-21-2012	5-21-2012	5-21-2012
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	27 27	27 27	27 27	27 27
Plant-Eval Interval	27 DP-1	27 DP-1	27 DP-1	27 DP-1
Days After Emergence	19 DE-1	19 DE-1	19 DE-1	19 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt Treatment No. Name	Rate Unit	Growth Stage	1	2	3	4
1 INSTIGATE	6 oz/a	PRE	0	86	88	73
REALM Q	4 oz/a	28 DAP				
AATREX	1.5 lb ai/a	28 DAP				
ABUNDIT	32 fl oz/a	28 DAP				
AMS	3.7 % v/v	28 DAP				
2 INSTIGATE	6 oz/a	PRE	0	87	94	88
AATREX	1 lb ai/a	PRE				
REALM Q	4 oz/a	28 DAP				
AATREX	1 lb ai/a	28 DAP				
ABUNDIT	32 fl oz/a	28 DAP				
AMS	3.7 % v/v	28 DAP				
3 INSTGATE	6 oz/a	PRE	0	85	93	87
CINCH ATZ	1.5 pt/a	PRE				
REALM Q	4 oz/a	28 DAP				
AATREX	1 lb ai/a	28 DAP				
ABUNDIT	32 fl oz/a	28 DAP				
AMS	3.7 % v/v	28 DAP				
4 INSTIGATE	6 oz/a	PRE	0	90	86	73
CINCH	0.66 pt/a	PRE				
REALM Q	4 oz/a	28 DAP				
AATREX	1.5 lb ai/a	28 DAP				
ABUNDIT	32 fl oz/a	28 DAP				
AMS	3.7 % v/v	28 DAP				
5 INSTIGATE	6 oz/a	PRE	0	87	87	70
AATREX	1.5 lb ai/a	28 DAP				
RESOLVE Q	1.2 oz/a	28 DAP				
ABUNDIT	32 fl oz/a	28 DAP				
AMS	3.7 % v/v	28 DAP				

# 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 trifida	Ipomoea sp.
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Description	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Rating Date	5-21-2012	5-21-2012	5-21-2012	5-21-2012
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	27 27	27 27	27 27	27 27
Plant-Eval Interval	27 DP-1	27 DP-1	27 DP-1	27 DP-1
Days After Emergence	19 DE-1	19 DE-1	19 DE-1	19 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
6 INSTIGATE	6 oz/a	PRE	0	88	96	93
AATREX	1 lb ai/a	PRE				
RESOLVE Q	1.2 oz/a	28 DAP				
AATREX	1 lb ai/a	28 DAP				
ABUNDIT	32 fl oz/a	28 DAP				
AMS	3.7 % v/v	28 DAP				
7 INSTIGATE	6 oz/a	PRE	0	92	94	78
CINCH ATZ	1.5 pt/a	PRE				
RESOLVE Q	1.2 oz/a	28 DAP				
AATREX	1.5 lb ai/a	28 DAP				
ABUNDIT	32 fl oz/a	28 DAP				
AMS	3.7 % v/v	28 DAP				
8 INSTIGATE	6 oz/a	PRE	0	90	87	73
CINCH	0.66 pt/a	PRE				
RESOLVE Q	1.2 oz/a	28 DAP				
AATREX	1.5 lb ai/a	28 DAP				
ABUNDIT	32 fl oz/a	28 DAP				
AMS	3.7 % v/v	28 DAP				
9 LEXAR	3 qt/a	PRE	0	98	96	96
ABUNDIT	32 fl oz/a	28 DAP				
AMS	3.7 % v/v	28 DAP				
10 HALEX GT	3.6 pt/a	28 DAP	0	0	0	0
AATREX	1 lb ai/a	28 DAP				
NIS	0.25 % v/v	28 DAP				
AMS	3.7 % v/v	28 DAP				
11 ROUNDUP POWERMAX	22 oz/a	28 DAP	0	0	0	0
AMS	3.7 % v/v	28 DAP				
12 CHECK UNTREATED			0	0	0	0
LSD (P=.05)			0.0	6.7	9.5	10.4
Standard Deviation			0.0	4.0	5.6	6.1
CV			0.0	5.92	8.23	10.07
Replicate F			0.000	4.463	0.300	1.599
Replicate Prob(F)			1.0000	0.0236	0.7437	0.2247
Treatment F			0.000	313.883	162.272	113.227
Treatment Prob(F)			1.0000	0.0001	0.0001	0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	SETFA	AMBTR
Pest Scientific Name	Chenopodium al>	Setaria faberi	Ambrosia trifi>
Pest Name	Common lambsqu>	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Description	BEFORE POST	AFTER POST	AFTER POST
Rating Date	5-21-2012		
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Days After First/Last Applic.	27 27		
Plant-Eval Interval	27 DP-1		
Days After Emergence	19 DE-1		
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	5	6	7	8
1	INSTIGATE	6 oz/a	PRE	93	0	99	99
	REALM Q	4 oz/a	28 DAP				
	AATREX	1.5 lb ai/a	28 DAP				
	ABUNDIT	32 fl oz/a	28 DAP				
	AMS	3.7 % v/v	28 DAP				
2	INSTIGATE	6 oz/a	PRE	96	0	99	99
	AATREX	1 lb ai/a	PRE				
	REALM Q	4 oz/a	28 DAP				
	AATREX	1 lb ai/a	28 DAP				
	ABUNDIT	32 fl oz/a	28 DAP				
	AMS	3.7 % v/v	28 DAP				
3	INSTGATE	6 oz/a	PRE	98	0	99	99
	CINCH ATZ	1.5 pt/a	PRE				
	REALM Q	4 oz/a	28 DAP				
	AATREX	1 lb ai/a	28 DAP				
	ABUNDIT	32 fl oz/a	28 DAP				
	AMS	3.7 % v/v	28 DAP				
4	INSTIGATE	6 oz/a	PRE	96	0	99	99
	CINCH	0.66 pt/a	PRE				
	REALM Q	4 oz/a	28 DAP				
	AATREX	1.5 lb ai/a	28 DAP				
	ABUNDIT	32 fl oz/a	28 DAP				
	AMS	3.7 % v/v	28 DAP				
5	INSTIGATE	6 oz/a	PRE	96	0	99	99
	AATREX	1.5 lb ai/a	28 DAP				
	RESOLVE Q	1.2 oz/a	28 DAP				
	ABUNDIT	32 fl oz/a	28 DAP				
	AMS	3.7 % v/v	28 DAP				

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	SETFA	AMBTR
Pest Scientific Name	Chenopodium al>	Setaria faberi	Ambrosia trifidi>
Pest Name	Common lambsqu>	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Description	BEFORE POST	AFTER POST	AFTER POST
Rating Date	5-21-2012		
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Days After First/Last Applic.	27 27		
Plant-Eval Interval	27 DP-1		
Days After Emergence	19 DE-1		
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	5	6	7	8
6	INSTIGATE	6 oz/a	PRE	98	0	99	99
	AATREX	1 lb ai/a	PRE				
	RESOLVE Q	1.2 oz/a	28 DAP				
	AATREX	1 lb ai/a	28 DAP				
	ABUNDIT	32 fl oz/a	28 DAP				
	AMS	3.7 % v/v	28 DAP				
7	INSTIGATE	6 oz/a	PRE	98	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	32 fl oz/a	28 DAP				
	AMS	3.7 % v/v	28 DAP				
8	INSTIGATE	6 oz/a	PRE	93	0	99	99
	CINCH	0.66 pt/a	PRE				
	RESOLVE Q	1.2 oz/a	28 DAP				
	AATREX	1.5 lb ai/a	28 DAP				
	ABUNDIT	32 fl oz/a	28 DAP				
	AMS	3.7 % v/v	28 DAP				
9	LEXAR	3 qt/a	PRE	98	0	99	99
	ABUNDIT	32 fl oz/a	28 DAP				
	AMS	3.7 % v/v	28 DAP				
10	HALEX GT	3.6 pt/a	28 DAP	0	0	99	99
	AATREX	1 lb ai/a	28 DAP				
	NIS	0.25 % v/v	28 DAP				
	AMS	3.7 % v/v	28 DAP				
11	ROUNDUP POWERMAX	22 oz/a	28 DAP	0	0	99	99
	AMS	3.7 % v/v	28 DAP				
12	CHECK UNTREATED			0	0	0	0
	LSD (P=.05)			3.1	0.0	0.0	0.0
	Standard Deviation			1.8	0.0	0.0	0.0
	CV			2.53	0.0	0.0	0.0
	Replicate F			5.249	0.000	0.000	0.000
	Replicate Prob(F)			0.0137	1.0000	1.0000	1.0000
	Treatment F			1712.999	0.000	0.000	0.000
	Treatment Prob(F)			0.0001	1.0000	1.0000	1.0000

# 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			ZEAMX	
BBCH Scale			BCOR	
Crop Scientific Name			Zea mays	
Crop Name			Corn	
Description	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Rating Date				
Rating Type	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Days After First/Last Applic.				
Plant-Eval Interval				
Days After Emergence				
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	9	10	11	12
1	INSTIGATE	6 oz/a	PRE	99	99	0	99
	REALM Q	4 oz/a	28 DAP				
	AATREX	1.5 lb ai/a	28 DAP				
	ABUNDIT	32 fl oz/a	28 DAP				
	AMS	3.7 % v/v	28 DAP				
2	INSTIGATE	6 oz/a	PRE	99	99	0	99
	AATREX	1 lb ai/a	PRE				
	REALM Q	4 oz/a	28 DAP				
	AATREX	1 lb ai/a	28 DAP				
	ABUNDIT	32 fl oz/a	28 DAP				
	AMS	3.7 % v/v	28 DAP				
3	INSTGATE	6 oz/a	PRE	99	99	0	99
	CINCH ATZ	1.5 pt/a	PRE				
	REALM Q	4 oz/a	28 DAP				
	AATREX	1 lb ai/a	28 DAP				
	ABUNDIT	32 fl oz/a	28 DAP				
	AMS	3.7 % v/v	28 DAP				
4	INSTIGATE	6 oz/a	PRE	99	99	0	99
	CINCH	0.66 pt/a	PRE				
	REALM Q	4 oz/a	28 DAP				
	AATREX	1.5 lb ai/a	28 DAP				
	ABUNDIT	32 fl oz/a	28 DAP				
	AMS	3.7 % v/v	28 DAP				
5	INSTIGATE	6 oz/a	PRE	99	99	0	99
	AATREX	1.5 lb ai/a	28 DAP				
	RESOLVE Q	1.2 oz/a	28 DAP				
	ABUNDIT	32 fl oz/a	28 DAP				
	AMS	3.7 % v/v	28 DAP				

# 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				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Description		AFTER POST	AFTER POST	AFTER POST
Rating Date				
Rating Type		CONTROL	CONTROL	INJURY
Rating Unit		PERCENT	PERCENT	PERCENT
Number of Subsamples		1	1	1
Days After First/Last Applic.				
Plant-Eval Interval				
Days After Emergence				
ARM Action Codes		P	P	P
Number of Decimals		0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	9	10
			11	12
6 INSTIGATE	6 oz/a	PRE	99	99
AATREX	1 lb ai/a	PRE		
RESOLVE Q	1.2 oz/a	28 DAP		
AATREX	1 lb ai/a	28 DAP		
ABUNDIT	32 fl oz/a	28 DAP		
AMS	3.7 % v/v	28 DAP		
7 INSTIGATE	6 oz/a	PRE	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	32 fl oz/a	28 DAP		
AMS	3.7 % v/v	28 DAP		
8 INSTIGATE	6 oz/a	PRE	99	99
CINCH	0.66 pt/a	PRE		
RESOLVE Q	1.2 oz/a	28 DAP		
AATREX	1.5 lb ai/a	28 DAP		
ABUNDIT	32 fl oz/a	28 DAP		
AMS	3.7 % v/v	28 DAP		
9 LEXAR	3 qt/a	PRE	99	99
ABUNDIT	32 fl oz/a	28 DAP		
AMS	3.7 % v/v	28 DAP		
10 HALEX GT	3.6 pt/a	28 DAP	99	99
AATREX	1 lb ai/a	28 DAP		
NIS	0.25 % v/v	28 DAP		
AMS	3.7 % v/v	28 DAP		
11 ROUNDUP POWERMAX	22 oz/a	28 DAP	99	99
AMS	3.7 % v/v	28 DAP		
12 CHECK UNTREATED			0	0
LSD (P=.05)			0.0	0.0
Standard Deviation			0.0	0.0
CV			0.0	0.0
Replicate F			0.000	0.000
Replicate Prob(F)			1.0000	1.0000
Treatment F			0.000	0.000
Treatment Prob(F)			1.0000	1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	CHEAL
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	Chenopodium al>
Pest Name	Giant ragweed	Morning glory	Common lambsqu>
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Description	AFTER POST	AFTER POST	AFTER POST
Rating Date			
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Days After First/Last Applic.			
Plant-Eval Interval			
Days After Emergence			
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	13	14	15
1 INSTIGATE	6 oz/a	PRE	99	99	99
REALM Q	4 oz/a	28 DAP			
AATREX	1.5 lb ai/a	28 DAP			
ABUNDIT	32 fl oz/a	28 DAP			
AMS	3.7 % v/v	28 DAP			
2 INSTIGATE	6 oz/a	PRE	99	99	99
AATREX	1 lb ai/a	PRE			
REALM Q	4 oz/a	28 DAP			
AATREX	1 lb ai/a	28 DAP			
ABUNDIT	32 fl oz/a	28 DAP			
AMS	3.7 % v/v	28 DAP			
3 INSTGATE	6 oz/a	PRE	99	99	99
CINCH ATZ	1.5 pt/a	PRE			
REALM Q	4 oz/a	28 DAP			
AATREX	1 lb ai/a	28 DAP			
ABUNDIT	32 fl oz/a	28 DAP			
AMS	3.7 % v/v	28 DAP			
4 INSTIGATE	6 oz/a	PRE	99	99	99
CINCH	0.66 pt/a	PRE			
REALM Q	4 oz/a	28 DAP			
AATREX	1.5 lb ai/a	28 DAP			
ABUNDIT	32 fl oz/a	28 DAP			
AMS	3.7 % v/v	28 DAP			
5 INSTIGATE	6 oz/a	PRE	99	99	99
AATREX	1.5 lb ai/a	28 DAP			
RESOLVE Q	1.2 oz/a	28 DAP			
ABUNDIT	32 fl oz/a	28 DAP			
AMS	3.7 % v/v	28 DAP			



# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed		
Pest Code	AMBTR	IPOSS	CHEAL		
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	Chenopodium al>		
Pest Name	Giant ragweed	Morning glory	Common lambsqu>		
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Description	AFTER POST	AFTER POST	AFTER POST		
Rating Date					
Rating Type	CONTROL	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT		
Number of Subsamples	1	1	1		
Days After First/Last Applic.					
Plant-Eval Interval					
Days After Emergence					
ARM Action Codes	P	P	P		
Number of Decimals	0	0	0		
Trt Treatment	Rate	Growth	13	14	15
No. Name	Rate Unit	Stage			
6 INSTIGATE	6 oz/a	PRE	99	99	99
AATREX	1 lb ai/a	PRE			
RESOLVE Q	1.2 oz/a	28 DAP			
AATREX	1 lb ai/a	28 DAP			
ABUNDIT	32 fl oz/a	28 DAP			
AMS	3.7 % v/v	28 DAP			
7 INSTIGATE	6 oz/a	PRE	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	32 fl oz/a	28 DAP			
AMS	3.7 % v/v	28 DAP			
8 INSTIGATE	6 oz/a	PRE	99	99	99
CINCH	0.66 pt/a	PRE			
RESOLVE Q	1.2 oz/a	28 DAP			
AATREX	1.5 lb ai/a	28 DAP			
ABUNDIT	32 fl oz/a	28 DAP			
AMS	3.7 % v/v	28 DAP			
9 LEXAR	3 qt/a	PRE	99	99	99
ABUNDIT	32 fl oz/a	28 DAP			
AMS	3.7 % v/v	28 DAP			
10 HALEX GT	3.6 pt/a	28 DAP	99	99	99
AATREX	1 lb ai/a	28 DAP			
NIS	0.25 % v/v	28 DAP			
AMS	3.7 % v/v	28 DAP			
11 ROUNDUP POWERMAX	22 oz/a	28 DAP	99	99	99
AMS	3.7 % v/v	28 DAP			
12 CHECK UNTREATED			0	0	0
LSD (P=.05)			0.0	0.0	0.0
Standard Deviation			0.0	0.0	0.0
CV			0.0	0.0	0.0
Replicate F			0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN PREEMERGENCE

Trial ID: C12010                      Protocol ID: DUPONT-USA-12-006  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK & SARA CARTER  
Project ID:                              Investigator: Charles H Slack  
   Sponsor Contact: DAN SMITH

#### 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  
CHEAL, Chenopodium album, = US

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Unit

PERCENT = percent

#### Plant-Eval Interval

27 DP-1 = 1 ZEAMX 4-24-2012

#### ARM Action Codes

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

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN PREEMERGENCE

Trial ID: C12010                      Protocol ID: DUPONT-USA-12-006  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK & SARA CARTER  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: DAN SMITH

### 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:** 4-24-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** ZEAMX Zea mays Corn

**Variety:** DKC 61-88

**BBCH Scale:** BCOR

**Planting Method:** DRILLE

**Depth, Unit:** 1.5 IN

**Row Spacing, Unit:** 30 IN

**Seed Bed:** SMOOTH

**Soil Moisture:** NORMAL

**Planting Date:** 4-24-2012

**Rate, Unit:** 32000 S/A

**Soil Temperature, Unit:** 53 F

**Emergence Date:** 5-2-2012

### 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

**Plot Width, Unit:** 10 FT

**Site Type:** FIELD field

**Plot Length, Unit:** 44 FT

**Plot Area, Unit:** 440 FT<sup>2</sup> **Tillage Type:** CONTIL conventional-till

**Replications:** 3 **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:**

WEDRDR wet-dry-dry

**Closest Weather Station:** SPINDLETOP

**Distance, Unit:** 1.5 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

	<b>A</b>	<b>B</b>
<b>Application Date:</b>	4-24-2012	5-22-2012
<b>Time of Day:</b>	4 PM	2 PM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	28DAP
<b>Application Placement:</b>	BROSOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	62 F	70 F
<b>% Relative Humidity:</b>	40	70
<b>Wind Velocity, Unit:</b>	8 MPH	6 MPH
<b>Wind Direction:</b>	W	NNW
<b>Soil Temperature, Unit:</b>	53 F	66 F
<b>Soil Moisture:</b>	GOOD	FAIR
<b>% Cloud Cover:</b>	50	50
<b>Next Rain Occurred On:</b>	4-25-2012	5-28-2012

### Crop Stage At Each Application

	<b>A</b>	<b>B</b>
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR
<b>Height, Unit:</b>	6	IN

### Pest Stage At Each Application

	<b>A</b>	<b>B</b>
<b>Pest 1 Code, Type, Scale:</b>	SETFA W	SETFA W
<b>Height, Unit:</b>	3	IN
<b>Pest 2 Code, Type, Scale:</b>	AMBTR W	AMBTR W
<b>Height, Unit:</b>	5	IN
<b>Pest 3 Code, Type, Scale:</b>	IPOSS W	IPOSS W
<b>Height, Unit:</b>	1.5	IN
<b>Pest 4 Code, Type, Scale:</b>	CHEAL W	CHEAL W
<b>Height, Unit:</b>	2.5	IN

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

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

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN PREEMERGENCE II

Trial ID: C12011                                  Protocol ID: DUPONT-USA-12-011  
 Location: LEXINGTON, KY                  Study Director: CHARLES SLACK & SARA CARTER  
 Project ID:    Investigator: Charles H Slack  
    Sponsor Contact: DAN SMITH

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	ZEAMX		
BBCH Scale	BCOR		
Crop Scientific Name	Zea mays		
Crop Name	Corn		
Description	AFTER PRE	AFTER PRE	AFTER PRE
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt	Treatment	Rate	Growth				
No.	Name	Rate Unit	Stage	1	2	3	4
1	PREQUEL	2 oz/a	PRE	0	99	91	85
	BREAKFREE ATZ	1.5 qt/a	PRE				
2	PREQUEL	1.66 oz/a	PRE	0	99	91	90
	BREAKFREE ATZ	2 qt/a	PRE				
3	PREQUEL	1.66 oz/a	PRE	0	99	86	92
	CINCH ATZ	2 qt/a	PRE				
4	PREQUEL	1.66 oz/a	PRE	0	99	99	99
	AATREX	1 lb ai/a	PRE				
	REALM Q	4 oz/a	MP				
	ABUNDIT	32 fl oz/a	MP				
	AMS	3.7 % v/v	MP				
5	CORVUS HERBICIDE	5.6 fl oz/a	PRE	0	99	80	80
6	CORVUS HERBICIDE	5.6 fl oz/a	PRE	0	99	95	89
	AATREX	1 lb ai/a	PRE				
7	HALEX GT	3.6 pt/a	MP	0	99	95	88
	NIS	0.25 % v/v	MP				
	AMS	2.5 % v/v	MP				
8	CHECK UNTREATED			0	0	0	0
	LSD (P=.05)			0.0	0.0	6.6	14.6
	Standard Deviation			0.0	0.0	3.8	8.3
	CV			0.0	0.0	4.72	10.69
	Replicate F			0.000	0.000	3.014	0.023
	Replicate Prob(F)			1.0000	1.0000	0.0815	0.9768
	Treatment F			0.000	0.000	227.617	44.183
	Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed			
Pest Code	CHEAL	SETFA	AMBTR	IPOSS			
Pest Scientific Name	Chenopodium al>	Setaria faberi	Ambrosia trifi>	Ipomoea sp.			
Pest Name	Common lambsqu>	Giant foxtail	Giant ragweed	Morning glory			
Crop Code	ZEAMX						
BBCH Scale	BCOR						
Crop Scientific Name	Zea mays						
Crop Name	Corn						
Description	AFTER PRE						
Rating Type	CONTROL	INJURY	CONTROL	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
Number of Subsamples	1	1	1	1	1		
Rating Timing	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK		
ARM Action Codes	P	P	P	P	P		
Number of Decimals	0	0	0	0	0		
Trt Treatment	Rate	Growth	5	6	7	8	9
No. Name	Rate Unit	Stage					
1 PREQUEL	2 oz/a	PRE	99	0	99	83	80
BREAKFREE ATZ	1.5 qt/a	PRE					
2 PREQUEL	1.66 oz/a	PRE	99	0	99	89	85
BREAKFREE ATZ	2 qt/a	PRE					
3 PREQUEL	1.66 oz/a	PRE	99	0	99	81	87
CINCH ATZ	2 qt/a	PRE					
4 PREQUEL	1.66 oz/a	PRE	99	0	99	99	99
AATREX	1 lb ai/a	PRE					
REALM Q	4 oz/a	MP					
ABUNDIT	32 fl oz/a	MP					
AMS	3.7 % v/v	MP					
5 CORVUS HERBICIDE	5.6 fl oz/a	PRE	99	0	99	73	70
6 CORVUS HERBICIDE	5.6 fl oz/a	PRE	99	0	99	95	83
AATREX	1 lb ai/a	PRE					
7 HALEX GT	3.6 pt/a	MP	99	0	99	93	91
NIS	0.25 % v/v	MP					
AMS	2.5 % v/v	MP					
8 CHECK UNTREATED			0	0	0	0	0
LSD (P=.05)			0.0	0.0	0.0	10.6	8.7
Standard Deviation			0.0	0.0	0.0	6.0	5.0
CV			0.0	0.0	0.0	7.88	6.68
Replicate F			0.000	0.000	0.000	2.916	2.780
Replicate Prob(F)			1.0000	1.0000	1.0000	0.0873	0.0962
Treatment F			0.000	0.000	0.000	84.557	118.134
Treatment Prob(F)			1.0000	1.0000	1.0000	0.0001	0.0001



# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type			W Weed		W Weed		W Weed		W Weed
Pest Code			CHEAL		SETFA		AMBTR		IPOSS
Pest Scientific Name			Chenopodium al>		Setaria faberi		Ambrosia trifi>		Ipomoea sp.
Pest Name			Common lambsqu>		Giant foxtail		Giant ragweed		Morning glory
Crop Code					ZEAMX				
BBCH Scale					BCOR				
Crop Scientific Name					Zea mays				
Crop Name					Corn				
Description									
Rating Type			CONTROL	INJURY	CONTROL	CONTROL	CONTROL		
Rating Unit			PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
Number of Subsamples			1	1	1	1	1		1
Rating Timing			4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK		8 WEEK
ARM Action Codes			P	P	P	P	P		P
Number of Decimals			0	0	0	0	0		0
Trt	Treatment	Rate	Growth						
No.	Name	Rate Unit	Stage	10	11	12	13		14
1	PREQUEL	2 oz/a	PRE	99	0	99	83		80
	BREAKFREE ATZ	1.5 qt/a	PRE						
2	PREQUEL	1.66 oz/a	PRE	99	0	99	89		85
	BREAKFREE ATZ	2 qt/a	PRE						
3	PREQUEL	1.66 oz/a	PRE	99	0	99	81		87
	CINCH ATZ	2 qt/a	PRE						
4	PREQUEL	1.66 oz/a	PRE	99	0	99	99		99
	AATREX	1 lb ai/a	PRE						
	REALM Q	4 oz/a	MP						
	ABUNDIT	32 fl oz/a	MP						
	AMS	3.7 % v/v	MP						
5	CORVUS HERBICIDE	5.6 fl oz/a	PRE	99	0	99	73		70
6	CORVUS HERBICIDE	5.6 fl oz/a	PRE	99	0	99	95		83
	AATREX	1 lb ai/a	PRE						
7	HALEX GT	3.6 pt/a	MP	99	0	99	93		91
	NIS	0.25 % v/v	MP						
	AMS	2.5 % v/v	MP						
8	CHECK UNTREATED			0	0	0	0		0
LSD (P=.05)				0.0	0.0	0.0	10.6		8.7
Standard Deviation				0.0	0.0	0.0	6.0		5.0
CV				0.0	0.0	0.0	7.88		6.68
Replicate F				0.000	0.000	0.000	2.916		2.780
Replicate Prob(F)				1.0000	1.0000	1.0000	0.0873		0.0962
Treatment F				0.000	0.000	0.000	84.557		118.134
Treatment Prob(F)				1.0000	1.0000	1.0000	0.0001		0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed
Pest Code	CHEAL
Pest Scientific Name	Chenopodium al>
Pest Name	Common lambsqu>
Crop Code	
BBCH Scale	
Crop Scientific Name	
Crop Name	
Description	
Rating Type	CONTROL
Rating Unit	PERCENT
Number of Subsamples	1
Rating Timing	8 WEEK
ARM Action Codes	P
Number of Decimals	0

Trt	Treatment	Rate	Growth	Stage	15
No.	Name	Rate Unit	Rate Unit	Stage	
1	PREQUEL	2 oz/a	PRE		99
	BREAKFREE ATZ	1.5 qt/a	PRE		
2	PREQUEL	1.66 oz/a	PRE		99
	BREAKFREE ATZ	2 qt/a	PRE		
3	PREQUEL	1.66 oz/a	PRE		99
	CINCH ATZ	2 qt/a	PRE		
4	PREQUEL	1.66 oz/a	PRE		99
	AATREX	1 lb ai/a	PRE		
	REALM Q	4 oz/a	MP		
	ABUNDIT	32 fl oz/a	MP		
	AMS	3.7 % v/v	MP		
5	CORVUS HERBICIDE	5.6 fl oz/a	PRE		99
6	CORVUS HERBICIDE	5.6 fl oz/a	PRE		99
	AATREX	1 lb ai/a	PRE		
7	HALEX GT	3.6 pt/a	MP		99
	NIS	0.25 % v/v	MP		
	AMS	2.5 % v/v	MP		
8	CHECK UNTREATED				0
	LSD (P=.05)				0.0
	Standard Deviation				0.0
	CV				0.0
	Replicate F				0.000
	Replicate Prob(F)				1.0000
	Treatment F				0.000
	Treatment Prob(F)				1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN PREEMERGENCE II

Trial ID: C12011                      Protocol ID: DUPONT-USA-12-011  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK & SARA CARTER  
Project ID:                              Investigator: Charles H Slack  
   Sponsor Contact: DAN SMITH

#### 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  
CHEAL, Chenopodium album, = US

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Unit

PERCENT = percent

#### ARM Action Codes

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

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN PREEMERGENCE II

Trial ID: C12011                      Protocol ID: DUPONT-USA-12-011  
 Location: LEXINGTON, KY        Study Director: CHARLES SLACK & SARA CARTER  
 Project ID:                            Investigator: Charles H Slack  
    Sponsor Contact: DAN SMITH

### 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:** 4-24-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** DKC 61-88  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** SMOOTH  
**Soil Moisture:** NORMAL  
**Planting Date:** 4-24-2012  
**Rate, Unit:** 32000 S/A  
**Soil Temperature, Unit:** 53 F  
**Emergence Date:** 5-2-2012

### 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

**Plot Width, Unit:** 10 FT  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 440 FT<sup>2</sup>  
**Replications:** 3  
**Site Type:** FIELD field  
**Tillage Type:** CONTIL conventional-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

### Soil Description

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

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

	<b>A</b>	<b>B</b>
<b>Application Date:</b>	4-24-2012	5-15-2012
<b>Time of Day:</b>	4 PM	2 PM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	MP
<b>Application Placement:</b>	BROSOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	62 F	70 F
<b>% Relative Humidity:</b>	40	60
<b>Wind Velocity, Unit:</b>	8 MPH	2 MPH
<b>Wind Direction:</b>	W	NNW
<b>Soil Temperature, Unit:</b>	53 F	63 F
<b>Soil Moisture:</b>	GOOD	SLIWET
<b>% Cloud Cover:</b>	50	50
<b>Next Rain Occurred On:</b>	4-25-2012	5-28-2012

### Crop Stage At Each Application

	<b>A</b>	<b>B</b>
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR
<b>Height, Unit:</b>	4	IN

### Pest Stage At Each Application

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

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

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE

Trial ID: C12012                      Protocol ID: AMV-12CO4H056  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK & SARA CARTER  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: NED FRENCH

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					
Description	AFTER V STAGE	AFTER V STAGE	AFTER V STAGE			
Rating Type	INJURY	CONTROL	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT			
Number of Subsamples	1	1	1			
Rating Timing	2 WEEK	2 WEEK	2 WEEK			
ARM Action Codes	P	P	P			
Number of Decimals	0	0	0			
Trt	Treatment	Rate	Growth	1	2	3
No.	Name	Rate Unit	Stage			
1	UNTREATED			0	0	0
2	IMPACT	0.75 oz/a	V2	0	99	98
	ROUNDUP POWERMAX	22 oz/a	V2			
	AATREX	1 qt/a	V2			
	MSO	0.5 % v/v	V2			
	AMS	3.7 % v/v	V2			
3	IMPACT	0.75 oz/a	V2	0	99	99
	ROUNDUP POWERMAX	22 oz/a	V2			
	AATREX	1 qt/a	V2			
	WARRANT	3 pt/a	V2			
	MSO	0.5 % v/v	V2			
	AMS	3.7 % v/v	V2			
4	HALEX GT	3.6 pt/a	V2	0	99	99
	AATREX	1 qt/a	V2			
	NIS	0.25 % v/v	V2			
	AMS	3.7 % v/v	V2			
5	ROUNDUP POWERMAX	22 oz/a	V2	0	99	99
	LAUDIS	3 oz/a	V2			
	AATREX	1 qt/a	V2			
	MSO	0.5 % v/v	V2			
	AMS	3.7 % v/v	V2			
6	DUAL II MAGNUM	1 pt/a	PRE	0	99	99
	IMPACT	0.75 oz/a	V4			
	ROUNDUP POWERMAX	22 oz/a	V4			
	AATREX	1 qt/a	V4			
	MSO	0.5 % v/v	V4			
	AMS	3.7 % v/v	V4			



# 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 trifida
Pest Name		Giant foxtail	Giant ragweed
Crop Code	ZEAMX		
BBCH Scale	BCOR		
Crop Scientific Name	Zea mays		
Crop Name	Corn		
Description	AFTER V STAGE	AFTER V STAGE	AFTER V STAGE
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3
7	DUAL II MAGNUM	1 pt/a	PRE	0	99	99
	IMPACT	0.75 oz/a	V4			
	ROUNDUP POWERMAX	22 oz/a	V4			
	AATREX	1 qt/a	V4			
	WARRANT	3 pt/a	V4			
	MSO	0.5 % v/v	V4			
	AMS	3.7 % v/v	V4			
8	DUAL II MAGNUM	1 pt/a	PRE	0	99	99
	HALEX GT	3.6 pt/a	V4			
	AATREX	1 qt/a	V4			
	NIS	0.25 % v/v	V4			
	AMS	3.7 % v/v	V4			
9	DUAL II MAGNUM	1 pt/a	PRE	0	99	99
	ROUNDUP POWERMAX	22 oz/a	V4			
	LAUDIS	3 oz/a	V4			
	AATREX	1 qt/a	V4			
	MSO	0.5 % v/v	V4			
	AMS	3.7 % v/v	V4			
10	STALWART XTRA LITE	2.1 qt/a	PRE	0	99	78
	LSD (P=.05)			0.0	0.0	2.1
	Standard Deviation			0.0	0.0	1.2
	CV			0.0	0.0	1.38
	Replicate F			0.000	0.000	0.486
	Replicate Prob(F)			1.0000	1.0000	0.6230
	Treatment F			0.000	0.000	2028.075
	Treatment Prob(F)			1.0000	1.0000	0.0001

# 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			ZEAMX			
BBCH Scale			BCOR			
Crop Scientific Name			Zea mays			
Crop Name			Corn			
Description	AFTER V STAGE	AFTER V STAGE				
Rating Type	CONTROL	CONTROL	INJURY	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT		
Number of Subsamples	1	1	1	1		
Rating Timing	2 WEEK	2 WEEK	4 WEEK	4 WEEK		
ARM Action Codes	P	P	P	P		
Number of Decimals	0	0	0	0		
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	4	5	6	7
1 UNTREATED			0	0	0	0
2 IMPACT	0.75 oz/a	V2	99	99	0	99
ROUNDUP POWERMAX	22 oz/a	V2				
AATREX	1 qt/a	V2				
MSO	0.5 % v/v	V2				
AMS	3.7 % v/v	V2				
3 IMPACT	0.75 oz/a	V2	99	99	0	99
ROUNDUP POWERMAX	22 oz/a	V2				
AATREX	1 qt/a	V2				
WARRANT	3 pt/a	V2				
MSO	0.5 % v/v	V2				
AMS	3.7 % v/v	V2				
4 HALEX GT	3.6 pt/a	V2	99	99	0	99
AATREX	1 qt/a	V2				
NIS	0.25 % v/v	V2				
AMS	3.7 % v/v	V2				
5 ROUNDUP POWERMAX	22 oz/a	V2	99	99	0	99
LAUDIS	3 oz/a	V2				
AATREX	1 qt/a	V2				
MSO	0.5 % v/v	V2				
AMS	3.7 % v/v	V2				
6 DUAL II MAGNUM	1 pt/a	PRE	99	99	0	99
IMPACT	0.75 oz/a	V4				
ROUNDUP POWERMAX	22 oz/a	V4				
AATREX	1 qt/a	V4				
MSO	0.5 % v/v	V4				
AMS	3.7 % v/v	V4				

# 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			ZEAMX	
BBCH Scale			BCOR	
Crop Scientific Name			Zea mays	
Crop Name			Corn	
Description	AFTER V STAGE	AFTER V STAGE		
Rating Type	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	2 WEEK	2 WEEK	4 WEEK	4 WEEK
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

  

Trt No.	Treatment Name	Rate	Growth Stage	4	5	6	7
7	DUAL II MAGNUM	1 pt/a	PRE	99	99	0	99
	IMPACT	0.75 oz/a	V4				
	ROUNDUP POWERMAX	22 oz/a	V4				
	AATREX	1 qt/a	V4				
	WARRANT	3 pt/a	V4				
	MSO	0.5 % v/v	V4				
	AMS	3.7 % v/v	V4				
8	DUAL II MAGNUM	1 pt/a	PRE	99	99	0	99
	HALEX GT	3.6 pt/a	V4				
	AATREX	1 qt/a	V4				
	NIS	0.25 % v/v	V4				
	AMS	3.7 % v/v	V4				
9	DUAL II MAGNUM	1 pt/a	PRE	99	99	0	99
	ROUNDUP POWERMAX	22 oz/a	V4				
	LAUDIS	3 oz/a	V4				
	AATREX	1 qt/a	V4				
	MSO	0.5 % v/v	V4				
	AMS	3.7 % v/v	V4				
10	STALWART XTRA LITE	2.1 qt/a	PRE	85	99	0	99
	LSD (P=.05)			2.7	0.0	0.0	0.0
	Standard Deviation			1.6	0.0	0.0	0.0
	CV			1.8	0.0	0.0	0.0
	Replicate F			1.000	0.000	0.000	0.000
	Replicate Prob(F)			0.3874	1.0000	1.0000	1.0000
	Treatment F			1162.680	0.000	0.000	0.000
	Treatment Prob(F)			0.0001	1.0000	1.0000	1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed			
Pest Code	AMBTR	IPOSS	CHEAL			
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	Chenopodium al>			
Pest Name	Giant ragweed	Morning glory	Common lambsqu>			
Crop Code				ZEAMX		
BBCH Scale				BCOR		
Crop Scientific Name				Zea mays		
Crop Name				Corn		
Description						
Rating Type	CONTROL	CONTROL	CONTROL	INJURY		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT		
Number of Subsamples	1	1	1	1		
Rating Timing	4 WEEK	4 WEEK	4 WEEK	8 WEEK		
ARM Action Codes	P	P	P	P		
Number of Decimals	0	0	0	0		
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	8	9	10	11
1 UNTREATED			0	0	0	0
2 IMPACT	0.75 oz/a	V2	92	96	99	0
ROUNDUP POWERMAX	22 oz/a	V2				
AATREX	1 qt/a	V2				
MSO	0.5 % v/v	V2				
AMS	3.7 % v/v	V2				
3 IMPACT	0.75 oz/a	V2	96	98	99	0
ROUNDUP POWERMAX	22 oz/a	V2				
AATREX	1 qt/a	V2				
WARRANT	3 pt/a	V2				
MSO	0.5 % v/v	V2				
AMS	3.7 % v/v	V2				
4 HALEX GT	3.6 pt/a	V2	99	99	99	0
AATREX	1 qt/a	V2				
NIS	0.25 % v/v	V2				
AMS	3.7 % v/v	V2				
5 ROUNDUP POWERMAX	22 oz/a	V2	98	98	99	0
LAUDIS	3 oz/a	V2				
AATREX	1 qt/a	V2				
MSO	0.5 % v/v	V2				
AMS	3.7 % v/v	V2				
6 DUAL II MAGNUM	1 pt/a	PRE	95	95	99	0
IMPACT	0.75 oz/a	V4				
ROUNDUP POWERMAX	22 oz/a	V4				
AATREX	1 qt/a	V4				
MSO	0.5 % v/v	V4				
AMS	3.7 % v/v	V4				

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	CHEAL	
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	Chenopodium al>	
Pest Name	Giant ragweed	Morning glory	Common lambsqu>	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Description				
Rating Type	CONTROL	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	4 WEEK	4 WEEK	4 WEEK	8 WEEK
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	8	9
7 DUAL II MAGNUM	1 pt/a	PRE	99	96
IMPACT	0.75 oz/a	V4		
ROUNDUP POWERMAX	22 oz/a	V4		
AATREX	1 qt/a	V4		
WARRANT	3 pt/a	V4		
MSO	0.5 % v/v	V4		
AMS	3.7 % v/v	V4		
8 DUAL II MAGNUM	1 pt/a	PRE	99	99
HALEX GT	3.6 pt/a	V4		
AATREX	1 qt/a	V4		
NIS	0.25 % v/v	V4		
AMS	3.7 % v/v	V4		
9 DUAL II MAGNUM	1 pt/a	PRE	98	98
ROUNDUP POWERMAX	22 oz/a	V4		
LAUDIS	3 oz/a	V4		
AATREX	1 qt/a	V4		
MSO	0.5 % v/v	V4		
AMS	3.7 % v/v	V4		
10 STALWART XTRA LITE	2.1 qt/a	PRE	67	77
LSD (P=.05)			4.3	5.0
Standard Deviation			2.5	2.9
CV			2.97	3.4
Replicate F			0.208	1.070
Replicate Prob(F)			0.8145	0.3638
Treatment F			464.982	336.535
Treatment Prob(F)			0.0001	0.0001
			0.000	0.000
			1.000	1.000
			0.000	0.000
			1.000	1.000

# 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	CHEAL
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Ipomoea sp.	Chenopodium al>
Pest Name	Giant foxtail	Giant ragweed	Morning glory	Common lambsqu>
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Description				
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt	Treatment	Rate	Growth	12	13	14	15
No.	Name	Rate Unit	Stage				
1	UNTREATED			0	0	0	0
2	IMPACT	0.75 oz/a	V2	99	92	96	99
	ROUNDUP POWERMAX	22 oz/a	V2				
	AATREX	1 qt/a	V2				
	MSO	0.5 % v/v	V2				
	AMS	3.7 % v/v	V2				
3	IMPACT	0.75 oz/a	V2	99	96	98	99
	ROUNDUP POWERMAX	22 oz/a	V2				
	AATREX	1 qt/a	V2				
	WARRANT	3 pt/a	V2				
	MSO	0.5 % v/v	V2				
	AMS	3.7 % v/v	V2				
4	HALEX GT	3.6 pt/a	V2	99	99	99	99
	AATREX	1 qt/a	V2				
	NIS	0.25 % v/v	V2				
	AMS	3.7 % v/v	V2				
5	ROUNDUP POWERMAX	22 oz/a	V2	99	98	98	99
	LAUDIS	3 oz/a	V2				
	AATREX	1 qt/a	V2				
	MSO	0.5 % v/v	V2				
	AMS	3.7 % v/v	V2				
6	DUAL II MAGNUM	1 pt/a	PRE	99	95	95	99
	IMPACT	0.75 oz/a	V4				
	ROUNDUP POWERMAX	22 oz/a	V4				
	AATREX	1 qt/a	V4				
	MSO	0.5 % v/v	V4				
	AMS	3.7 % v/v	V4				

# 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	CHEAL
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Ipomoea sp.	Chenopodium al>
Pest Name	Giant foxtail	Giant ragweed	Morning glory	Common lambsqu>
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Description				
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	12	13
7 DUAL II MAGNUM	1 pt/a	PRE	99	99
IMPACT	0.75 oz/a	V4		96
ROUNDUP POWERMAX	22 oz/a	V4		
AATREX	1 qt/a	V4		
WARRANT	3 pt/a	V4		
MSO	0.5 % v/v	V4		
AMS	3.7 % v/v	V4		
8 DUAL II MAGNUM	1 pt/a	PRE	99	99
HALEX GT	3.6 pt/a	V4		99
AATREX	1 qt/a	V4		
NIS	0.25 % v/v	V4		
AMS	3.7 % v/v	V4		
9 DUAL II MAGNUM	1 pt/a	PRE	99	98
ROUNDUP POWERMAX	22 oz/a	V4		98
LAUDIS	3 oz/a	V4		
AATREX	1 qt/a	V4		
MSO	0.5 % v/v	V4		
AMS	3.7 % v/v	V4		
10 STALWART XTRA LITE	2.1 qt/a	PRE	99	67
LSD (P=.05)			0.0	4.3
Standard Deviation			0.0	2.5
CV			0.0	2.97
				3.4
Replicate F			0.000	0.208
Replicate Prob(F)			1.0000	0.8145
Treatment F			0.000	464.982
Treatment Prob(F)			1.0000	0.0001
				1.070
				0.3638
				336.535
				0.0001
				0.000
				1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE

Trial ID: C12012                      Protocol ID: AMV-12CO4H056  
Location: LEXINGTON, KY      Study Director: CHARLES SLACK & SARA CARTER  
Project ID:                              Investigator: Charles H Slack  
   Sponsor Contact: NED FRENCH

#### 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  
CHEAL, *Chenopodium album*, = US

#### Crop Code

ZEAMX, BCOR, *Zea mays*, = US

#### Rating Unit

PERCENT = percent

#### ARM Action Codes

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



# Plant and Soil Science, U of KY Weed Science Research

## CORN POSTEMERGENCE

Trial ID: C12012                      Protocol ID: AMV-12CO4H056  
 Location: LEXINGTON, KY        Study Director: CHARLES SLACK & SARA CARTER  
 Project ID:                            Investigator: Charles H Slack  
    Sponsor Contact: NED FRENCH

### General Trial Information

**Study Director:** CHARLES SLACK & SARA CARTER  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
  
**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-24-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK & SARA CARTER  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Address:** 105 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312        **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** DKC 61-88  
**BBCH Scale:** BCOR **Planting Date:** 4-24-2012  
**Planting Method:** DRILLE drilled **Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** SMOOTH smooth **Soil Temperature, Unit:** 53 F  
**Soil Moisture:** NORMAL normal, adequate **Emergence Date:** 5-2-2012

### 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

**Plot Width, Unit:** 10 FT **Site Type:** FIELD field  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 440 FT<sup>2</sup> **Tillage Type:** CONTIL conventional-till  
**Replications:** 3 **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:** WEWEDR wet-wet-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

	A	B	C
<b>Application Date:</b>	4-24-2012	5-11-2012	5-18-2012
<b>Time of Day:</b>	4 PM	3 PM	10 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	V2	V4
<b>Application Placement:</b>	BROSOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	62 F	68 F	67 F
<b>% Relative Humidity:</b>	40	50	40
<b>Wind Velocity, Unit:</b>	8 MPH	6 MPH	4 MPH
<b>Wind Direction:</b>	W	SW	SW
<b>Soil Temperature, Unit:</b>	53 F	62 F	65 F
<b>Soil Moisture:</b>	GOOD	GOOD	GOOD
<b>% Cloud Cover:</b>	50	20	10
<b>Next Rain Occurred On:</b>	4-25-2012	5-12-2012	5-28-2012

### Crop Stage At Each Application

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>		BBCH	BBCH
<b>Stage Majority, Percent:</b>		V2 90	V4 100
<b>Height, Unit:</b>		6 IN	8 IN

### Pest Stage At Each Application

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

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

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE II

Trial ID: C12014                      Protocol ID: SYN-HSC002A4  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK & SARA CARTER  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: SCOTT CULLY

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	ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt	Treatment	Rate	Growth	1	2	3	4
No.	Name	Rate Unit	Stage				
1	LEXAR EZ	3 qt/a	PRE	0	99	99	99
	PRINCEP	1 qt/a	PRE				
2	LEXAR EZ	1.5 qt/a	PRE	0	99	99	99
	LEXAR EZ	1.5 qt/a	V5				
3	LEXAR EZ	1.5 qt/a	PRE	0	99	99	99
	HALEX GT	3.6 pt/a	V5				
	NIS	0.25 % v/v	V5				
	AMS	2.5 % v/v	V5				
	AATREX	1 qt/a	V5				
4	HALEX GT	3.6 pt/a	V5	0	99	99	96
	AATREX	1 qt/a	V5				
	NIS	0.25 % v/v	V5				
	AMS	2.5 % v/v	V5				
5	LEXAR EZ	1.5 qt/a	PRE	0	99	99	99
	HALEX GT	3.6 pt/a	V5				
	PEAK	0.25 oz/a	V5				
	NIS	0.25 % v/v	V5				
	AMS	2.5 % v/v	V5				
6	KEYSTONE	2.6 qt/a	PRE	0	99	94	91
	HORNET	3 oz/a	PRE				
7	SURESTART	2 pt/a	PRE	0	99	99	93
	DURANGO DMA	1.5 pt/a	LP				
	AMS	2.5 % v/v	LP				
8	SURESTART	2.5 pt/a	PRE	0	99	99	88
	DURANGO DMA	1.5 pt/a	LP				
	AMS	2.5 % v/v	LP				
9	SURESTART	2.5 pt/a	PRE	0	99	99	99
	AATREX	1 lb ai/a	PRE				
	DURANGO DMA	1.5 pt/a	LP				
	AMS	2.5 % v/v	LP				
10	SURESTART	2 pt/a	EP	0	99	99	99
	DURANGO DMA	1.5 pt/a	EP				
	AMS	2.5 % v/v	EP				

# 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	ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4
11	ANTHEM	8 oz/a		PRE	0	99	99	89
	ROUNDUP POWERMAX	22 oz/a		V5				
	AMS	3.7 % v/v		V5				
12	BALANCE FLEXX HERBICIDE	3 oz/a		PRE	0	99	99	99
	AATREX	1 qt/a		PRE				
	ROUNDUP POWERMAX	22 oz/a		V5				
	LAUDIS	3 oz/a		V5				
	CLARITY	8 oz/a		V5				
	AMS	3.7 % v/v		V5				
13	CORVUS HERBICIDE	3 oz/a		PRE	0	99	99	99
	AATREX	1 qt/a		PRE				
	ROUNDUP POWERMAX	22 oz/a		V5				
	LAUDIS	3 oz/a		V5				
	CLARITY	8 oz/a		V5				
	AMS	3.7 % v/v		V5				
14	INSTIGATE	6 oz/a		PRE	0	99	99	99
	AATREX	1 lb ai/a		PRE				
	REALM Q	4 oz/a		V5				
	AATREX	1 lb ai/a		V5				
	ABUNDIT	32 fl oz/a		V5				
	AMS	3.7 % v/v		V5				
	LSD (P=.05)				0.0	0.0	3.6	4.9
	Standard Deviation				0.0	0.0	2.2	2.9
	CV				0.0	0.0	2.19	3.03
	Replicate F				0.000	0.000	1.000	0.171
	Replicate Prob(F)				1.0000	1.0000	0.3816	0.8439
	Treatment F				0.000	0.000	1.000	6.351
	Treatment Prob(F)				1.0000	1.0000	0.4786	0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	SETFA	AMBTR
Pest Scientific Name	Chenopodium al>	Setaria faberi	Ambrosia trifi>
Pest Name	Common lambsqu>	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	4 WEEK	4 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	5	6	7	8
1 LEXAR EZ	3 qt/a	PRE	99	0	99	98
PRINCEP	1 qt/a	PRE				
2 LEXAR EZ	1.5 qt/a	PRE	99	0	99	99
LEXAR EZ	1.5 qt/a	V5				
3 LEXAR EZ	1.5 qt/a	PRE	99	0	99	99
HALEX GT	3.6 pt/a	V5				
NIS	0.25 % v/v	V5				
AMS	2.5 % v/v	V5				
AATREX	1 qt/a	V5				
4 HALEX GT	3.6 pt/a	V5	99	0	99	98
AATREX	1 qt/a	V5				
NIS	0.25 % v/v	V5				
AMS	2.5 % v/v	V5				
5 LEXAR EZ	1.5 qt/a	PRE	99	0	99	99
HALEX GT	3.6 pt/a	V5				
PEAK	0.25 oz/a	V5				
NIS	0.25 % v/v	V5				
AMS	2.5 % v/v	V5				
6 KEYSTONE	2.6 qt/a	PRE	99	0	99	94
HORNET	3 oz/a	PRE				
7 SURESTART	2 pt/a	PRE	99	0	99	96
DURANGO DMA	1.5 pt/a	LP				
AMS	2.5 % v/v	LP				
8 SURESTART	2.5 pt/a	PRE	99	0	99	99
DURANGO DMA	1.5 pt/a	LP				
AMS	2.5 % v/v	LP				
9 SURESTART	2.5 pt/a	PRE	99	0	99	99
AATREX	1 lb ai/a	PRE				
DURANGO DMA	1.5 pt/a	LP				
AMS	2.5 % v/v	LP				
10 SURESTART	2 pt/a	EP	99	0	99	96
DURANGO DMA	1.5 pt/a	EP				
AMS	2.5 % v/v	EP				

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	SETFA	AMBTR
Pest Scientific Name	Chenopodium al>	Setaria faberi	Ambrosia trifi>
Pest Name	Common lambsqu>	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	4 WEEK	4 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	5	6	7	8
11	ANTHEM	8 oz/a		PRE	99	0	99	99
	ROUNDUP POWERMAX	22 oz/a		V5				
	AMS	3.7 % v/v		V5				
12	BALANCE FLEXX HERBICIDE	3 oz/a		PRE	99	0	99	99
	AATREX	1 qt/a		PRE				
	ROUNDUP POWERMAX	22 oz/a		V5				
	LAUDIS	3 oz/a		V5				
	CLARITY	8 oz/a		V5				
	AMS	3.7 % v/v		V5				
13	CORVUS HERBICIDE	3 oz/a		PRE	99	0	99	99
	AATREX	1 qt/a		PRE				
	ROUNDUP POWERMAX	22 oz/a		V5				
	LAUDIS	3 oz/a		V5				
	CLARITY	8 oz/a		V5				
	AMS	3.7 % v/v		V5				
14	INSTIGATE	6 oz/a		PRE	99	0	99	99
	AATREX	1 lb ai/a		PRE				
	REALM Q	4 oz/a		V5				
	AATREX	1 lb ai/a		V5				
	ABUNDIT	32 fl oz/a		V5				
	AMS	3.7 % v/v		V5				
	LSD (P=.05)				0.0	0.0	0.0	4.9
	Standard Deviation				0.0	0.0	0.0	2.9
	CV				0.0	0.0	0.0	2.99
	Replicate F				0.000	0.000	0.000	2.112
	Replicate Prob(F)				1.0000	1.0000	1.0000	0.1413
	Treatment F				0.000	0.000	0.000	0.822
	Treatment Prob(F)				1.0000	1.0000	1.0000	0.6348



# 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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	4 WEEK	4 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	9	10	11	12
		Rate Unit					
1	LEXAR EZ	3 qt/a	PRE	95	99	0	99
	PRINCEP	1 qt/a	PRE				
2	LEXAR EZ	1.5 qt/a	PRE	99	99	0	99
	LEXAR EZ	1.5 qt/a	V5				
3	LEXAR EZ	1.5 qt/a	PRE	99	99	0	99
	HALEX GT	3.6 pt/a	V5				
	NIS	0.25 % v/v	V5				
	AMS	2.5 % v/v	V5				
	AATREX	1 qt/a	V5				
4	HALEX GT	3.6 pt/a	V5	96	99	0	99
	AATREX	1 qt/a	V5				
	NIS	0.25 % v/v	V5				
	AMS	2.5 % v/v	V5				
5	LEXAR EZ	1.5 qt/a	PRE	99	99	0	99
	HALEX GT	3.6 pt/a	V5				
	PEAK	0.25 oz/a	V5				
	NIS	0.25 % v/v	V5				
	AMS	2.5 % v/v	V5				
6	KEYSTONE	2.6 qt/a	PRE	83	99	0	99
	HORNET	3 oz/a	PRE				
7	SURESTART	2 pt/a	PRE	92	99	0	99
	DURANGO DMA	1.5 pt/a	LP				
	AMS	2.5 % v/v	LP				
8	SURESTART	2.5 pt/a	PRE	95	99	0	99
	DURANGO DMA	1.5 pt/a	LP				
	AMS	2.5 % v/v	LP				
9	SURESTART	2.5 pt/a	PRE	98	99	0	99
	AATREX	1 lb ai/a	PRE				
	DURANGO DMA	1.5 pt/a	LP				
	AMS	2.5 % v/v	LP				
10	SURESTART	2 pt/a	EP	99	99	0	99
	DURANGO DMA	1.5 pt/a	EP				
	AMS	2.5 % v/v	EP				

# 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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	4 WEEK	4 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	9	10	11	12
11	ANTHEM	8 oz/a		PRE	96		99	0
	ROUNDUP POWERMAX	22 oz/a		V5				99
	AMS	3.7 % v/v		V5				
12	BALANCE FLEXX HERBICIDE	3 oz/a		PRE	99		99	0
	AATREX	1 qt/a		PRE				
	ROUNDUP POWERMAX	22 oz/a		V5				99
	LAUDIS	3 oz/a		V5				
	CLARITY	8 oz/a		V5				
	AMS	3.7 % v/v		V5				
13	CORVUS HERBICIDE	3 oz/a		PRE	99		99	0
	AATREX	1 qt/a		PRE				
	ROUNDUP POWERMAX	22 oz/a		V5				99
	LAUDIS	3 oz/a		V5				
	CLARITY	8 oz/a		V5				
	AMS	3.7 % v/v		V5				
14	INSTIGATE	6 oz/a		PRE	99		99	0
	AATREX	1 lb ai/a		PRE				
	REALM Q	4 oz/a		V5				99
	AATREX	1 lb ai/a		V5				
	ABUNDIT	32 fl oz/a		V5				
	AMS	3.7 % v/v		V5				
	LSD (P=.05)				5.0		0.0	0.0
	Standard Deviation				3.0		0.0	0.0
	CV				3.1		0.0	0.0
	Replicate F				0.451		0.000	0.000
	Replicate Prob(F)				0.6419		1.0000	1.0000
	Treatment F				6.412		0.000	0.000
	Treatment Prob(F)				0.0001		1.0000	1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed		
Pest Code	AMBTR	IPOSS	CHEAL		
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	Chenopodium al>		
Pest Name	Giant ragweed	Morning glory	Common lambsqu>		
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Type	CONTROL	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT		
Number of Subsamples	1	1	1		
Rating Timing	8 WEEK	8 WEEK	8 WEEK		
ARM Action Codes	P	P	P		
Number of Decimals	0	0	0		
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	13		
			14		
			15		
1 LEXAR EZ	3 qt/a	PRE	98	95	99
PRINCEP	1 qt/a	PRE			
2 LEXAR EZ	1.5 qt/a	PRE	99	99	99
LEXAR EZ	1.5 qt/a	V5			
3 LEXAR EZ	1.5 qt/a	PRE	99	99	99
HALEX GT	3.6 pt/a	V5			
NIS	0.25 % v/v	V5			
AMS	2.5 % v/v	V5			
AATREX	1 qt/a	V5			
4 HALEX GT	3.6 pt/a	V5	98	96	99
AATREX	1 qt/a	V5			
NIS	0.25 % v/v	V5			
AMS	2.5 % v/v	V5			
5 LEXAR EZ	1.5 qt/a	PRE	99	99	99
HALEX GT	3.6 pt/a	V5			
PEAK	0.25 oz/a	V5			
NIS	0.25 % v/v	V5			
AMS	2.5 % v/v	V5			
6 KEYSTONE	2.6 qt/a	PRE	94	83	99
HORNET	3 oz/a	PRE			
7 SURESTART	2 pt/a	PRE	96	92	99
DURANGO DMA	1.5 pt/a	LP			
AMS	2.5 % v/v	LP			
8 SURESTART	2.5 pt/a	PRE	99	95	99
DURANGO DMA	1.5 pt/a	LP			
AMS	2.5 % v/v	LP			
9 SURESTART	2.5 pt/a	PRE	99	98	99
AATREX	1 lb ai/a	PRE			
DURANGO DMA	1.5 pt/a	LP			
AMS	2.5 % v/v	LP			
10 SURESTART	2 pt/a	EP	96	99	99
DURANGO DMA	1.5 pt/a	EP			
AMS	2.5 % v/v	EP			

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	CHEAL
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	Chenopodium al>
Pest Name	Giant ragweed	Morning glory	Common lambsqu>
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0
Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	13 14 15
11 ANTHEM	8 oz/a	PRE	99 96 99
ROUNDUP POWERMAX	22 oz/a	V5	
AMS	3.7 % v/v	V5	
12 BALANCE FLEXX HERBICIDE	3 oz/a	PRE	99 99 99
AATREX	1 qt/a	PRE	
ROUNDUP POWERMAX	22 oz/a	V5	
LAUDIS	3 oz/a	V5	
CLARITY	8 oz/a	V5	
AMS	3.7 % v/v	V5	
13 CORVUS HERBICIDE	3 oz/a	PRE	99 99 99
AATREX	1 qt/a	PRE	
ROUNDUP POWERMAX	22 oz/a	V5	
LAUDIS	3 oz/a	V5	
CLARITY	8 oz/a	V5	
AMS	3.7 % v/v	V5	
14 INSTIGATE	6 oz/a	PRE	99 99 99
AATREX	1 lb ai/a	PRE	
REALM Q	4 oz/a	V5	
AATREX	1 lb ai/a	V5	
ABUNDIT	32 fl oz/a	V5	
AMS	3.7 % v/v	V5	
LSD (P=.05)			4.9 5.0 0.0
Standard Deviation			2.9 3.0 0.0
CV			2.99 3.1 0.0
Replicate F			2.112 0.451 0.000
Replicate Prob(F)			0.1413 0.6419 1.0000
Treatment F			0.822 6.412 0.000
Treatment Prob(F)			0.6348 0.0001 1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE II

Trial ID: C12014                      Protocol ID: SYN-HSC002A4  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK & SARA CARTER  
Project ID:                              Investigator: Charles H 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

IPOSS, Ipomoea sp., = US

CHEAL, Chenopodium album, = US

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Unit

PERCENT = percent

#### ARM Action Codes

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

# Plant and Soil Science, U of KY Weed Science Research

## CORN POSTEMERGENCE II

Trial ID: C12014                      Protocol ID: SYN-HSC002A4  
 Location: LEXINGTON, KY        Study Director: CHARLES SLACK & SARA CARTER  
 Project ID:                            Investigator: Charles H Slack  
    Sponsor Contact: SCOTT CULLY

### General Trial Information

**Study Director:** CHARLES SLACK & SARA CARTER  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-24-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK & SARA CARTER  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Address:** 105 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546

**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312        **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** ZEAMX Zea mays Corn

**Variety:** DKC 61-88

**BBCH Scale:** BCOR

**Planting Method:** DRILLE

**Depth, Unit:** 1.5 IN

**Row Spacing, Unit:** 30 IN

**Seed Bed:** SMOOTH

**Soil Moisture:** NORMAL

**Planting Date:** 4-24-2012

**Rate, Unit:** 32000 S/A

**Soil Temperature, Unit:** 53 F

**Emergence Date:** 5-2-2012

### 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

**Plot Width, Unit:** 10 FT

**Site Type:** FIELD field

**Plot Length, Unit:** 44 FT

**Plot Area, Unit:** 440 FT<sup>2</sup> **Tillage Type:** CONTIL conventional-till

**Replications:** 3 **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:**

WEDRDR wet-dry-dry

**Closest Weather Station:** SPINDLETOP

**Distance, Unit:** 1.25 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

	A	B	C
<b>Application Date:</b>	4-24-2012	5-11-2012	5-21-2012
<b>Time of Day:</b>	4 PM	3 PM	1 PM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	EP	V5, LP
<b>Application Placement:</b>	BROSOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	62 F	70 F	77 F
<b>% Relative Humidity:</b>	40	30	60
<b>Wind Velocity, Unit:</b>	8 MPH	4 MPH	8 MPH
<b>Wind Direction:</b>	W	SW	WNW
<b>Soil Temperature, Unit:</b>	53 F	61 F	66 F
<b>Soil Moisture:</b>	GOOD	GOOD	FAIR
<b>% Cloud Cover:</b>	50	30	20
<b>Next Rain Occurred On:</b>	4-25-2012	5-12-2012	5-28-2012

### Crop Stage At Each Application

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Height, Unit:</b>	3	IN	8 IN

### Pest Stage At Each Application

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



# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

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

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE III

Trial ID: C12015	Protocol ID: FMC-ANTH-CORN
Location: LEXINGTON, KY	Study Director: CHARLES SLACK & SARA CARTER
Project ID:	Investigator: Charles H Slack
	Sponsor Contact: RUSTY MITCHELL

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	ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trit No.	Treatment Name	Rate	Growth Stage	1	2	3	4
1	ANTHEM	8 oz/a	PRE	0	99	96	90
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
2	ANTHEM ATZ	32 oz/a	PRE	0	99	99	98
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
3	DUAL II MAGNUM	22 oz/a	PRE	0	99	98	86
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
4	BICEP II MAGNUM	75 oz/a	PRE	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
5	LUMAX	3 qt/a	PRE	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
6	ANTHEM	8 oz/a	EP	0	99	91	95
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
7	ANTHEM ATZ	28 oz/a	EP	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
8	HALEX GT	58 oz/a	EP	0	99	99	99
	AMS	3.7 % v/v	EP				
9	LEXAR	96 oz/a	EP	0	99	99	99
	AMS	3.7 % v/v	EP				
10	ROUNDUP POWERMAX	22 oz/a	EP	0	99	93	95
	AMS	3.7 % v/v	EP				
11	ROUNDUP POWERMAX	22 oz/a	EP	0	99	85	88
	AMS	3.7 % v/v	EP				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				

# 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	ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt	Treatment	Rate	Growth					
No.	Name	Rate	Unit	Stage	1	2	3	4
	12 CHECK UNTREATED				0	0	0	0
	LSD (P=.05)				0.0	0.0	6.7	4.6
	Standard Deviation				0.0	0.0	4.0	2.7
	CV				0.0	0.0	4.49	3.09
	Replicate F				0.000	0.000	0.804	0.096
	Replicate Prob(F)				1.0000	1.0000	0.4601	0.9089
	Treatment F				0.000	0.000	151.191	321.346
	Treatment Prob(F)				1.0000	1.0000	0.0001	0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	SETFA	AMBTR
Pest Scientific Name	Chenopodium al>	Setaria faberi	Ambrosia trifi>
Pest Name	Common lambsqu>	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	4 WEEK	4 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	5	6	7	8
1	ANTHEM	8 oz/a	PRE	99	0	99	93
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
2	ANTHEM ATZ	32 oz/a	PRE	99	0	99	95
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
3	DUAL II MAGNUM	22 oz/a	PRE	99	0	99	93
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
4	BICEP II MAGNUM	75 oz/a	PRE	99	0	99	95
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
5	LUMAX	3 qt/a	PRE	99	0	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
6	ANTHEM	8 oz/a	EP	99	0	99	90
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
7	ANTHEM ATZ	28 oz/a	EP	99	0	99	95
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
8	HALEX GT	58 oz/a	EP	99	0	99	99
	AMS	3.7 % v/v	EP				
9	LEXAR	96 oz/a	EP	99	0	96	99
	AMS	3.7 % v/v	EP				
10	ROUNDUP POWERMAX	22 oz/a	EP	98	0	98	88
	AMS	3.7 % v/v	EP				
11	ROUNDUP POWERMAX	22 oz/a	EP	99	0	99	77
	AMS	3.7 % v/v	EP				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	SETFA	AMBTR
Pest Scientific Name	Chenopodium al>	Setaria faberi	Ambrosia trifi>
Pest Name	Common lambsqu>	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	4 WEEK	4 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

  

Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	5	6
12 CHECK UNTREATED			0	0
LSD (P=.05)			1.1	0.0
Standard Deviation			0.7	0.0
CV			0.74	0.0
				7
				8
Replicate F			1.000	0.000
Replicate Prob(F)			0.3840	1.0000
Treatment F			5500.563	0.000
Treatment Prob(F)			0.0001	1.0000

# 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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	4 WEEK	4 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	9	10	11	12
1	ANTHEM	8 oz/a	PRE	88	99	0	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
2	ANTHEM ATZ	32 oz/a	PRE	93	99	0	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
3	DUAL II MAGNUM	22 oz/a	PRE	88	99	0	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
4	BICEP II MAGNUM	75 oz/a	PRE	95	99	0	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
5	LUMAX	3 qt/a	PRE	98	99	0	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
6	ANTHEM	8 oz/a	EP	88	99	0	99
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
7	ANTHEM ATZ	28 oz/a	EP	98	99	0	99
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
8	HALEX GT	58 oz/a	EP	99	99	0	99
	AMS	3.7 % v/v	EP				
9	LEXAR	96 oz/a	EP	99	99	0	96
	AMS	3.7 % v/v	EP				
10	ROUNDUP POWERMAX	22 oz/a	EP	90	98	0	98
	AMS	3.7 % v/v	EP				
11	ROUNDUP POWERMAX	22 oz/a	EP	77	99	0	99
	AMS	3.7 % v/v	EP				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				

# 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			ZEAMX	
BBCH Scale			BCOR	
Crop Scientific Name			Zea mays	
Crop Name			Corn	
Rating Type	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	9	10
			11	12
12 CHECK UNTREATED			0	0
LSD (P=.05)			8.2	1.1
Standard Deviation			4.9	0.7
CV			5.77	0.74
				0.0
				0.0
Replicate F			1.159	1.000
Replicate Prob(F)			0.3323	0.3840
Treatment F			94.654	5500.563
Treatment Prob(F)			0.0001	0.0001
				0.000
				873.592
				0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	CHEAL
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	Chenopodium al>
Pest Name	Giant ragweed	Morning glory	Common lambsqu>
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	13	14	15
1	ANTHEM	8 oz/a	PRE	93	88	99
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
2	ANTHEM ATZ	32 oz/a	PRE	95	93	99
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
3	DUAL II MAGNUM	22 oz/a	PRE	93	88	99
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
4	BICEP II MAGNUM	75 oz/a	PRE	95	95	99
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
5	LUMAX	3 qt/a	PRE	99	98	99
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
6	ANTHEM	8 oz/a	EP	90	88	99
	ROUNDUP POWERMAX	22 oz/a	EP			
	AMS	3.7 % v/v	EP			
7	ANTHEM ATZ	28 oz/a	EP	95	98	99
	ROUNDUP POWERMAX	22 oz/a	EP			
	AMS	3.7 % v/v	EP			
8	HALEX GT	58 oz/a	EP	99	99	99
	AMS	3.7 % v/v	EP			
9	LEXAR	96 oz/a	EP	99	99	99
	AMS	3.7 % v/v	EP			
10	ROUNDUP POWERMAX	22 oz/a	EP	88	90	98
	AMS	3.7 % v/v	EP			
11	ROUNDUP POWERMAX	22 oz/a	EP	77	77	99
	AMS	3.7 % v/v	EP			
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			



# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		AMBTR	IPOSS	CHEAL
Pest Scientific Name		Ambrosia trifi>	Ipomoea sp.	Chenopodium al>
Pest Name		Giant ragweed	Morning glory	Common lambsqu>
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Type		CONTROL	CONTROL	CONTROL
Rating Unit		PERCENT	PERCENT	PERCENT
Number of Subsamples		1	1	1
Rating Timing		8 WEEK	8 WEEK	8 WEEK
ARM Action Codes		P	P	P
Number of Decimals		0	0	0
Trt Treatment	Rate Growth			
No. Name	Rate Unit Stage	13	14	15
12 CHECK UNTREATED		0	0	0
LSD (P=.05)		9.1	8.2	1.1
Standard Deviation		5.4	4.9	0.7
CV		6.3	5.77	0.74
Replicate F		0.875	1.159	1.000
Replicate Prob(F)		0.4310	0.3323	0.3840
Treatment F		78.851	94.654	5500.563
Treatment Prob(F)		0.0001	0.0001	0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE III

Trial ID: C12015                      Protocol ID: FMC-ANTH-CORN  
Location: LEXINGTON, KY      Study Director: CHARLES SLACK & SARA CARTER  
Project ID:                              Investigator: Charles H 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

IPOSS, Ipomoea sp., = US

CHEAL, Chenopodium album, = US

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Unit

PERCENT = percent

#### ARM Action Codes

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

# Plant and Soil Science, U of KY Weed Science Research

## CORN POSTEMERGENCE III

Trial ID: C12015                      Protocol ID: FMC-ANTH-CORN  
 Location: LEXINGTON, KY        Study Director: CHARLES SLACK & SARA CARTER  
 Project ID:                            Investigator: Charles H Slack  
    Sponsor Contact: RUSTY MITCHELL

### General Trial Information

**Study Director:** CHARLES SLACK & SARA CARTER  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-24-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK & SARA CARTER  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Address:** 105 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546

**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312        **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** DKC 61-88  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** SMOOTH smooth  
**Soil Moisture:** NORMAL normal, adequate

**Planting Date:** 4-24-2012  
**Rate, Unit:** 32000 S/A

**Soil Temperature, Unit:** 58 F  
**Emergence Date:** 5-5-2012

### 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

**Plot Width, Unit:** 10 FT  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 440 FT<sup>2</sup>  
**Replications:** 3

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

### Soil Description

**Description Name:** MAURY

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

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.25 MI

# Plant and Soil Science, U of KY Weed Science Research

## Application Description

	A	B	C
<b>Application Date:</b>	4-24-2012	5-11-2012	5-18-2012
<b>Time of Day:</b>	4 PM	3 PM	10 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	V2	V4
<b>Application Placement:</b>	BROSOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	62 F	68 F	67 F
<b>% Relative Humidity:</b>	40	50	40
<b>Wind Velocity, Unit:</b>	8 MPH	6 MPH	4 MPH
<b>Wind Direction:</b>	W	SW	SW
<b>Soil Temperature, Unit:</b>	58 F	70 F	73 F
<b>Soil Moisture:</b>	GOOD	GOOD	GOOD
<b>% Cloud Cover:</b>	50	20	10
<b>Next Rain Occurred On:</b>	4-25-2012	5-12-2012	5-28-2012

## Crop Stage At Each Application

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Height, Unit:</b>		3 IN	6 IN

## Pest Stage At Each Application

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

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

# Plant and Soil Science, U of KY Weed Science Research

## CORN POSTEMERGENCE IV

Trial ID: C12016	Protocol ID: BAYER-RBLN
Location: LEXINGTON, KY	Study Director: CHARLES SLACK & SARA CARTER
Project ID:	Investigator: Charles H Slack
	Sponsor Contact: MARK WADDINGTON

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	ZEAMX		
BBCH Scale	BCOR		
Crop Scientific Name	Zea mays		
Crop Name	Corn		
Description	BEFORE POST	BEFORE POST	BEFORE POST
Rating Date	5-9-2012	5-9-2012	5-9-2012
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	15 15	15 15	15 15
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1
Days After Emergence	7 DE-1	7 DE-1	7 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt Treatment No. Name	Rate	Growth Stage	1	2	3	4
1 UNTREATED			0	0	0	0
2 CORVUS HERBICIDE	3 oz/a	PRE	0	99	89	93
AATREX	1 qt/a	PRE				
ROUNDUP POWERMAX	22 oz/a	V3				
LAUDIS	3 oz/a	V3				
CLARITY	8 oz/a	V3				
AMS	3.7 % v/v	V3				
3 CORVUS HERBICIDE	3 oz/a	PRE	0	99	90	95
AATREX	1 qt/a	PRE				
ROUNDUP POWERMAX	22 oz/a	V3				
LAUDIS	3 oz/a	V3				
CLARITY	16 oz/a	V3				
AMS	3.7 % v/v	V3				
4 CORVUS HERBICIDE	3 oz/a	PRE	0	99	82	92
AATREX	1 qt/a	PRE				
ROUNDUP POWERMAX	22 oz/a	V3				
CAPRENO HERBICIDE	3 oz/a	V3				
CLARITY	8 oz/a	V3				
AMS	3.7 % v/v	V3				
5 CORVUS HERBICIDE	3 oz/a	PRE	0	99	87	92
AATREX	1 qt/a	PRE				
ROUNDUP POWERMAX	22 oz/a	V3				
CAPRENO HERBICIDE	3 oz/a	V3				
CLARITY	16 oz/a	V3				
AMS	3.7 % v/v	V3				

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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	ZEAMX		
BBCH Scale	BCOR		
Crop Scientific Name	Zea mays		
Crop Name	Corn		
Description	BEFORE POST	BEFORE POST	BEFORE POST
Rating Date	5-9-2012	5-9-2012	5-9-2012
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	15 15	15 15	15 15
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1
Days After Emergence	7 DE-1	7 DE-1	7 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt	Treatment	Rate	Growth				
No.	Name	Rate Unit	Stage	1	2	3	4
6	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	0	99	88	92
	AATREX	1 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	V3				
	LAUDIS	3 oz/a	V3				
	CLARITY	8 oz/a	V3				
	AMS	3.7 % v/v	V3				
7	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	0	99	89	95
	AATREX	1 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	V3				
	LAUDIS	3 oz/a	V3				
	CLARITY	16 oz/a	V3				
	AMS	3.7 % v/v	V3				
8	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	0	99	91	93
	AATREX	1 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	V3				
	CAPRENO HERBICIDE	3 oz/a	V3				
	CLARITY	8 oz/a	V3				
	AMS	3.7 % v/v	V3				
9	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	0	99	93	95
	AATREX	1 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	V3				
	CAPRENO HERBICIDE	3 oz/a	V3				
	CLARITY	16 oz/a	V3				
	AMS	3.7 % v/v	V3				
10	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	0	99	88	95
	AATREX	1 qt/a	PRE				
	IGNITE	22 oz/a	V3				
	LAUDIS	3 oz/a	V3				
	AMS	3.7 % v/v	V3				
11	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	0	99	86	90
	AATREX	1 qt/a	PRE				
	IGNITE	22 oz/a	V3				
	LAUDIS	3 oz/a	V3				
	CLARITY	8 oz/a	V3				
	AMS	3.7 % v/v	V3				
12	LUMAX	1.5 qt/a	PRE	0	99	86	91
	HALEX GT	3.6 pt/a	V3				
	NIS	0.25 % v/v	V3				



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## Weed Science Research

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	ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Description	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Rating Date	5-9-2012	5-9-2012	5-9-2012	5-9-2012
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	15 15	15 15	15 15	15 15
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1	15 DP-1
Days After Emergence	7 DE-1	7 DE-1	7 DE-1	7 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	1	2
			3	4
13 HARNESS XTRA	3 qt/a	PRE	0	99
ROUNDUP POWERMAX	22 oz/a	V3		96
IMPACT	0.75 oz/a	V3		98
AMS	3.7 % v/v	V3		
14 CHECK UNTREATED			0	0
LSD (P=.05)			0.0	0.0
Standard Deviation			0.0	0.0
CV			0.0	0.0
			6.61	3.64
Replicate F			0.000	0.000
Replicate Prob(F)			0.0000	0.0000
Treatment F			0.000	0.000
Treatment Prob(F)			1.0000	1.0000
			0.853	0.171
			0.4377	0.8435
			124.651	407.502
			0.0001	0.0001

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## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	SETFA	AMBTR
Pest Scientific Name	Chenopodium al>	Setaria faberi	Ambrosia trifi>
Pest Name	Common lambsqu>	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Description	BEFORE POST		
Rating Date	5-9-2012	6-12-2012	6-12-2012
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	15 15	49 28	49 28
Plant-Eval Interval	15 DP-1	49 DP-1	49 DP-1
Days After Emergence	7 DE-1	41 DE-1	41 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	5	6	7	8
1	UNTREATED			0	0	0	0
2	CORVUS HERBICIDE	3 oz/a	PRE	98	0	99	99
	AATREX	1 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	V3				
	LAUDIS	3 oz/a	V3				
	CLARITY	8 oz/a	V3				
	AMS	3.7 % v/v	V3				
3	CORVUS HERBICIDE	3 oz/a	PRE	99	0	99	99
	AATREX	1 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	V3				
	LAUDIS	3 oz/a	V3				
	CLARITY	16 oz/a	V3				
	AMS	3.7 % v/v	V3				
4	CORVUS HERBICIDE	3 oz/a	PRE	99	0	99	99
	AATREX	1 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	V3				
	CAPRENO HERBICIDE	3 oz/a	V3				
	CLARITY	8 oz/a	V3				
	AMS	3.7 % v/v	V3				
5	CORVUS HERBICIDE	3 oz/a	PRE	98	0	99	98
	AATREX	1 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	V3				
	CAPRENO HERBICIDE	3 oz/a	V3				
	CLARITY	16 oz/a	V3				
	AMS	3.7 % v/v	V3				

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## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	SETFA	AMBTR
Pest Scientific Name	Chenopodium al>	Setaria faberi	Ambrosia trifi>
Pest Name	Common lambsqu>	Giant foxtail	Giant ragweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Description	BEFORE POST		
Rating Date	5-9-2012	6-12-2012	6-12-2012
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	15 15	49 28	49 28
Plant-Eval Interval	15 DP-1	49 DP-1	49 DP-1
Days After Emergence	7 DE-1	41 DE-1	41 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt	Treatment	Rate	Growth	5		6		7		8	
No.	Name	Rate Unit	Stage								
6	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	98		0		99		99	
	AATREX	1 qt/a	PRE								
	ROUNDUP POWERMAX	22 oz/a	V3								
	LAUDIS	3 oz/a	V3								
	CLARITY	8 oz/a	V3								
	AMS	3.7 % v/v	V3								
7	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	99		0		99		99	
	AATREX	1 qt/a	PRE								
	ROUNDUP POWERMAX	22 oz/a	V3								
	LAUDIS	3 oz/a	V3								
	CLARITY	16 oz/a	V3								
	AMS	3.7 % v/v	V3								
8	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	98		0		99		99	
	AATREX	1 qt/a	PRE								
	ROUNDUP POWERMAX	22 oz/a	V3								
	CAPRENO HERBICIDE	3 oz/a	V3								
	CLARITY	8 oz/a	V3								
	AMS	3.7 % v/v	V3								
9	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	98		0		99		99	
	AATREX	1 qt/a	PRE								
	ROUNDUP POWERMAX	22 oz/a	V3								
	CAPRENO HERBICIDE	3 oz/a	V3								
	CLARITY	16 oz/a	V3								
	AMS	3.7 % v/v	V3								
10	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	96		0		99		95	
	AATREX	1 qt/a	PRE								
	IGNITE	22 oz/a	V3								
	LAUDIS	3 oz/a	V3								
	AMS	3.7 % v/v	V3								
11	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	98		0		99		98	
	AATREX	1 qt/a	PRE								
	IGNITE	22 oz/a	V3								
	LAUDIS	3 oz/a	V3								
	CLARITY	8 oz/a	V3								
	AMS	3.7 % v/v	V3								
12	LUMAX	1.5 qt/a	PRE	98		0		99		99	
	HALEX GT	3.6 pt/a	V3								
	NIS	0.25 % v/v	V3								

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## Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	CHEAL	SETFA	AMBTR	
Pest Scientific Name	Chenopodium al>	Setaria faberi	Ambrosia trifi>	
Pest Name	Common lambsqu>	Giant foxtail	Giant ragweed	
Crop Code		ZEAMX		
BBCH Scale		BCOR		
Crop Scientific Name		Zea mays		
Crop Name		Corn		
Description	BEFORE POST			
Rating Date	5-9-2012	6-12-2012	6-12-2012	6-12-2012
Rating Type	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	2 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	15 15	49 28	49 28	49 28
Plant-Eval Interval	15 DP-1	49 DP-1	49 DP-1	49 DP-1
Days After Emergence	7 DE-1	41 DE-1	41 DE-1	41 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

  

Trt	Treatment	Rate	Growth	5		6		7		8	
No.	Name	Rate	Unit	Stage							
13	HARNESS XTRA	3 qt/a		PRE	99	0		99		96	
	ROUNDUP POWERMAX	22 oz/a		V3`							
	IMPACT	0.75 oz/a		V3							
	AMS	3.7 % v/v		V3							
14	CHECK UNTREATED				0	0		0		0	
	LSD (P=.05)				2.7	0.0		0.0		1.8	
	Standard Deviation				1.6	0.0		0.0		1.1	
	CV				1.94	0.0		0.0		1.25	
	Replicate F				3.000	0.000		0.000		1.368	
	Replicate Prob(F)				0.0673	1.0000		1.0000		0.2722	
	Treatment F				1425.423	0.000		0.000		3431.461	
	Treatment Prob(F)				0.0001	1.0000		1.0000		0.0001	

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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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Rating Date	6-12-2012	6-12-2012	7-10-2012
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	4 WEEK	4 WEEK	8 WEEK
Days After First/Last Applic.	49 28	49 28	77 56
Plant-Eval Interval	49 DP-1	49 DP-1	77 DP-1
Days After Emergence	41 DE-1	41 DE-1	69 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt	Treatment	Rate	Growth	9	10	11	12
No.	Name	Rate Unit	Stage				
1	UNTREATED			0	0	0	0
2	CORVUS HERBICIDE	3 oz/a	PRE	98	98	0	99
	AATREX	1 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	V3				
	LAUDIS	3 oz/a	V3				
	CLARITY	8 oz/a	V3				
	AMS	3.7 % v/v	V3				
3	CORVUS HERBICIDE	3 oz/a	PRE	98	99	0	99
	AATREX	1 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	V3				
	LAUDIS	3 oz/a	V3				
	CLARITY	16 oz/a	V3				
	AMS	3.7 % v/v	V3				
4	CORVUS HERBICIDE	3 oz/a	PRE	99	99	0	99
	AATREX	1 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	V3				
	CAPRENO HERBICIDE	3 oz/a	V3				
	CLARITY	8 oz/a	V3				
	AMS	3.7 % v/v	V3				
5	CORVUS HERBICIDE	3 oz/a	PRE	98	98	0	99
	AATREX	1 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	V3				
	CAPRENO HERBICIDE	3 oz/a	V3				
	CLARITY	16 oz/a	V3				
	AMS	3.7 % v/v	V3				



# 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			ZEAMX	
BBCH Scale			BCOR	
Crop Scientific Name			Zea mays	
Crop Name			Corn	
Description				
Rating Date	6-12-2012	6-12-2012	7-10-2012	7-10-2012
Rating Type	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	49 28	49 28	77 56	77 56
Plant-Eval Interval	49 DP-1	49 DP-1	77 DP-1	77 DP-1
Days After Emergence	41 DE-1	41 DE-1	69 DE-1	69 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	9	10
13 HARNESS XTRA	3 qt/a	PRE	96	99
ROUNDUP POWERMAX	22 oz/a	V3`		0
IMPACT	0.75 oz/a	V3		99
AMS	3.7 % v/v	V3		0
14 CHECK UNTREATED			0	0
LSD (P=.05)			2.8	2.6
Standard Deviation			1.7	1.6
CV			1.97	1.87
				0.0
				0.0
Replicate F			2.656	4.333
Replicate Prob(F)			0.0892	0.0238
Treatment F			1382.855	1547.447
Treatment Prob(F)			0.0001	0.0001
				1.0000
				1.0000





# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	CHEAL
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.	Chenopodium album
Pest Name	Giant ragweed	Morning glory	Common lambsquarters
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Description			
Rating Date	7-10-2012	7-10-2012	7-10-2012
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	77 56	77 56	77 56
Plant-Eval Interval	77 DP-1	77 DP-1	77 DP-1
Days After Emergence	69 DE-1	69 DE-1	69 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	13	14	15
6	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	99	98	98
	AATREX	1 qt/a	PRE			
	ROUNDUP POWERMAX	22 oz/a	V3			
	LAUDIS	3 oz/a	V3			
	CLARITY	8 oz/a	V3			
	AMS	3.7 % v/v	V3			
7	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	99	99	99
	AATREX	1 qt/a	PRE			
	ROUNDUP POWERMAX	22 oz/a	V3			
	LAUDIS	3 oz/a	V3			
	CLARITY	16 oz/a	V3			
	AMS	3.7 % v/v	V3			
8	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	99	99	98
	AATREX	1 qt/a	PRE			
	ROUNDUP POWERMAX	22 oz/a	V3			
	CAPRENO HERBICIDE	3 oz/a	V3			
	CLARITY	8 oz/a	V3			
	AMS	3.7 % v/v	V3			
9	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	99	98	98
	AATREX	1 qt/a	PRE			
	ROUNDUP POWERMAX	22 oz/a	V3			
	CAPRENO HERBICIDE	3 oz/a	V3			
	CLARITY	16 oz/a	V3			
	AMS	3.7 % v/v	V3			
10	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	95	95	98
	AATREX	1 qt/a	PRE			
	IGNITE	22 oz/a	V3			
	LAUDIS	3 oz/a	V3			
	AMS	3.7 % v/v	V3			
11	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	98	96	98
	AATREX	1 qt/a	PRE			
	IGNITE	22 oz/a	V3			
	LAUDIS	3 oz/a	V3			
	CLARITY	8 oz/a	V3			
	AMS	3.7 % v/v	V3			
12	LUMAX	1.5 qt/a	PRE	99	98	98
	HALEX GT	3.6 pt/a	V3			
	NIS	0.25 % v/v	V3			

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	CHEAL
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.	Chenopodium album
Pest Name	Giant ragweed	Morning glory	Common lambsquarters
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Description			
Rating Date	7-10-2012	7-10-2012	7-10-2012
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	77 56	77 56	77 56
Plant-Eval Interval	77 DP-1	77 DP-1	77 DP-1
Days After Emergence	69 DE-1	69 DE-1	69 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0
Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	
13 HARNESS XTRA	3 qt/a	PRE	13
ROUNDUP POWERMAX	22 oz/a	V3	96
IMPACT	0.75 oz/a	V3	96
AMS	3.7 % v/v	V3	96
14 CHECK UNTREATED			0
LSD (P=.05)			1.8
Standard Deviation			1.1
CV			1.25
Replicate F			1.368
Replicate Prob(F)			0.2722
Treatment F			3431.461
Treatment Prob(F)			0.0001
			14
			96
			0
			2.8
			1.7
			1.97
			2.656
			0.0892
			1382.855
			0.0001
			15
			99
			0
			2.6
			1.6
			1.87
			4.333
			0.0238
			1547.447
			0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE IV

Trial ID: C12016                      Protocol ID: BAYER-RBLN  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK & SARA CARTER  
Project ID:                              Investigator: Charles H Slack  
   Sponsor Contact: MARK WADDINGTON

#### 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  
CHEAL, Chenopodium album, = US

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Unit

PERCENT = percent

#### Plant-Eval Interval

15 DP-1 = 1 ZEAMX 4-24-2012  
49 DP-1 = 1 ZEAMX 4-24-2012  
77 DP-1 = 1 ZEAMX 4-24-2012

#### ARM Action Codes

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

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE IV

Trial ID: C12016      Protocol ID: BAYER-RBLN  
 Location: LEXINGTON, KY      Study Director: CHARLES SLACK & SARA CARTER  
 Project ID:      Investigator: Charles H Slack  
                          Sponsor Contact: MARK WADDINGTON

### General Trial Information

**Study Director:** CHARLES SLACK & SARA CARTER  
**Investigator:** CHARLES SLACK      **Title:** RESEARCH SPECIALIST

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-24-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK & SARA CARTER  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Address:** 105 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546

**Investigator:** CHARLES SLACK      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747      **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** 31G71  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** SMOOTH smooth  
**Soil Moisture:** NORMAL normal, adequate

**Planting Date:** 4-24-2012  
**Rate, Unit:** 32000 S/A

**Soil Temperature, Unit:** 53 F  
**Emergence Date:** 5-2-2012

### 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

**Plot Width, Unit:** 10 FT  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 440 FT<sup>2</sup>  
**Replications:** 3

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

### Soil Description

**Description Name:** MAURY

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

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

	<b>A</b>	<b>B</b>
<b>Application Date:</b>	4-24-2012	5-15-2012
<b>Time of Day:</b>	4 PM	2:30 PM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	V3
<b>Application Placement:</b>	BROSOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	62 F	70 F
<b>% Relative Humidity:</b>	40	60
<b>Wind Velocity, Unit:</b>	8 MPH	2 MPH
<b>Wind Direction:</b>	W	NNW
<b>Soil Temperature, Unit:</b>	53 F	63 F
<b>Soil Moisture:</b>	GOOD	SLIWET
<b>% Cloud Cover:</b>	50	50
<b>Next Rain Occurred On:</b>	4-25-2012	5-28-2012

### Crop Stage At Each Application

	<b>A</b>	<b>B</b>
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>		BBCH
<b>Stage Majority, Percent:</b>		V3 95
<b>Height, Unit:</b>		6 IN

### Pest Stage At Each Application

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

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

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE VARIETIES

Trial ID: C12020  
 Location: LEXINGTON, KY  
 Project ID:  
 Protocol ID: BASF-MON CORN VAR  
 Study Director: CHARLES SLACK  
 Investigator: Charles H Slack  
 Sponsor Contact: MITCH BLAIR/MATT LIVESAY

Pest Type		W Weed	W Weed		W Weed
Pest Code		SETFA	AMACH		SETFA
Pest Scientific Name		Setaria faberi	Amaranthus hyb>		Setaria faberi
Pest Name		Giant foxtail	Smooth pigweed		Giant foxtail
Crop Code	ZEAMX			ZEAMX	
BBCH Scale	BCOR			BCOR	
Crop Scientific Name	Zea mays			Zea mays	
Crop Name	Corn			Corn	
Rating Date	5-24-2012	5-24-2012	5-24-2012	6-21-2012	6-21-2012
Rating Type	INJURY	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	14 14	14 14	14 14	42 14	42 14
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1	43 DP-1	43 DP-1
Days After Emergence	10 DE-1	10 DE-1	10 DE-1	38 DE-1	38 DE-1
ARM Action Codes					
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4	5
1	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	DKC 60-62							
2	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	AMS	3.5 % v/v	V5					
	DKC 60-62							
3	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	PRIAXOR	4 oz/a	V5					
	DKC 60-62							
4	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	DKC 61-88							
5	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	AMS	3.5 % v/v	V5					
	DKC 61-88							
6	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE	6 oz/a	V5					
	DKC 61-88							
7	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE AMP	10 oz/a	V5					
	DKC 61-88							



# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMACH	SETFA
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Setaria faberi
Pest Name		Giant foxtail	Smooth pigweed	Giant foxtail
Crop Code	ZEAMX			ZEAMX
BBCH Scale	BCOR			BCOR
Crop Scientific Name	Zea mays			Zea mays
Crop Name	Corn			Corn
Rating Date	5-24-2012	5-24-2012	5-24-2012	6-21-2012
Rating Type	INJURY	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	14 14	14 14	14 14	42 14
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1	43 DP-1
Days After Emergence	10 DE-1	10 DE-1	10 DE-1	38 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt	Treatment	Rate	Growth					
No.	Name	Rate Unit	Stage	1	2	3	4	5
8	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	PRIAXOR	4 oz/a	V5					
	DKC 61-88							
9	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE	6 oz/a	V5					
	PRIAXOR	4 oz/a	V10					
	DKC 61-88							
10	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE	6 oz/a	V5					
	HEADLINE AMP	10 oz/a	TASSLE					
	DKC 61-88							
11	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE	6 oz/a	V5					
	PRIAXOR	4 oz/a	TASSLE					
	DKC 61-88							
12	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	P1184 HR							
13	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	AMS	3.5 % v/v	V5					
	P1184 HR							
14	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	PRIAXOR	4 oz/a	V5					
	P1184 HR							
15	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	DKC 62-09							

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMACH	SETFA
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Setaria faberi
Pest Name		Giant foxtail	Smooth pigweed	Giant foxtail
Crop Code	ZEAMX			ZEAMX
BBCH Scale	BCOR			BCOR
Crop Scientific Name	Zea mays			Zea mays
Crop Name	Corn			Corn
Rating Date	5-24-2012	5-24-2012	5-24-2012	6-21-2012
Rating Type	INJURY	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	14 14	14 14	14 14	42 14
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1	43 DP-1
Days After Emergence	10 DE-1	10 DE-1	10 DE-1	38 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4	5
16	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	AMS	3.5 % v/v	V5					
	DKC 62-09							
17	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE	6 oz/a	V5					
	DKC 62-09							
18	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE AMP	10 oz/a	V5					
	DKC 62-09							
19	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	PRIAXOR	4 oz/a	V5					
	DKC 62-09							
20	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE	6 oz/a	V5					
	PRIAXOR	4 oz/a	V10					
	DKC 62-09							
21	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE	6 oz/a	V5					
	HEADLINE AMP	10 oz/a	TASSLE					
	DKC 62-09							
22	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE	6 oz/a	V5					
	PRIAXOR	4 oz/a	TASSLE					
	DKC 62-09							

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMACH	SETFA
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Setaria faberi
Pest Name		Giant foxtail	Smooth pigweed	Giant foxtail
Crop Code	ZEAMX			ZEAMX
BBCH Scale	BCOR			BCOR
Crop Scientific Name	Zea mays			Zea mays
Crop Name	Corn			Corn
Rating Date	5-24-2012	5-24-2012	5-24-2012	6-21-2012
Rating Type	INJURY	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	14 14	14 14	14 14	42 14
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1	43 DP-1
Days After Emergence	10 DE-1	10 DE-1	10 DE-1	38 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt	Treatment	Rate	Growth					
No.	Name	Rate Unit	Stage	1	2	3	4	5
23	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	DKC 62-58							
24	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	AMS	3.5 % v/v	V5					
	DKC 62-58							
25	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	PRIAXOR	4 oz/a	V5					
	DKC 62-58							
26	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	DKC 62-97							
27	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	AMS	3.5 % v/v	V5					
	DKC 62-97							
28	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE	6 oz/a	V5					
	DKC 62-97							
29	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE AMP	10 oz/a	V5					
	DKC 62-97							
30	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	PRIAXOR	4 oz/a	V5					
	DKC 62-97							

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMACH	SETFA
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Setaria faberi
Pest Name		Giant foxtail	Smooth pigweed	Giant foxtail
Crop Code	ZEAMX			ZEAMX
BBCH Scale	BCOR			BCOR
Crop Scientific Name	Zea mays			Zea mays
Crop Name	Corn			Corn
Rating Date	5-24-2012	5-24-2012	5-24-2012	6-21-2012
Rating Type	INJURY	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	14 14	14 14	14 14	42 14
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1	43 DP-1
Days After Emergence	10 DE-1	10 DE-1	10 DE-1	38 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4	5
31	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE	6 oz/a	V5					
	PRIAXOR	4 oz/a	V10					
	DKC 62-97							
32	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE	6 oz/a	V5					
	HEADLINE AMP	10 oz/a	TASSLE					
	DKC 62-97							
33	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE	6 oz/a	V5					
	PRIAXOR	4 oz/a	TASSLE					
	DKC 62-97							
34	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	DKC 63-25							
35	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	AMS	3.5 % v/v	V5					
	DKC 63-25							
36	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	PRIAXOR	4 oz/a	V5					
	DKC 63-25							
37	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	DKC 63-87							
38	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	AMS	3.5 % v/v	V5					
	DKC 63-87							

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMACH	SETFA
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Setaria faberi
Pest Name		Giant foxtail	Smooth pigweed	Giant foxtail
Crop Code	ZEAMX			ZEAMX
BBCH Scale	BCOR			BCOR
Crop Scientific Name	Zea mays			Zea mays
Crop Name	Corn			Corn
Rating Date	5-24-2012	5-24-2012	5-24-2012	6-21-2012
Rating Type	INJURY	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	14 14	14 14	14 14	42 14
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1	43 DP-1
Days After Emergence	10 DE-1	10 DE-1	10 DE-1	38 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4	5
39	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	PRIAXOR	4 oz/a	V5					
	DKC 63-87							
40	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	DKC 64-69							
41	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	AMS	3.5 % v/v	V5					
	DKC 64-69							
42	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE	6 oz/a	V5					
	DKC 64-69							
43	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE AMP	10 oz/a	V5					
	DKC 64-69							
44	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	PRIAXOR	4 oz/a	V5					
	DKC 64-69							
45	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE	6 oz/a	V5					
	PRIAXOR	4 oz/a	V10					
	DKC 64-69							
46	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE	6 oz/a	V5					
	HEADLINE AMP	10 oz/a	TASSLE					
	DKC 64-69							

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMACH	SETFA
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Setaria faberi
Pest Name		Giant foxtail	Smooth pigweed	Giant foxtail
Crop Code	ZEAMX			ZEAMX
BBCH Scale	BCOR			BCOR
Crop Scientific Name	Zea mays			Zea mays
Crop Name	Corn			Corn
Rating Date	5-24-2012	5-24-2012	5-24-2012	6-21-2012
Rating Type	INJURY	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	14 14	14 14	14 14	42 14
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1	43 DP-1
Days After Emergence	10 DE-1	10 DE-1	10 DE-1	38 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4	5
47	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	HEADLINE	6 oz/a	V5					
	PRIAXOR	4 oz/a	TASSLE					
	DKC 64-69							
48	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	DKC 64-98							
49	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	AMS	3.5 % v/v	V5					
	DKC 64-98							
50	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	PRIAXOR	4 oz/a	V5					
	DKC 64-98							
51	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	P 1319 HR							
52	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	AMS	3.5 % v/v	V5					
	P 1319 HR							
53	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	PRIAXOR	4 oz/a	V5					
	P 1319 HR							
54	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	DKC 65-19							
55	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	AMS	3.5 % v/v	V5					
	DKC 65-19							

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMACH	SETFA
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Setaria faberi
Pest Name		Giant foxtail	Smooth pigweed	Giant foxtail
Crop Code	ZEAMX			ZEAMX
BBCH Scale	BCOR			BCOR
Crop Scientific Name	Zea mays			Zea mays
Crop Name	Corn			Corn
Rating Date	5-24-2012	5-24-2012	5-24-2012	6-21-2012
Rating Type	INJURY	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	14 14	14 14	14 14	42 14
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1	43 DP-1
Days After Emergence	10 DE-1	10 DE-1	10 DE-1	38 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt	Treatment	Rate	Growth					
No.	Name	Rate Unit	Stage	1	2	3	4	5
56	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	PRIAXOR	4 oz/a	V5					
	DKC 65-19							
57	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	DKC 65-44							
58	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	AMS	3.5 % v/v	V5					
	DKC 65-44							
59	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	PRIAXOR	4 oz/a	V5					
	DKC 65-44							
60	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	DKC 66-86							
61	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	AMS	3.5 % v/v	V5					
	DKC 66-86							
62	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	PRIAXOR	4 oz/a	V5					
	DKC 66-86							
63	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	DKC 66-97							
64	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	AMS	3.5 % v/v	V5					
	DKC 66-97							

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMACH	SETFA
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Setaria faberi
Pest Name		Giant foxtail	Smooth pigweed	Giant foxtail
Crop Code	ZEAMX			ZEAMX
BBCH Scale	BCOR			BCOR
Crop Scientific Name	Zea mays			Zea mays
Crop Name	Corn			Corn
Rating Date	5-24-2012	5-24-2012	5-24-2012	6-21-2012
Rating Type	INJURY	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	14 14	14 14	14 14	42 14
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1	43 DP-1
Days After Emergence	10 DE-1	10 DE-1	10 DE-1	38 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4	5
65	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	PRIAXOR	4 oz/a	V5					
	DKC 66-97							
66	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	P 2088 HR							
67	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	AMS	3.5 % v/v	V5					
	P 2088 HR							
68	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	PRIAXOR	4 oz/a	V5					
	P 2088 HR							
69	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	DKC 67-57							
70	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	AMS	3.5 % v/v	V5					
	DKC 67-57							
71	SHARPEN	2 oz/a	PRE	0	99	99	0	99
	DEGREE XTRA	3.5 qt/a	PRE					
	ROUNDUP POWERMAX	22 fl oz/a	V5					
	PRIAXOR	4 oz/a	V5					
	DKC 67-57							
	LSD (P=.05)			0.0	0.0	0.0	0.0	0.0
	Standard Deviation			0.0	0.0	0.0	0.0	0.0
	CV			0.0	0.0	0.0	0.0	0.0
	Replicate F			0.000	0.000	0.000	0.000	0.000
	Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000
	Treatment F			0.000	0.000	0.000	0.000	0.000
	Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000



# 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		ZEAMX
BBCH Scale		BCOR
Crop Scientific Name		Zea mays
Crop Name		Corn
Rating Date	6-21-2012	10-8-2012
Rating Type	CONTROL	YIELD
Rating Unit	PERCENT	BU
Number of Subsamples	1	1
Days After First/Last Applic.	42 14	151 75
Plant-Eval Interval	43 DP-1	152 DP-1
Days After Emergence	38 DE-1	147 DE-1
ARM Action Codes		TY1
Number of Decimals	0	1

Trt No.	Treatment Name	Rate	Growth Stage	6	10
1	SHARPEN	2 oz/a	PRE	99	80.9
	DEGREE XTRA	3.5 qt/a	PRE		
	DKC 60-62				
2	SHARPEN	2 oz/a	PRE	99	81.2
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	AMS	3.5 % v/v	V5		
	DKC 60-62				
3	SHARPEN	2 oz/a	PRE	99	81.7
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	PRIAXOR	4 oz/a	V5		
	DKC 60-62				
4	SHARPEN	2 oz/a	PRE	99	97.7
	DEGREE XTRA	3.5 qt/a	PRE		
	DKC 61-88				
5	SHARPEN	2 oz/a	PRE	99	89.5
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	AMS	3.5 % v/v	V5		
	DKC 61-88				
6	SHARPEN	2 oz/a	PRE	99	88.1
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE	6 oz/a	V5		
	DKC 61-88				
7	SHARPEN	2 oz/a	PRE	99	104.7
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE AMP	10 oz/a	V5		
	DKC 61-88				

# 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	ZEAMX
BBCH Scale	BCOR
Crop Scientific Name	Zea mays
Crop Name	Corn
Rating Date	6-21-2012 10-8-2012
Rating Type	CONTROL YIELD
Rating Unit	PERCENT BU
Number of Subsamples	1 1
Days After First/Last Applic.	42 14 151 75
Plant-Eval Interval	43 DP-1 152 DP-1
Days After Emergence	38 DE-1 147 DE-1
ARM Action Codes	TY1
Number of Decimals	0 1

Trt No.	Treatment Name	Rate	Growth Stage	6	10
8	SHARPEN	2 oz/a	PRE	99	108.0
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	PRIAXOR	4 oz/a	V5		
	DKC 61-88				
9	SHARPEN	2 oz/a	PRE	99	112.8
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE	6 oz/a	V5		
	PRIAXOR	4 oz/a	V10		
	DKC 61-88				
10	SHARPEN	2 oz/a	PRE	99	103.4
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE	6 oz/a	V5		
	HEADLINE AMP	10 oz/a	TASSLE		
	DKC 61-88				
11	SHARPEN	2 oz/a	PRE	99	101.3
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE	6 oz/a	V5		
	PRIAXOR	4 oz/a	TASSLE		
	DKC 61-88				
12	SHARPEN	2 oz/a	PRE	99	94.6
	DEGREE XTRA	3.5 qt/a	PRE		
	P1184 HR				
13	SHARPEN	2 oz/a	PRE	99	96.3
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	AMS	3.5 % v/v	V5		
	P1184 HR				
14	SHARPEN	2 oz/a	PRE	99	98.4
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	PRIAXOR	4 oz/a	V5		
	P1184 HR				
15	SHARPEN	2 oz/a	PRE	99	104.6
	DEGREE XTRA	3.5 qt/a	PRE		
	DKC 62-09				

# 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	ZEAMX
BBCH Scale	BCOR
Crop Scientific Name	Zea mays
Crop Name	Corn
Rating Date	6-21-2012 10-8-2012
Rating Type	CONTROL YIELD
Rating Unit	PERCENT BU
Number of Subsamples	1 1
Days After First/Last Applic.	42 14 151 75
Plant-Eval Interval	43 DP-1 152 DP-1
Days After Emergence	38 DE-1 147 DE-1
ARM Action Codes	TY1
Number of Decimals	0 1

Trt No.	Treatment Name	Rate	Growth Stage	6	10
16	SHARPEN	2 oz/a	PRE	99	95.1
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	AMS	3.5 % v/v	V5		
	DKC 62-09				
17	SHARPEN	2 oz/a	PRE	99	96.1
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE	6 oz/a	V5		
	DKC 62-09				
18	SHARPEN	2 oz/a	PRE	99	97.7
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE AMP	10 oz/a	V5		
	DKC 62-09				
19	SHARPEN	2 oz/a	PRE	99	100.4
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	PRIAXOR	4 oz/a	V5		
	DKC 62-09				
20	SHARPEN	2 oz/a	PRE	99	89.2
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE	6 oz/a	V5		
	PRIAXOR	4 oz/a	V10		
	DKC 62-09				
21	SHARPEN	2 oz/a	PRE	99	117.4
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE	6 oz/a	V5		
	HEADLINE AMP	10 oz/a	TASSLE		
	DKC 62-09				
22	SHARPEN	2 oz/a	PRE	99	109.3
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE	6 oz/a	V5		
	PRIAXOR	4 oz/a	TASSLE		
	DKC 62-09				

# 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	ZEAMX
BBCH Scale	BCOR
Crop Scientific Name	Zea mays
Crop Name	Corn
Rating Date	6-21-2012 10-8-2012
Rating Type	CONTROL YIELD
Rating Unit	PERCENT BU
Number of Subsamples	1 1
Days After First/Last Applic.	42 14 151 75
Plant-Eval Interval	43 DP-1 152 DP-1
Days After Emergence	38 DE-1 147 DE-1
ARM Action Codes	TY1
Number of Decimals	0 1

Trt No.	Treatment Name	Rate	Growth Stage	6	10
23	SHARPEN	2 oz/a	PRE	99	90.9
	DEGREE XTRA	3.5 qt/a	PRE		
	DKC 62-58				
24	SHARPEN	2 oz/a	PRE	99	94.2
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	AMS	3.5 % v/v	V5		
	DKC 62-58				
25	SHARPEN	2 oz/a	PRE	99	92.9
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	PRIAXOR	4 oz/a	V5		
	DKC 62-58				
26	SHARPEN	2 oz/a	PRE	99	98.1
	DEGREE XTRA	3.5 qt/a	PRE		
	DKC 62-97				
27	SHARPEN	2 oz/a	PRE	99	105.7
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	AMS	3.5 % v/v	V5		
	DKC 62-97				
28	SHARPEN	2 oz/a	PRE	99	102.8
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE	6 oz/a	V5		
	DKC 62-97				
29	SHARPEN	2 oz/a	PRE	99	106.6
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE AMP	10 oz/a	V5		
	DKC 62-97				
30	SHARPEN	2 oz/a	PRE	99	107.1
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	PRIAXOR	4 oz/a	V5		
	DKC 62-97				

# 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	ZEAMX
BBCH Scale	BCOR
Crop Scientific Name	Zea mays
Crop Name	Corn
Rating Date	6-21-2012 10-8-2012
Rating Type	CONTROL YIELD
Rating Unit	PERCENT BU
Number of Subsamples	1 1
Days After First/Last Applic.	42 14 151 75
Plant-Eval Interval	43 DP-1 152 DP-1
Days After Emergence	38 DE-1 147 DE-1
ARM Action Codes	TY1
Number of Decimals	0 1

Trt No.	Treatment Name	Rate	Growth Stage	6	10
31	SHARPEN	2 oz/a	PRE	99	105.2
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE	6 oz/a	V5		
	PRIAXOR	4 oz/a	V10		
	DKC 62-97				
32	SHARPEN	2 oz/a	PRE	99	105.8
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE	6 oz/a	V5		
	HEADLINE AMP	10 oz/a	TASSLE		
	DKC 62-97				
33	SHARPEN	2 oz/a	PRE	99	110.6
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE	6 oz/a	V5		
	PRIAXOR	4 oz/a	TASSLE		
	DKC 62-97				
34	SHARPEN	2 oz/a	PRE	99	139.0
	DEGREE XTRA	3.5 qt/a	PRE		
	DKC 63-25				
35	SHARPEN	2 oz/a	PRE	99	135.0
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	AMS	3.5 % v/v	V5		
	DKC 63-25				
36	SHARPEN	2 oz/a	PRE	99	135.8
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	PRIAXOR	4 oz/a	V5		
	DKC 63-25				
37	SHARPEN	2 oz/a	PRE	99	139.9
	DEGREE XTRA	3.5 qt/a	PRE		
	DKC 63-87				
38	SHARPEN	2 oz/a	PRE	99	141.3
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	AMS	3.5 % v/v	V5		
	DKC 63-87				

# 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	ZEAMX
BBCH Scale	BCOR
Crop Scientific Name	Zea mays
Crop Name	Corn
Rating Date	6-21-2012 10-8-2012
Rating Type	CONTROL YIELD
Rating Unit	PERCENT BU
Number of Subsamples	1 1
Days After First/Last Applic.	42 14 151 75
Plant-Eval Interval	43 DP-1 152 DP-1
Days After Emergence	38 DE-1 147 DE-1
ARM Action Codes	TY1
Number of Decimals	0 1

Trt No.	Treatment Name	Rate	Growth Stage	6	10
39	SHARPEN	2 oz/a	PRE	99	150.2
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	PRIAXOR	4 oz/a	V5		
	DKC 63-87				
40	SHARPEN	2 oz/a	PRE	99	112.6
	DEGREE XTRA	3.5 qt/a	PRE		
	DKC 64-69				
41	SHARPEN	2 oz/a	PRE	99	119.7
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	AMS	3.5 % v/v	V5		
	DKC 64-69				
42	SHARPEN	2 oz/a	PRE	99	110.8
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE	6 oz/a	V5		
	DKC 64-69				
43	SHARPEN	2 oz/a	PRE	99	112.4
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE AMP	10 oz/a	V5		
	DKC 64-69				
44	SHARPEN	2 oz/a	PRE	99	112.6
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	PRIAXOR	4 oz/a	V5		
	DKC 64-69				
45	SHARPEN	2 oz/a	PRE	99	117.2
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE	6 oz/a	V5		
	PRIAXOR	4 oz/a	V10		
	DKC 64-69				
46	SHARPEN	2 oz/a	PRE	99	117.0
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE	6 oz/a	V5		
	HEADLINE AMP	10 oz/a	TASSLE		
	DKC 64-69				

# 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		ZEAMX
BBCH Scale		BCOR
Crop Scientific Name		Zea mays
Crop Name		Corn
Rating Date	6-21-2012	10-8-2012
Rating Type	CONTROL	YIELD
Rating Unit	PERCENT	BU
Number of Subsamples		1
Days After First/Last Applic.	42 14	151 75
Plant-Eval Interval	43 DP-1	152 DP-1
Days After Emergence	38 DE-1	147 DE-1
ARM Action Codes		TY1
Number of Decimals		0 1

Trt No.	Treatment Name	Rate	Growth Stage	6	10
47	SHARPEN	2 oz/a	PRE	99	117.5
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	HEADLINE	6 oz/a	V5		
	PRIAXOR	4 oz/a	TASSLE		
	DKC 64-69				
48	SHARPEN	2 oz/a	PRE	99	99.0
	DEGREE XTRA	3.5 qt/a	PRE		
	DKC 64-98				
49	SHARPEN	2 oz/a	PRE	99	105.8
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	AMS	3.5 % v/v	V5		
	DKC 64-98				
50	SHARPEN	2 oz/a	PRE	99	103.7
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	PRIAXOR	4 oz/a	V5		
	DKC 64-98				
51	SHARPEN	2 oz/a	PRE	99	85.0
	DEGREE XTRA	3.5 qt/a	PRE		
	P 1319 HR				
52	SHARPEN	2 oz/a	PRE	99	83.1
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	AMS	3.5 % v/v	V5		
	P 1319 HR				
53	SHARPEN	2 oz/a	PRE	99	91.4
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	PRIAXOR	4 oz/a	V5		
	P 1319 HR				
54	SHARPEN	2 oz/a	PRE	99	104.3
	DEGREE XTRA	3.5 qt/a	PRE		
	DKC 65-19				
55	SHARPEN	2 oz/a	PRE	99	110.2
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	AMS	3.5 % v/v	V5		
	DKC 65-19				

# 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	ZEAMX
BBCH Scale	BCOR
Crop Scientific Name	Zea mays
Crop Name	Corn
Rating Date	6-21-2012 10-8-2012
Rating Type	CONTROL YIELD
Rating Unit	PERCENT BU
Number of Subsamples	1 1
Days After First/Last Applic.	42 14 151 75
Plant-Eval Interval	43 DP-1 152 DP-1
Days After Emergence	38 DE-1 147 DE-1
ARM Action Codes	TY1
Number of Decimals	0 1

Trt No.	Treatment Name	Rate	Growth Stage	6	10
56	SHARPEN	2 oz/a	PRE	99	109.3
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	PRIAXOR	4 oz/a	V5		
	DKC 65-19				
57	SHARPEN	2 oz/a	PRE	99	100.4
	DEGREE XTRA	3.5 qt/a	PRE		
	DKC 65-44				
58	SHARPEN	2 oz/a	PRE	99	100.1
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	AMS	3.5 % v/v	V5		
	DKC 65-44				
59	SHARPEN	2 oz/a	PRE	99	102.5
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	PRIAXOR	4 oz/a	V5		
	DKC 65-44				
60	SHARPEN	2 oz/a	PRE	99	103.8
	DEGREE XTRA	3.5 qt/a	PRE		
	DKC 66-86				
61	SHARPEN	2 oz/a	PRE	99	104.2
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	AMS	3.5 % v/v	V5		
	DKC 66-86				
62	SHARPEN	2 oz/a	PRE	99	101.1
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	PRIAXOR	4 oz/a	V5		
	DKC 66-86				
63	SHARPEN	2 oz/a	PRE	99	88.8
	DEGREE XTRA	3.5 qt/a	PRE		
	DKC 66-97				
64	SHARPEN	2 oz/a	PRE	99	101.4
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	AMS	3.5 % v/v	V5		
	DKC 66-97				



# 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	ZEAMX
BBCH Scale	BCOR
Crop Scientific Name	Zea mays
Crop Name	Corn
Rating Date	6-21-2012 10-8-2012
Rating Type	CONTROL YIELD
Rating Unit	PERCENT BU
Number of Subsamples	1 1
Days After First/Last Applic.	42 14 151 75
Plant-Eval Interval	43 DP-1 152 DP-1
Days After Emergence	38 DE-1 147 DE-1
ARM Action Codes	TY1
Number of Decimals	0 1

Trt No.	Treatment Name	Rate	Growth Stage	6	10
65	SHARPEN	2 oz/a	PRE	99	94.8
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	PRIAXOR	4 oz/a	V5		
	DKC 66-97				
66	SHARPEN	2 oz/a	PRE	99	87.3
	DEGREE XTRA	3.5 qt/a	PRE		
	P 2088 HR				
67	SHARPEN	2 oz/a	PRE	99	88.3
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	AMS	3.5 % v/v	V5		
	P 2088 HR				
68	SHARPEN	2 oz/a	PRE	99	83.9
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	PRIAXOR	4 oz/a	V5		
	P 2088 HR				
69	SHARPEN	2 oz/a	PRE	99	104.0
	DEGREE XTRA	3.5 qt/a	PRE		
	DKC 67-57				
70	SHARPEN	2 oz/a	PRE	99	123.4
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	AMS	3.5 % v/v	V5		
	DKC 67-57				
71	SHARPEN	2 oz/a	PRE	99	108.0
	DEGREE XTRA	3.5 qt/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	V5		
	PRIAXOR	4 oz/a	V5		
	DKC 67-57				
	LSD (P=.05)			0.0	6.73
	Standard Deviation			0.0	4.86
	CV			0.0	4.65
	Replicate F			0.000	10.112
	Replicate Prob(F)			1.0000	0.0001
	Treatment F			0.000	36.885
	Treatment Prob(F)			1.0000	0.0001

# Plant and Soil Science, U of KY Weed Science Research

## CORN POSTEMERGENCE VARIETIES

Trial ID: C12020  
Location: LEXINGTON, KY  
Project ID:  
Protocol ID: BASF-MON CORN VAR  
Study Director: CHARLES SLACK  
Investigator: Charles H Slack  
Sponsor Contact: MITCH BLAIR/MATT LIVESAY

### Pest Type

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

### Pest Code

SETFA, Setaria faberi, = US

AMACH, Amaranthus hybridus, = US

### Crop Code

ZEAMX, BCOR, Zea mays, = US

### Rating Type

YIELD = yield

### Rating Unit

PERCENT = percent

BU = bushel

### Plant-Eval Interval

15 DP-1 = 1 ZEAMX 5-9-2012

43 DP-1 = 1 ZEAMX 5-9-2012

152 DP-1 = 1 ZEAMX 5-9-2012

### ARM Action Codes

TY1 =  $5.556122 * [8] * (100 - [9]) / 84.5$



# Plant and Soil Science, U of KY

## Weed Science Research

**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate  
**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

**Planting Date:** 5-9-2012  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 73 F  
**Emergence Date:** 5-14-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

**Crop 2:** ZEAMX Zea mays  
**Variety:** DKC 61-88  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate  
**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

Corn

**Planting Date:** 5-9-2012  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 73 F  
**Emergence Date:** 5-14-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

**Crop 3:** ZEAMX Zea mays  
**Variety:** P 1184 HR  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate  
**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

Corn

**Planting Date:** 5-9-2012  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 73 F  
**Emergence Date:** 5-14-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

**Crop 4:** ZEAMX Zea mays  
**Variety:** DKC 62-09  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate  
**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

Corn

**Planting Date:** 5-9-2012  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 73 F  
**Emergence Date:** 5-14-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

# Plant and Soil Science, U of KY

## Weed Science Research

**Crop 5:** ZEAMX Zea mays  
**Variety:** DKC 62-58  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate  
**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

Corn

**Planting Date:** 5-9-2012  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 73 F  
**Emergence Date:** 5-14-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

**Crop 6:** ZEAMX Zea mays  
**Variety:** DKC 62-97  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate  
**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

Corn

**Planting Date:** 5-9-2012  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 73 F  
**Emergence Date:** 5-14-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

**Crop 7:** ZEAMX Zea mays  
**Variety:** DKC 63-25  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate  
**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

Corn

**Planting Date:** 5-9-2012  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 73 F  
**Emergence Date:** 5-14-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

**Crop 8:** ZEAMX Zea mays  
**Variety:** DKC 63-87  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate

Corn

**Planting Date:** 5-9-2012  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 73 F  
**Emergence Date:** 5-14-2012

# Plant and Soil Science, U of KY

## Weed Science Research

**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

**Crop 9:** ZEAMX Zea mays  
**Variety:** DKC 64-69  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate  
**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

Corn  
**Planting Date:** 5-9-2012  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 73 F  
**Emergence Date:** 5-14-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

**Crop 10:** ZEAMX Zea mays  
**Variety:** DKC 64-98  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate  
**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

Corn  
**Planting Date:** 5-9-2012  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 73 F  
**Emergence Date:** 5-14-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

**Crop 11:** ZEAMX Zea mays  
**Variety:** P 1319 HR  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate  
**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

Corn  
**Planting Date:** 5-9-2012  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 73 F  
**Emergence Date:** 5-14-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

**Crop 12:** ZEAMX Zea mays  
**Variety:** DKC 65-19  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN

Corn  
**Planting Date:** 5-9-2012  
**Rate, Unit:** 30000 S/A

# Plant and Soil Science, U of KY

## Weed Science Research

**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate  
**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

**Soil Temperature, Unit:** 73 F  
**Emergence Date:** 5-14-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

**Crop 13:** ZEAMX Zea mays Corn  
**Variety:** DKC 65-44  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate  
**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

**Planting Date:** 5-9-2012  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 73 F  
**Emergence Date:** 5-14-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

**Crop 14:** ZEAMX Zea mays Corn  
**Variety:** DKC 66-86  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate  
**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

**Planting Date:** 5-9-2012  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 73 F  
**Emergence Date:** 5-14-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

**Crop 15:** ZEAMX Zea mays Corn  
**Variety:** DKC 66-97  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate  
**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

**Planting Date:** 5-9-2012  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 73 F  
**Emergence Date:** 5-14-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

**Crop 16:** ZEAMX Zea mays Corn  
**Variety:** P 2088 HR

# Plant and Soil Science, U of KY

## Weed Science Research

**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate  
**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

**Planting Date:** 5-9-2012  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 73 F  
**Emergence Date:** 5-14-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

**Crop 17:** ZEAMX Zea mays  
**Variety:** DKC 67-57  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate  
**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

Corn

**Planting Date:** 5-9-2012  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 73 F  
**Emergence Date:** 5-14-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

### 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

### Site and Design

**Plot Width, Unit:** 10 FT  
**Plot Length, Unit:** 33 FT  
**Plot Area, Unit:** 330 FT<sup>2</sup>  
**Replications:** 4

**Site Type:** FIELD field  
**Tillage Type:** NOTILL no-till  
**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

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1 MI



# Plant and Soil Science, U of KY

## Weed Science Research

	Application Description			
	A	B	C	D
<b>Application Date:</b>	5-10-2012	6-7-2012	7-17-2012	7-25-2012
<b>Time of Day:</b>	10 AM	2 PM	10 AM	10 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	V5	V10	TASSLE
<b>Application Placement:</b>	BROFOL	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	SARA CARTER	SARA CARTER
<b>Air Temperature, Unit:</b>	60 F	78 F	80 F	95 F
<b>% Relative Humidity:</b>	30	35	71	85
<b>Wind Velocity, Unit:</b>	4 MPH	6 MPH	6 MPH	4 MPH
<b>Wind Direction:</b>	N	NE	WSW	SE
<b>Soil Temperature, Unit:</b>	70 F	73 F	94 F	87 F
<b>Soil Moisture:</b>	NORMAL	DRY	FAIR	FAIR
<b>% Cloud Cover:</b>	10	10	10	20
<b>Next Rain Occurred On:</b>	5-12-2012	6-11-2012	7-18-2012	7-26-2012

	Crop Stage At Each Application			
	A	B	C	D
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>		BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>		V5	V10	TASSLE
<b>Crop 2 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>		BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>		V5	V10	TASSLE
<b>Crop 3 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>		BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>		V5	V10	TASSLE
<b>Crop 4 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>		BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>		V5	V10	TASSLE
<b>Crop 5 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>		BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>		V5	V10	TASSLE
<b>Crop 6 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>		BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>		V5	V10	TASSLE
<b>Crop 7 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>		BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>		V5	V10	TASSLE
<b>Crop 8 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>		BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>		V5	V10	TASSLE
<b>Crop 9 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR

# Plant and Soil Science, U of KY Weed Science Research

<b>Stage Scale Used:</b>	BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>	V5	V10	TASSLE
<b>Crop10 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>	BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>	V5	V10	TASSLE
<b>Crop11 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>	BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>	V5	V10	TASSLE
<b>Crop12 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>	BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>	V5	V10	TASSLE
<b>Crop13 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>	BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>	V5	V10	TASSLE
<b>Crop14 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>	BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>	V5	V10	TASSLE
<b>Crop15 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>	BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>	V5	V10	TASSLE
<b>Crop16 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>	BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>	V5	V10	TASSLE
<b>Crop17 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>	BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>	V5	V10	TASSLE

### Pest Stage At Each Application

	A		B		C		D	
<b>Pest 1 Code, Type, Scale:</b>	SETFA	W	SETFA	W	SETFA	W	SETFA	W
<b>Height, Unit:</b>	3	IN	6	IN	6	IN		
<b>Pest 2 Code, Type, Scale:</b>	AMACH	W	AMACH	W	AMACH	W	AMACH	W
<b>Height, Unit:</b>	3	IN	4	IN	5	IN		

# Plant and Soil Science, U of KY

## Weed Science Research

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

Date	By	Notes
5-9-2012	SARA CARTER	COMPLETE BURNDOWN WITH ROUNDUP, DEGREE XTRA AND SHARPEN

# Plant and Soil Science, U of KY Weed Science Research

## CORN POSTEMERGENCE V

Trial ID: C12030                      Protocol ID: SYN-ZSC050A4  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: SCOTT CULLY

Pest Type		W Weed	W Weed
Pest Code		SETFA	AMACH
Pest Scientific Name		Setaria faberi	Amaranthus hyb>
Pest Name		Giant foxtail	Smooth pigweed
Crop Code	ZEAMX		
BBCH Scale	BCOR		
Crop Scientific Name	Zea mays		
Crop Name	Corn		
Description			
Rating Date	5-17-2012	5-17-2012	5-17-2012
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
SE Description			
Days After First/Last Applic.	14 14	14 14	14 14
Trt-Eval Interval			
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1
Days After Emergence	7 DE-1	7 DE-1	7 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt Treatment No. Name	Rate Unit	Growth Stage	1	2	3
1 NK 68B AGRISURE 3000 GT			0	90	99
AATREX	1 qt/a	PRE			
TOUCHDOWN TOTAL	24 oz/a	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			
QUILT XCEL	10.5 oz/a	R1			
2 NK 68B AGRISURE 3000 GT			0	90	99
AATREX	1 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			
QUILT XCEL	10.5 oz/a	R1			
3 NK 68B AGRISURE 3000 GT			0	90	99
LEXAR EZ	1.5 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			
QUILT XCEL	10.5 oz/a	R1			
4 NK 68B AGRISURE VIPTERA 3111			0	90	99
AATREX	1 qt/a	PRE			
TOUCHDOWN TOTAL	24 oz/a	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			
QUILT XCEL	10.5 oz/a	R1			

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type		W Weed	W Weed		
Pest Code		SETFA	AMACH		
Pest Scientific Name		Setaria faberi	Amaranthus hyb>		
Pest Name		Giant foxtail	Smooth pigweed		
Crop Code	ZEAMX				
BBCH Scale	BCOR				
Crop Scientific Name	Zea mays				
Crop Name	Corn				
Description					
Rating Date	5-17-2012	5-17-2012	5-17-2012		
Rating Type	INJURY	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT		
Number of Subsamples	1	1	1		
SE Description					
Days After First/Last Applic.	14 14	14 14	14 14		
Trt-Eval Interval					
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1		
Days After Emergence	7 DE-1	7 DE-1	7 DE-1		
ARM Action Codes	P	P	P		
Number of Decimals	0	0	0		
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	1	2	3
5 NK 68B AGRISURE VIPTERA 3111			0	90	99
AATREX	1 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			
QUILT XCEL	10.5 oz/a	R1			
6 NK 68B AGRISURE VIPTERA 3111			0	99	99
LEXAR EZ	1.5 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			
QUILT XCEL	10.5 oz/a	R1			
7 NK 68B AGRISURE 3000 GT			0	90	99
AATREX	1 qt/a	PRE			
TOUCHDOWN TOTAL	24 oz/a	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			
8 NK 68B AGRISURE 3000 GT			0	90	99
AATREX	1 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			
9 NK 68B AGRISURE 3000 GT			0	99	99
LEXAR EZ	1.5 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type		W Weed	W Weed		
Pest Code		SETFA	AMACH		
Pest Scientific Name		Setaria faberi	Amaranthus hyb>		
Pest Name		Giant foxtail	Smooth pigweed		
Crop Code	ZEAMX				
BBCH Scale	BCOR				
Crop Scientific Name	Zea mays				
Crop Name	Corn				
Description					
Rating Date	5-17-2012	5-17-2012	5-17-2012		
Rating Type	INJURY	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT		
Number of Subsamples	1	1	1		
SE Description					
Days After First/Last Applic.	14 14	14 14	14 14		
Trt-Eval Interval					
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1		
Days After Emergence	7 DE-1	7 DE-1	7 DE-1		
ARM Action Codes	P	P	P		
Number of Decimals	0	0	0		
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	1	2	3
10 NK 68B AGRISURE VIPTERA 3111			0	90	99
AATREX	1 qt/a	PRE			
TOUCHDOWN TOTAL	24 oz/a	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			
11 NK 68B AGRISURE VIPTERA 3111			0	90	99
AATREX	1 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			
12 NK 68B AGRISURE VIPTERA 3111			0	99	99
LEXAR EZ	1.5 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			
13 NK 68B AGRISURE 3000 GT			0	90	99
AATREX	1 qt/a	PRE			
TOUCHDOWN TOTAL	24 oz/a	4-6"			
AMS	2.5 % v/v	4-6"			
14 NK 68B AGRISURE 3000 GT			0	90	99
AATREX	1 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
15 NK 68B AGRISURE 3000 GT			0	99	99
LEXAR EZ	1.5 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type		W Weed	W Weed		
Pest Code		SETFA	AMACH		
Pest Scientific Name		Setaria faberi	Amaranthus hyb>		
Pest Name		Giant foxtail	Smooth pigweed		
Crop Code	ZEAMX				
BBCH Scale	BCOR				
Crop Scientific Name	Zea mays				
Crop Name	Corn				
Description					
Rating Date	5-17-2012	5-17-2012	5-17-2012		
Rating Type	INJURY	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT		
Number of Subsamples	1	1	1		
SE Description					
Days After First/Last Applic.	14 14	14 14	14 14		
Trt-Eval Interval					
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1		
Days After Emergence	7 DE-1	7 DE-1	7 DE-1		
ARM Action Codes	P	P	P		
Number of Decimals	0	0	0		
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	1	2	3
16 NK 68B AGRISURE VIPTERA 3111			0	90	99
AATREX	1 qt/a	PRE			
TOUCHDOWN TOTAL	24 oz/a	4-6"			
AMS	2.5 % v/v	4-6"			
17 NK 68B AGRISURE VIPTERA 3111			0	90	99
AATREX	1 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
18 NK 68B AGRISURE VIPTERA 3111			0	99	99
LEXAR EZ	1.5 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
19 NK 68B AGRISURE 3000 GT			0	90	99
AATREX	1 qt/a	PRE			
TOUCHDOWN TOTAL	24 oz/a	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	R1			
20 NK 68B AGRISURE 3000 GT			0	90	99
AATREX	1 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	R1			
21 NK 68B AGRISURE 3000 GT			0	99	99
LEXAR EZ	1.5 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	R1			

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type		W Weed	W Weed
Pest Code		SETFA	AMACH
Pest Scientific Name		Setaria faberi	Amaranthus hyb>
Pest Name		Giant foxtail	Smooth pigweed
Crop Code	ZEAMX		
BBCH Scale	BCOR		
Crop Scientific Name	Zea mays		
Crop Name	Corn		
Description			
Rating Date	5-17-2012	5-17-2012	5-17-2012
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
SE Description			
Days After First/Last Applic.	14 14	14 14	14 14
Trt-Eval Interval			
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1
Days After Emergence	7 DE-1	7 DE-1	7 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0
Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	
22 NK 68B AGRISURE VIPTERA 3111			1 2 3
AATREX	1 qt/a	PRE	0 90 99
TOUCHDOWN TOTAL	24 oz/a	4-6"	
AMS	2.5 % v/v	4-6"	
QUILT XCEL	10.5 oz/a	R1	
23 NK 68B AGRISURE VIPTERA 3111			0 90 99
AATREX	1 qt/a	PRE	
HALEX GT	3.6 pt/a	4-6"	
AATREX	1 pt/a	4-6"	
NIS	0.25 % v/v	4-6"	
AMS	2.5 % v/v	4-6"	
QUILT XCEL	10.5 oz/a	R1	
24 NK 68B AGRISURE VIPTERA 3111			0 99 99
LEXAR EZ	1.5 qt/a	PRE	
HALEX GT	3.6 pt/a	4-6"	
AATREX	1 pt/a	4-6"	
NIS	0.25 % v/v	4-6"	
AMS	2.5 % v/v	4-6"	
QUILT XCEL	10.5 oz/a	R1	
LSD (P=.05)	.	.	.
Standard Deviation	.	.	.
CV	.	.	.



# 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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			AFTER POST
Rating Date	5-17-2012	5-17-2012	6-14-2012
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
SE Description			2 WEEK
Days After First/Last Applic.	14 14	14 14	42 13
Trt-Eval Interval			
Plant-Eval Interval	15 DP-1	15 DP-1	43 DP-1
Days After Emergence	7 DE-1	7 DE-1	35 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	4	5	6
1	NK 68B AGRISURE 3000 GT			99	90	0
	AATREX	1 qt/a	PRE			
	TOUCHDOWN TOTAL	24 oz/a	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
	QUILT XCEL	10.5 oz/a	R1			
2	NK 68B AGRISURE 3000 GT			99	90	0
	AATREX	1 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
	QUILT XCEL	10.5 oz/a	R1			
3	NK 68B AGRISURE 3000 GT			99	99	0
	LEXAR EZ	1.5 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
	QUILT XCEL	10.5 oz/a	R1			
4	NK 68B AGRISURE VIPTERA 3111			99	90	0
	AATREX	1 qt/a	PRE			
	TOUCHDOWN TOTAL	24 oz/a	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
	QUILT XCEL	10.5 oz/a	R1			

# 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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			AFTER POST
Rating Date	5-17-2012	5-17-2012	6-14-2012
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
SE Description			2 WEEK
Days After First/Last Applic.	14 14	14 14	42 13
Trt-Eval Interval			
Plant-Eval Interval	15 DP-1	15 DP-1	43 DP-1
Days After Emergence	7 DE-1	7 DE-1	35 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt	Treatment	Rate	Growth			
No.	Name	Rate Unit	Stage	4	5	6
5	NK 68B AGRISURE VIPTERA 3111			99	90	0
	AATREX	1 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
	QUILT XCEL	10.5 oz/a	R1			
6	NK 68B AGRISURE VIPTERA 3111			99	99	0
	LEXAR EZ	1.5 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
	QUILT XCEL	10.5 oz/a	R1			
7	NK 68B AGRISURE 3000 GT			99	90	0
	AATREX	1 qt/a	PRE			
	TOUCHDOWN TOTAL	24 oz/a	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
8	NK 68B AGRISURE 3000 GT			99	90	0
	AATREX	1 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
9	NK 68B AGRISURE 3000 GT			99	99	0
	LEXAR EZ	1.5 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			

# 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					ZEAMX
BBCH Scale					BCOR
Crop Scientific Name					Zea mays
Crop Name					Corn
Description					AFTER POST
Rating Date	5-17-2012	5-17-2012			6-14-2012
Rating Type	CONTROL	CONTROL			INJURY
Rating Unit	PERCENT	PERCENT			PERCENT
Number of Subsamples	1	1			1
SE Description					2 WEEK
Days After First/Last Applic.	14 14	14 14			42 13
Trt-Eval Interval					
Plant-Eval Interval	15 DP-1	15 DP-1			43 DP-1
Days After Emergence	7 DE-1	7 DE-1			35 DE-1
ARM Action Codes	P	P			P
Number of Decimals	0	0			0
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	4	5	6
10 NK 68B AGRISURE VIPTERA 3111			99	90	0
AATREX	1 qt/a	PRE			
TOUCHDOWN TOTAL	24 oz/a	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			
11 NK 68B AGRISURE VIPTERA 3111			99	90	0
AATREX	1 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			
12 NK 68B AGRISURE VIPTERA 3111			99	99	0
LEXAR EZ	1.5 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			
13 NK 68B AGRISURE 3000 GT			99	90	0
AATREX	1 qt/a	PRE			
TOUCHDOWN TOTAL	24 oz/a	4-6"			
AMS	2.5 % v/v	4-6"			
14 NK 68B AGRISURE 3000 GT			99	90	0
AATREX	1 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
15 NK 68B AGRISURE 3000 GT			99	99	0
LEXAR EZ	1.5 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			

# 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					ZEAMX
BBCH Scale					BCOR
Crop Scientific Name					Zea mays
Crop Name					Corn
Description					AFTER POST
Rating Date	5-17-2012	5-17-2012			6-14-2012
Rating Type	CONTROL	CONTROL			INJURY
Rating Unit	PERCENT	PERCENT			PERCENT
Number of Subsamples	1	1			1
SE Description					2 WEEK
Days After First/Last Applic.	14 14	14 14			42 13
Trt-Eval Interval					
Plant-Eval Interval	15 DP-1	15 DP-1			43 DP-1
Days After Emergence	7 DE-1	7 DE-1			35 DE-1
ARM Action Codes	P	P			P
Number of Decimals	0	0			0
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	4	5	6
16 NK 68B AGRISURE VIPTERA 3111			99	90	0
AATREX	1 qt/a	PRE			
TOUCHDOWN TOTAL	24 oz/a	4-6"			
AMS	2.5 % v/v	4-6"			
17 NK 68B AGRISURE VIPTERA 3111			99	90	0
AATREX	1 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
18 NK 68B AGRISURE VIPTERA 3111			99	99	0
LEXAR EZ	1.5 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
19 NK 68B AGRISURE 3000 GT			99	90	0
AATREX	1 qt/a	PRE			
TOUCHDOWN TOTAL	24 oz/a	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	R1			
20 NK 68B AGRISURE 3000 GT			99	90	0
AATREX	1 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	R1			
21 NK 68B AGRISURE 3000 GT			99	99	0
LEXAR EZ	1.5 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	R1			

# 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					ZEAMX
BBCH Scale					BCOR
Crop Scientific Name					Zea mays
Crop Name					Corn
Description					AFTER POST
Rating Date	5-17-2012	5-17-2012			6-14-2012
Rating Type	CONTROL	CONTROL			INJURY
Rating Unit	PERCENT	PERCENT			PERCENT
Number of Subsamples	1	1			1
SE Description					2 WEEK
Days After First/Last Applic.	14 14	14 14			42 13
Trt-Eval Interval					
Plant-Eval Interval	15 DP-1	15 DP-1			43 DP-1
Days After Emergence	7 DE-1	7 DE-1			35 DE-1
ARM Action Codes	P	P			P
Number of Decimals	0	0			0
Trt Treatment					
No. Name	Rate	Growth			
	Rate Unit	Stage	4	5	6
22 NK 68B AGRISURE VIPTERA 3111			99	90	0
AATREX	1 qt/a	PRE			
TOUCHDOWN TOTAL	24 oz/a	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	R1			
23 NK 68B AGRISURE VIPTERA 3111			99	90	0
AATREX	1 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	R1			
24 NK 68B AGRISURE VIPTERA 3111			99	99	0
LEXAR EZ	1.5 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	R1			
LSD (P=.05)			.	.	.
Standard Deviation			.	.	.
CV			.	.	.

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMACH	CHEAL
Pest Scientific Name	Setaria faberi	Amaranthus hyb>	Chenopodium al>
Pest Name	Giant foxtail	Smooth pigweed	Common lambsqu>
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Description	AFTER POST	AFTER POST	AFTER POST
Rating Date	6-14-2012	6-14-2012	6-14-2012
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
SE Description	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	42 13	42 13	42 13
Trt-Eval Interval			
Plant-Eval Interval	43 DP-1	43 DP-1	43 DP-1
Days After Emergence	35 DE-1	35 DE-1	35 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	7	8	9
1	NK 68B AGRISURE 3000 GT			99	99	99
	AATREX	1 qt/a	PRE			
	TOUCHDOWN TOTAL	24 oz/a	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
	QUILT XCEL	10.5 oz/a	R1			
2	NK 68B AGRISURE 3000 GT			99	99	99
	AATREX	1 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
	QUILT XCEL	10.5 oz/a	R1			
3	NK 68B AGRISURE 3000 GT			99	99	99
	LEXAR EZ	1.5 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
	QUILT XCEL	10.5 oz/a	R1			
4	NK 68B AGRISURE VIPTERA 3111			99	99	99
	AATREX	1 qt/a	PRE			
	TOUCHDOWN TOTAL	24 oz/a	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
	QUILT XCEL	10.5 oz/a	R1			

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMACH	CHEAL
Pest Scientific Name	Setaria faberi	Amaranthus hyb>	Chenopodium al>
Pest Name	Giant foxtail	Smooth pigweed	Common lambsqu>
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Description	AFTER POST	AFTER POST	AFTER POST
Rating Date	6-14-2012	6-14-2012	6-14-2012
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
SE Description	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	42 13	42 13	42 13
Trt-Eval Interval			
Plant-Eval Interval	43 DP-1	43 DP-1	43 DP-1
Days After Emergence	35 DE-1	35 DE-1	35 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt	Treatment	Rate	Growth			
No. Name		Rate Unit	Stage	7	8	9
5	NK 68B AGRISURE VIPTERA 3111			99	99	99
	AATREX	1 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
	QUILT XCEL	10.5 oz/a	R1			
6	NK 68B AGRISURE VIPTERA 3111			99	99	99
	LEXAR EZ	1.5 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
	QUILT XCEL	10.5 oz/a	R1			
7	NK 68B AGRISURE 3000 GT			99	99	99
	AATREX	1 qt/a	PRE			
	TOUCHDOWN TOTAL	24 oz/a	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
8	NK 68B AGRISURE 3000 GT			99	99	99
	AATREX	1 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
9	NK 68B AGRISURE 3000 GT			99	99	99
	LEXAR EZ	1.5 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMACH	CHEAL
Pest Scientific Name	Setaria faberi	Amaranthus hyb>	Chenopodium al>
Pest Name	Giant foxtail	Smooth pigweed	Common lambsqu>
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Description	AFTER POST	AFTER POST	AFTER POST
Rating Date	6-14-2012	6-14-2012	6-14-2012
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
SE Description	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	42 13	42 13	42 13
Trt-Eval Interval			
Plant-Eval Interval	43 DP-1	43 DP-1	43 DP-1
Days After Emergence	35 DE-1	35 DE-1	35 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt	Treatment	Rate	Growth			
No.	Name	Rate Unit	Stage	7	8	9
10	NK 68B AGRISURE VIPTERA 3111			99	99	99
	AATREX	1 qt/a	PRE			
	TOUCHDOWN TOTAL	24 oz/a	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
11	NK 68B AGRISURE VIPTERA 3111			99	99	99
	AATREX	1 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
12	NK 68B AGRISURE VIPTERA 3111			99	99	99
	LEXAR EZ	1.5 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
13	NK 68B AGRISURE 3000 GT			99	99	99
	AATREX	1 qt/a	PRE			
	TOUCHDOWN TOTAL	24 oz/a	4-6"			
	AMS	2.5 % v/v	4-6"			
14	NK 68B AGRISURE 3000 GT			99	99	99
	AATREX	1 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
15	NK 68B AGRISURE 3000 GT			99	99	99
	LEXAR EZ	1.5 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			



# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMACH	CHEAL
Pest Scientific Name	Setaria faberi	Amaranthus hyb>	Chenopodium al>
Pest Name	Giant foxtail	Smooth pigweed	Common lambsqu>
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Description	AFTER POST	AFTER POST	AFTER POST
Rating Date	6-14-2012	6-14-2012	6-14-2012
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
SE Description	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	42 13	42 13	42 13
Trt-Eval Interval			
Plant-Eval Interval	43 DP-1	43 DP-1	43 DP-1
Days After Emergence	35 DE-1	35 DE-1	35 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt	Treatment	Rate	Growth			
No.	Name	Rate Unit	Stage	7	8	9
16	NK 68B AGRISURE VIPTERA 3111			99	99	99
	AATREX	1 qt/a	PRE			
	TOUCHDOWN TOTAL	24 oz/a	4-6"			
	AMS	2.5 % v/v	4-6"			
17	NK 68B AGRISURE VIPTERA 3111			99	99	99
	AATREX	1 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
18	NK 68B AGRISURE VIPTERA 3111			99	99	99
	LEXAR EZ	1.5 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
19	NK 68B AGRISURE 3000 GT			99	99	99
	AATREX	1 qt/a	PRE			
	TOUCHDOWN TOTAL	24 oz/a	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	R1			
20	NK 68B AGRISURE 3000 GT			99	99	99
	AATREX	1 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	R1			
21	NK 68B AGRISURE 3000 GT			99	99	99
	LEXAR EZ	1.5 qt/a	PRE			
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	R1			

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMACH	CHEAL
Pest Scientific Name	Setaria faberi	Amaranthus hyb>	Chenopodium al>
Pest Name	Giant foxtail	Smooth pigweed	Common lambsqu>
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Description	AFTER POST	AFTER POST	AFTER POST
Rating Date	6-14-2012	6-14-2012	6-14-2012
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
SE Description	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	42 13	42 13	42 13
Trt-Eval Interval			
Plant-Eval Interval	43 DP-1	43 DP-1	43 DP-1
Days After Emergence	35 DE-1	35 DE-1	35 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0
Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	
22 NK 68B AGRISURE VIPTERA 3111			7 8 9
AATREX	1 qt/a	PRE	99 99 99
TOUCHDOWN TOTAL	24 oz/a	4-6"	
AMS	2.5 % v/v	4-6"	
QUILT XCEL	10.5 oz/a	R1	
23 NK 68B AGRISURE VIPTERA 3111			99 99 99
AATREX	1 qt/a	PRE	
HALEX GT	3.6 pt/a	4-6"	
AATREX	1 pt/a	4-6"	
NIS	0.25 % v/v	4-6"	
AMS	2.5 % v/v	4-6"	
QUILT XCEL	10.5 oz/a	R1	
24 NK 68B AGRISURE VIPTERA 3111			99 99 99
LEXAR EZ	1.5 qt/a	PRE	
HALEX GT	3.6 pt/a	4-6"	
AATREX	1 pt/a	4-6"	
NIS	0.25 % v/v	4-6"	
AMS	2.5 % v/v	4-6"	
QUILT XCEL	10.5 oz/a	R1	
LSD (P=.05)	.	.	.
Standard Deviation	.	.	.
CV	.	.	.

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	SETFA	AMACH
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Amaranthus hyb>
Pest Name	Morning glory	Giant foxtail	Smooth pigweed
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Description	AFTER POST	AFTER POST	AFTER POST
Rating Date	6-14-2014	6-28-2012	6-28-2012
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
SE Description	2 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	772 696	56 27	56 27
Trt-Eval Interval			
Plant-Eval Interval	773 DP-1	57 DP-1	57 DP-1
Days After Emergence	765 DE-1	49 DE-1	49 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	10	11	12	13
1	NK 68B AGRISURE 3000 GT			99	0	99	99
	AATREX	1 qt/a	PRE				
	TOUCHDOWN TOTAL	24 oz/a	4-6"				
	AMS	2.5 % v/v	4-6"				
	QUILT XCEL	10.5 oz/a	V5				
	QUILT XCEL	10.5 oz/a	R1				
2	NK 68B AGRISURE 3000 GT			99	0	99	99
	AATREX	1 qt/a	PRE				
	HALEX GT	3.6 pt/a	4-6"				
	AATREX	1 pt/a	4-6"				
	NIS	0.25 % v/v	4-6"				
	AMS	2.5 % v/v	4-6"				
	QUILT XCEL	10.5 oz/a	V5				
	QUILT XCEL	10.5 oz/a	R1				
3	NK 68B AGRISURE 3000 GT			99	0	99	99
	LEXAR EZ	1.5 qt/a	PRE				
	HALEX GT	3.6 pt/a	4-6"				
	AATREX	1 pt/a	4-6"				
	NIS	0.25 % v/v	4-6"				
	AMS	2.5 % v/v	4-6"				
	QUILT XCEL	10.5 oz/a	V5				
	QUILT XCEL	10.5 oz/a	R1				
4	NK 68B AGRISURE VIPTERA 3111			99	0	99	99
	AATREX	1 qt/a	PRE				
	TOUCHDOWN TOTAL	24 oz/a	4-6"				
	AMS	2.5 % v/v	4-6"				
	QUILT XCEL	10.5 oz/a	V5				
	QUILT XCEL	10.5 oz/a	R1				

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed			
Pest Code	IPOSS	SETFA	AMACH			
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Amaranthus hyb>			
Pest Name	Morning glory	Giant foxtail	Smooth pigweed			
Crop Code		ZEAMX				
BBCH Scale		BCOR				
Crop Scientific Name		Zea mays				
Crop Name		Corn				
Description	AFTER POST	AFTER POST	AFTER POST			
Rating Date	6-14-2014	6-28-2012	6-28-2012			
Rating Type	CONTROL	INJURY	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT			
Number of Subsamples	1	1	1			
SE Description	2 WEEK	4 WEEK	4 WEEK			
Days After First/Last Applic.	772 696	56 27	56 27			
Trt-Eval Interval						
Plant-Eval Interval	773 DP-1	57 DP-1	57 DP-1			
Days After Emergence	765 DE-1	49 DE-1	49 DE-1			
ARM Action Codes	P	P	P			
Number of Decimals	0	0	0			
Trt Treatment	Rate	Growth	10	11	12	13
No. Name	Rate Unit	Stage				
5 NK 68B AGRISURE VIPTERA 3111			99	0	99	99
AATREX	1 qt/a	PRE				
HALEX GT	3.6 pt/a	4-6"				
AATREX	1 pt/a	4-6"				
NIS	0.25 % v/v	4-6"				
AMS	2.5 % v/v	4-6"				
QUILT XCEL	10.5 oz/a	V5				
QUILT XCEL	10.5 oz/a	R1				
6 NK 68B AGRISURE VIPTERA 3111			99	0	99	99
LEXAR EZ	1.5 qt/a	PRE				
HALEX GT	3.6 pt/a	4-6"				
AATREX	1 pt/a	4-6"				
NIS	0.25 % v/v	4-6"				
AMS	2.5 % v/v	4-6"				
QUILT XCEL	10.5 oz/a	V5				
QUILT XCEL	10.5 oz/a	R1				
7 NK 68B AGRISURE 3000 GT			99	0	99	99
AATREX	1 qt/a	PRE				
TOUCHDOWN TOTAL	24 oz/a	4-6"				
AMS	2.5 % v/v	4-6"				
QUILT XCEL	10.5 oz/a	V5				
8 NK 68B AGRISURE 3000 GT			99	0	99	99
AATREX	1 qt/a	PRE				
HALEX GT	3.6 pt/a	4-6"				
AATREX	1 pt/a	4-6"				
NIS	0.25 % v/v	4-6"				
AMS	2.5 % v/v	4-6"				
QUILT XCEL	10.5 oz/a	V5				
9 NK 68B AGRISURE 3000 GT			99	0	99	99
LEXAR EZ	1.5 qt/a	PRE				
HALEX GT	3.6 pt/a	4-6"				
AATREX	1 pt/a	4-6"				
NIS	0.25 % v/v	4-6"				
AMS	2.5 % v/v	4-6"				
QUILT XCEL	10.5 oz/a	V5				

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed			
Pest Code	IPOSS	SETFA	AMACH			
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Amaranthus hyb>			
Pest Name	Morning glory	Giant foxtail	Smooth pigweed			
Crop Code		ZEAMX				
BBCH Scale		BCOR				
Crop Scientific Name		Zea mays				
Crop Name		Corn				
Description	AFTER POST	AFTER POST	AFTER POST			
Rating Date	6-14-2014	6-28-2012	6-28-2012			
Rating Type	CONTROL	INJURY	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT			
Number of Subsamples	1	1	1			
SE Description	2 WEEK	4 WEEK	4 WEEK			
Days After First/Last Applic.	772 696	56 27	56 27			
Trt-Eval Interval						
Plant-Eval Interval	773 DP-1	57 DP-1	57 DP-1			
Days After Emergence	765 DE-1	49 DE-1	49 DE-1			
ARM Action Codes	P	P	P			
Number of Decimals	0	0	0			
Trt Treatment	Rate	Growth	10	11	12	13
No. Name	Rate Unit	Stage				
10 NK 68B AGRISURE VIPTERA 3111			99	0	99	99
AATREX	1 qt/a	PRE				
TOUCHDOWN TOTAL	24 oz/a	4-6"				
AMS	2.5 % v/v	4-6"				
QUILT XCEL	10.5 oz/a	V5				
11 NK 68B AGRISURE VIPTERA 3111			99	0	99	99
AATREX	1 qt/a	PRE				
HALEX GT	3.6 pt/a	4-6"				
AATREX	1 pt/a	4-6"				
NIS	0.25 % v/v	4-6"				
AMS	2.5 % v/v	4-6"				
QUILT XCEL	10.5 oz/a	V5				
12 NK 68B AGRISURE VIPTERA 3111			99	0	99	99
LEXAR EZ	1.5 qt/a	PRE				
HALEX GT	3.6 pt/a	4-6"				
AATREX	1 pt/a	4-6"				
NIS	0.25 % v/v	4-6"				
AMS	2.5 % v/v	4-6"				
QUILT XCEL	10.5 oz/a	V5				
13 NK 68B AGRISURE 3000 GT			99	0	99	99
AATREX	1 qt/a	PRE				
TOUCHDOWN TOTAL	24 oz/a	4-6"				
AMS	2.5 % v/v	4-6"				
14 NK 68B AGRISURE 3000 GT			99	0	99	99
AATREX	1 qt/a	PRE				
HALEX GT	3.6 pt/a	4-6"				
AATREX	1 pt/a	4-6"				
NIS	0.25 % v/v	4-6"				
AMS	2.5 % v/v	4-6"				
15 NK 68B AGRISURE 3000 GT			99	0	99	99
LEXAR EZ	1.5 qt/a	PRE				
HALEX GT	3.6 pt/a	4-6"				
AATREX	1 pt/a	4-6"				
NIS	0.25 % v/v	4-6"				
AMS	2.5 % v/v	4-6"				

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed			
Pest Code	IPOSS	SETFA	AMACH			
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Amaranthus hyb>			
Pest Name	Morning glory	Giant foxtail	Smooth pigweed			
Crop Code		ZEAMX				
BBCH Scale		BCOR				
Crop Scientific Name		Zea mays				
Crop Name		Corn				
Description	AFTER POST	AFTER POST	AFTER POST			
Rating Date	6-14-2014	6-28-2012	6-28-2012			
Rating Type	CONTROL	INJURY	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT			
Number of Subsamples	1	1	1			
SE Description	2 WEEK	4 WEEK	4 WEEK			
Days After First/Last Applic.	772 696	56 27	56 27			
Trt-Eval Interval						
Plant-Eval Interval	773 DP-1	57 DP-1	57 DP-1			
Days After Emergence	765 DE-1	49 DE-1	49 DE-1			
ARM Action Codes	P	P	P			
Number of Decimals	0	0	0			
Trt Treatment	Rate	Growth	10	11	12	13
No. Name	Rate Unit	Stage				
16 NK 68B AGRISURE VIPTERA 3111			99	0	99	99
AATREX	1 qt/a	PRE				
TOUCHDOWN TOTAL	24 oz/a	4-6"				
AMS	2.5 % v/v	4-6"				
17 NK 68B AGRISURE VIPTERA 3111			99	0	99	99
AATREX	1 qt/a	PRE				
HALEX GT	3.6 pt/a	4-6"				
AATREX	1 pt/a	4-6"				
NIS	0.25 % v/v	4-6"				
AMS	2.5 % v/v	4-6"				
18 NK 68B AGRISURE VIPTERA 3111			99	0	99	99
LEXAR EZ	1.5 qt/a	PRE				
HALEX GT	3.6 pt/a	4-6"				
AATREX	1 pt/a	4-6"				
NIS	0.25 % v/v	4-6"				
AMS	2.5 % v/v	4-6"				
19 NK 68B AGRISURE 3000 GT			99	0	99	99
AATREX	1 qt/a	PRE				
TOUCHDOWN TOTAL	24 oz/a	4-6"				
AMS	2.5 % v/v	4-6"				
QUILT XCEL	10.5 oz/a	R1				
20 NK 68B AGRISURE 3000 GT			99	0	99	99
AATREX	1 qt/a	PRE				
HALEX GT	3.6 pt/a	4-6"				
AATREX	1 pt/a	4-6"				
NIS	0.25 % v/v	4-6"				
AMS	2.5 % v/v	4-6"				
QUILT XCEL	10.5 oz/a	R1				
21 NK 68B AGRISURE 3000 GT			99	0	99	99
LEXAR EZ	1.5 qt/a	PRE				
HALEX GT	3.6 pt/a	4-6"				
AATREX	1 pt/a	4-6"				
NIS	0.25 % v/v	4-6"				
AMS	2.5 % v/v	4-6"				
QUILT XCEL	10.5 oz/a	R1				

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed			
Pest Code	IPOSS	SETFA	AMACH			
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Amaranthus hyb>			
Pest Name	Morning glory	Giant foxtail	Smooth pigweed			
Crop Code		ZEAMX				
BBCH Scale		BCOR				
Crop Scientific Name		Zea mays				
Crop Name		Corn				
Description	AFTER POST	AFTER POST	AFTER POST			
Rating Date	6-14-2014	6-28-2012	6-28-2012			
Rating Type	CONTROL	INJURY	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT			
Number of Subsamples	1	1	1			
SE Description	2 WEEK	4 WEEK	4 WEEK			
Days After First/Last Applic.	772 696	56 27	56 27			
Trt-Eval Interval						
Plant-Eval Interval	773 DP-1	57 DP-1	57 DP-1			
Days After Emergence	765 DE-1	49 DE-1	49 DE-1			
ARM Action Codes	P	P	P			
Number of Decimals	0	0	0			
Trt Treatment	Rate	Growth	10	11	12	13
No. Name	Rate Unit	Stage				
22 NK 68B AGRISURE VIPTERA 3111			99	0	99	99
AATREX	1 qt/a	PRE				
TOUCHDOWN TOTAL	24 oz/a	4-6"				
AMS	2.5 % v/v	4-6"				
QUILT XCEL	10.5 oz/a	R1				
23 NK 68B AGRISURE VIPTERA 3111			99	0	99	99
AATREX	1 qt/a	PRE				
HALEX GT	3.6 pt/a	4-6"				
AATREX	1 pt/a	4-6"				
NIS	0.25 % v/v	4-6"				
AMS	2.5 % v/v	4-6"				
QUILT XCEL	10.5 oz/a	R1				
24 NK 68B AGRISURE VIPTERA 3111			99	0	99	99
LEXAR EZ	1.5 qt/a	PRE				
HALEX GT	3.6 pt/a	4-6"				
AATREX	1 pt/a	4-6"				
NIS	0.25 % v/v	4-6"				
AMS	2.5 % v/v	4-6"				
QUILT XCEL	10.5 oz/a	R1				
LSD (P=.05)			.	.	.	.
Standard Deviation			.	.	.	.
CV			.	.	.	.

# 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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description	AFTER POST	AFTER POST	
Rating Date	6-28-2012	6-28-2012	10-4-2012
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1
SE Description	4 WEEK	4 WEEK	
Days After First/Last Applic.	56 27	56 27	154 78
Trt-Eval Interval			78 DA-D
Plant-Eval Interval	57 DP-1	57 DP-1	155 DP-1
Days After Emergence	49 DE-1	49 DE-1	147 DE-1
ARM Action Codes	P	P	TY1
Number of Decimals	0	0	1

Trt No.	Treatment Name	Rate	Growth Stage	14	15	19
1	NK 68B AGRISURE 3000 GT				99	99
	AATREX	1 qt/a	PRE			0.2
	TOUCHDOWN TOTAL	24 oz/a	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
	QUILT XCEL	10.5 oz/a	R1			
2	NK 68B AGRISURE 3000 GT				99	99
	AATREX	1 qt/a	PRE			2.1
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
	QUILT XCEL	10.5 oz/a	R1			
3	NK 68B AGRISURE 3000 GT				99	99
	LEXAR EZ	1.5 qt/a	PRE			5.5
	HALEX GT	3.6 pt/a	4-6"			
	AATREX	1 pt/a	4-6"			
	NIS	0.25 % v/v	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
	QUILT XCEL	10.5 oz/a	R1			
4	NK 68B AGRISURE VIPTERA 3111				99	99
	AATREX	1 qt/a	PRE			3.3
	TOUCHDOWN TOTAL	24 oz/a	4-6"			
	AMS	2.5 % v/v	4-6"			
	QUILT XCEL	10.5 oz/a	V5			
	QUILT XCEL	10.5 oz/a	R1			



# 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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description	AFTER POST	AFTER POST	
Rating Date	6-28-2012	6-28-2012	10-4-2012
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1
SE Description	4 WEEK	4 WEEK	
Days After First/Last Applic.	56 27	56 27	154 78
Trt-Eval Interval			78 DA-D
Plant-Eval Interval	57 DP-1	57 DP-1	155 DP-1
Days After Emergence	49 DE-1	49 DE-1	147 DE-1
ARM Action Codes	P	P	TY1
Number of Decimals	0	0	1

Trt	Treatment	Rate	Growth				
No.	Name	Rate Unit	Stage	14	15	19	
5	NK 68B AGRISURE VIPTERA 3111			99	99	9.3	
	AATREX	1 qt/a	PRE				
	HALEX GT	3.6 pt/a	4-6"				
	AATREX	1 pt/a	4-6"				
	NIS	0.25 % v/v	4-6"				
	AMS	2.5 % v/v	4-6"				
	QUILT XCEL	10.5 oz/a	V5				
	QUILT XCEL	10.5 oz/a	R1				
6	NK 68B AGRISURE VIPTERA 3111			99	99	7.7	
	LEXAR EZ	1.5 qt/a	PRE				
	HALEX GT	3.6 pt/a	4-6"				
	AATREX	1 pt/a	4-6"				
	NIS	0.25 % v/v	4-6"				
	AMS	2.5 % v/v	4-6"				
	QUILT XCEL	10.5 oz/a	V5				
	QUILT XCEL	10.5 oz/a	R1				
7	NK 68B AGRISURE 3000 GT			99	99	2.9	
	AATREX	1 qt/a	PRE				
	TOUCHDOWN TOTAL	24 oz/a	4-6"				
	AMS	2.5 % v/v	4-6"				
	QUILT XCEL	10.5 oz/a	V5				
8	NK 68B AGRISURE 3000 GT			99	99	12.0	
	AATREX	1 qt/a	PRE				
	HALEX GT	3.6 pt/a	4-6"				
	AATREX	1 pt/a	4-6"				
	NIS	0.25 % v/v	4-6"				
	AMS	2.5 % v/v	4-6"				
	QUILT XCEL	10.5 oz/a	V5				
9	NK 68B AGRISURE 3000 GT			99	99	1.5	
	LEXAR EZ	1.5 qt/a	PRE				
	HALEX GT	3.6 pt/a	4-6"				
	AATREX	1 pt/a	4-6"				
	NIS	0.25 % v/v	4-6"				
	AMS	2.5 % v/v	4-6"				
	QUILT XCEL	10.5 oz/a	V5				

# 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			ZEAMX		
BBCH Scale			BCOR		
Crop Scientific Name			Zea mays		
Crop Name			Corn		
Description	AFTER POST	AFTER POST			
Rating Date	6-28-2012	6-28-2012	10-4-2012		
Rating Type	CONTROL	CONTROL	YIELD		
Rating Unit	PERCENT	PERCENT	BU		
Number of Subsamples	1	1	1		
SE Description	4 WEEK	4 WEEK			
Days After First/Last Applic.	56 27	56 27	154 78		
Trt-Eval Interval			78 DA-D		
Plant-Eval Interval	57 DP-1	57 DP-1	155 DP-1		
Days After Emergence	49 DE-1	49 DE-1	147 DE-1		
ARM Action Codes	P	P	TY1		
Number of Decimals	0	0	1		
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	14	15	19
10 NK 68B AGRISURE VIPTERA 3111			99	99	2.6
AATREX	1 qt/a	PRE			
TOUCHDOWN TOTAL	24 oz/a	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			
11 NK 68B AGRISURE VIPTERA 3111			99	99	1.9
AATREX	1 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			
12 NK 68B AGRISURE VIPTERA 3111			99	99	12.6
LEXAR EZ	1.5 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
QUILT XCEL	10.5 oz/a	V5			
13 NK 68B AGRISURE 3000 GT			99	99	4.6
AATREX	1 qt/a	PRE			
TOUCHDOWN TOTAL	24 oz/a	4-6"			
AMS	2.5 % v/v	4-6"			
14 NK 68B AGRISURE 3000 GT			99	99	8.9
AATREX	1 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			
15 NK 68B AGRISURE 3000 GT			99	99	6.3
LEXAR EZ	1.5 qt/a	PRE			
HALEX GT	3.6 pt/a	4-6"			
AATREX	1 pt/a	4-6"			
NIS	0.25 % v/v	4-6"			
AMS	2.5 % v/v	4-6"			

# 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			ZEAMX	
BBCH Scale			BCOR	
Crop Scientific Name			Zea mays	
Crop Name			Corn	
Description	AFTER POST	AFTER POST		
Rating Date	6-28-2012	6-28-2012	10-4-2012	
Rating Type	CONTROL	CONTROL	YIELD	
Rating Unit	PERCENT	PERCENT	BU	
Number of Subsamples	1	1	1	
SE Description	4 WEEK	4 WEEK		
Days After First/Last Applic.	56 27	56 27	154	78
Trt-Eval Interval			78 DA-D	
Plant-Eval Interval	57 DP-1	57 DP-1	155 DP-1	
Days After Emergence	49 DE-1	49 DE-1	147 DE-1	
ARM Action Codes	P	P	TY1	
Number of Decimals	0	0	1	
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	14	15
16 NK 68B AGRISURE VIPTERA 3111			99	99
AATREX	1 qt/a	PRE		10.6
TOUCHDOWN TOTAL	24 oz/a	4-6"		
AMS	2.5 % v/v	4-6"		
17 NK 68B AGRISURE VIPTERA 3111			99	99
AATREX	1 qt/a	PRE		5.8
HALEX GT	3.6 pt/a	4-6"		
AATREX	1 pt/a	4-6"		
NIS	0.25 % v/v	4-6"		
AMS	2.5 % v/v	4-6"		
18 NK 68B AGRISURE VIPTERA 3111			99	99
LEXAR EZ	1.5 qt/a	PRE		8.8
HALEX GT	3.6 pt/a	4-6"		
AATREX	1 pt/a	4-6"		
NIS	0.25 % v/v	4-6"		
AMS	2.5 % v/v	4-6"		
19 NK 68B AGRISURE 3000 GT			99	99
AATREX	1 qt/a	PRE		4.6
TOUCHDOWN TOTAL	24 oz/a	4-6"		
AMS	2.5 % v/v	4-6"		
QUILT XCEL	10.5 oz/a	R1		
20 NK 68B AGRISURE 3000 GT			99	99
AATREX	1 qt/a	PRE		12.9
HALEX GT	3.6 pt/a	4-6"		
AATREX	1 pt/a	4-6"		
NIS	0.25 % v/v	4-6"		
AMS	2.5 % v/v	4-6"		
QUILT XCEL	10.5 oz/a	R1		
21 NK 68B AGRISURE 3000 GT			99	99
LEXAR EZ	1.5 qt/a	PRE		13.8
HALEX GT	3.6 pt/a	4-6"		
AATREX	1 pt/a	4-6"		
NIS	0.25 % v/v	4-6"		
AMS	2.5 % v/v	4-6"		
QUILT XCEL	10.5 oz/a	R1		

# 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			ZEAMX	
BBCH Scale			BCOR	
Crop Scientific Name			Zea mays	
Crop Name			Corn	
Description	AFTER POST	AFTER POST		
Rating Date	6-28-2012	6-28-2012	10-4-2012	
Rating Type	CONTROL	CONTROL	YIELD	
Rating Unit	PERCENT	PERCENT	BU	
Number of Subsamples	1	1	1	
SE Description	4 WEEK	4 WEEK		
Days After First/Last Applic.	56 27	56 27	154 78	
Trt-Eval Interval			78 DA-D	
Plant-Eval Interval	57 DP-1	57 DP-1	155 DP-1	
Days After Emergence	49 DE-1	49 DE-1	147 DE-1	
ARM Action Codes	P	P	TY1	
Number of Decimals	0	0	1	
<hr/>				
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	14	15
			19	
22 NK 68B AGRISURE VIPTERA 3111			99	99
AATREX	1 qt/a	PRE		15.9
TOUCHDOWN TOTAL	24 oz/a	4-6"		
AMS	2.5 % v/v	4-6"		
QUILT XCEL	10.5 oz/a	R1		
23 NK 68B AGRISURE VIPTERA 3111			99	99
AATREX	1 qt/a	PRE		6.4
HALEX GT	3.6 pt/a	4-6"		
AATREX	1 pt/a	4-6"		
NIS	0.25 % v/v	4-6"		
AMS	2.5 % v/v	4-6"		
QUILT XCEL	10.5 oz/a	R1		
24 NK 68B AGRISURE VIPTERA 3111			99	99
LEXAR EZ	1.5 qt/a	PRE		6.9
HALEX GT	3.6 pt/a	4-6"		
AATREX	1 pt/a	4-6"		
NIS	0.25 % v/v	4-6"		
AMS	2.5 % v/v	4-6"		
QUILT XCEL	10.5 oz/a	R1		
LSD (P=.05)			.	.
Standard Deviation			.	.
CV			.	.

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE V

Trial ID: C12030                      Protocol ID: SYN-ZSC050A4  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
Project ID:                              Investigator: Charles H Slack  
   Sponsor Contact: SCOTT CULLY

#### Pest Type

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

#### Pest Code

SETFA, Setaria faberi, = US  
AMACH, Amaranthus hybridus, = 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

#### Plant-Eval Interval

15 DP-1 = 1 ZEAMX 5-2-2012  
43 DP-1 = 1 ZEAMX 5-2-2012  
773 DP-1 = 1 ZEAMX 5-2-2012  
57 DP-1 = 1 ZEAMX 5-2-2012  
155 DP-1 = 1 ZEAMX 5-2-2012

#### ARM Action Codes

P = Rating scale of 0 to 100 (e.g. % control or injury)  
TY1 =  $2.074286 * [17] * (100 - [18]) / 84.5$

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE V

Trial ID: C12030                      Protocol ID: SYN-ZSC050A4  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: SCOTT CULLY

### General Trial Information

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

**Discipline:** FIH fungicide-insecticide-herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-2-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** NK 68B  
**BBCH Scale:** BCOR  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** GOOD good  
**Harvest Date:** 10-4-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 15.5

**Planting Date:** 5-2-2012  
**Rate, Unit:** 32000 S/A  
**Soil Temperature, Unit:** 66 F  
**Emergence Date:** 5-10-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 75 FT

### 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

**Plot Width, Unit:** 10 FT  
**Plot Length, Unit:** 80 FT  
**Plot Area, Unit:** 800 FT<sup>2</sup>  
**Replications:** 1

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

### Soil Description

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

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**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
<b>Application Date:</b>	5-3-2012	5-31-2012	6-1-2012	7-18-2012
<b>Time of Day:</b>	10 AM	1 PM	1 PM	10 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	4-6"	V5	R1
<b>Application Placement:</b>	BROSOI	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	SARA CARTER	SARA CARTER
<b>Air Temperature, Unit:</b>	78 F	82 F	62 F	88 F
<b>% Relative Humidity:</b>	65	85	85	55
<b>Wind Velocity, Unit:</b>	3 MPH	4 MPH	4 MPH	6 MPH
<b>Wind Direction:</b>	SW	SE	SE	SW
<b>Soil Temperature, Unit:</b>	66 F	68 F	68 F	81 F
<b>Soil Moisture:</b>	GOOD	DRY	DRY	POOR
<b>% Cloud Cover:</b>	10	15	20	40
<b>Next Rain Occurred On:</b>	5-4-2012	6-1-2012	6-2-2012	7-19-2012

	Crop Stage At Each Application							
	A		B		C		D	
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX	BCOR	ZEAMX	BCOR	ZEAMX	BCOR	ZEAMX	BCOR
<b>Stage Scale Used:</b>					BBCH		BBCH	
<b>Stage Majority, Percent:</b>					V5	95	R1	100
<b>Height, Unit:</b>			12	IN	12	IN	72	IN

	Pest Stage At Each Application							
	A		B		C		D	
<b>Pest 1 Code, Type, Scale:</b>	SETFA	W	SETFA	W	SETFA	W	SETFA	W
<b>Height, Unit:</b>			2	IN	2	IN	6	IN
<b>Pest 2 Code, Type, Scale:</b>	AMBTR	W	AMBTR	W	AMBTR	W	AMBTR	W
<b>Height, Unit:</b>			3	IN	3	IN	12	IN
<b>Pest 3 Code, Type, Scale:</b>	CHEAL	W	CHEAL	W	CHEAL	W	CHEAL	W
<b>Height, Unit:</b>			2	IN	2	IN	8	IN
<b>Pest 4 Code, Type, Scale:</b>	IPOSS	W	IPOSS	W	IPOSS	W	IPOSS	W
<b>Height, Unit:</b>			1	IN	1	IN	6	IN



# Plant and Soil Science, U of KY

## Weed Science Research

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

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN

Trial ID: S12020                      Protocol ID: DOW-RRSB-102  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
 Project ID: 1                              Investigator: Charles H Slack  
     Sponsor Contact: JONATHAN HUFF

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	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Description	AFTER APPL.	AFTER APPL.	AFTER APPL.	AFTER APPL.
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt	Treatment	Rate	Growth					
No.	Name	Rate Unit	Stage	1	2	3	4	5
1	SONIC	3 oz/a	PRE	0	99	99	99	99
	DURANGO DMA	24 fl oz/a	PRE					
	AMS	2.5 % v/v	PRE					
	DURANGO DMA	24 fl oz/a	MP					
	AMS	2.5 % v/v	MP					
2	SONIC	4.5 oz/a	PRE	0	99	99	99	99
	DURANGO DMA	24 fl oz/a	PRE					
	AMS	2.5 % v/v	PRE					
	DURANGO DMA	24 fl oz/a	MP					
	AMS	2.5 % v/v	MP					
3	DURANGO DMA	24 fl oz/a	PRE	0	99	99	99	99
	AMS	2.5 % v/v	PRE					
	DURANGO DMA	24 fl oz/a	MP					
	FIRSTRATE	0.3 oz/a	MP					
	AMS	2.5 % v/v	MP					
	DURANGO DMA	24 fl oz/a	LP					
	AMS	2.5 % v/v	LP					
	LSD (P=.05)			0.0	0.0	0.0	0.0	0.0
	Standard Deviation			0.0	0.0	0.0	0.0	0.0
	CV			0.0	0.0	0.0	0.0	0.0
	Replicate F			0.000	0.000	0.000	0.000	0.000
	Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000
	Treatment F			0.000	0.000	0.000	0.000	0.000
	Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000

# 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	GLXMA							
BBCH Scale	BSOY							
Crop Scientific Name	Glycine max							
Crop Name	Soybean							
Description	AFTER APPL.	AFTER APPL.	AFTER APPL.	AFTER APPL.				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1				
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK				
ARM Action Codes	P	P	P	P				
Number of Decimals	0	0	0	0				
Trt	Treatment	Rate	Growth	6	7	8	9	10
No.	Name	Rate Unit	Stage					
1	SONIC	3 oz/a	PRE	0	99	99	99	99
	DURANGO DMA	24 fl oz/a	PRE					
	AMS	2.5 % v/v	PRE					
	DURANGO DMA	24 fl oz/a	MP					
	AMS	2.5 % v/v	MP					
2	SONIC	4.5 oz/a	PRE	0	99	99	99	99
	DURANGO DMA	24 fl oz/a	PRE					
	AMS	2.5 % v/v	PRE					
	DURANGO DMA	24 fl oz/a	MP					
	AMS	2.5 % v/v	MP					
3	DURANGO DMA	24 fl oz/a	PRE	0	99	99	99	99
	AMS	2.5 % v/v	PRE					
	DURANGO DMA	24 fl oz/a	MP					
	FIRSTRATE	0.3 oz/a	MP					
	AMS	2.5 % v/v	MP					
	DURANGO DMA	24 fl oz/a	LP					
	AMS	2.5 % v/v	LP					
	LSD (P=.05)			0.0	0.0	0.0	0.0	0.0
	Standard Deviation			0.0	0.0	0.0	0.0	0.0
	CV			0.0	0.0	0.0	0.0	0.0
	Replicate F			0.000	0.000	0.000	0.000	0.000
	Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000
	Treatment F			0.000	0.000	0.000	0.000	0.000
	Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000

# 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	GLXMA							
BBCH Scale	BSOY							
Crop Scientific Name	Glycine max							
Crop Name	Soybean							
Description	AFTER APPL.	AFTER APPL.	AFTER APPL.	AFTER APPL.				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1				
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK				
ARM Action Codes	P	P	P	P				
Number of Decimals	0	0	0	0				
Trt	Treatment	Rate	Growth	11	12	13	14	15
No.	Name	Rate Unit	Stage					
1	SONIC	3 oz/a	PRE	0	99	99	99	99
	DURANGO DMA	24 fl oz/a	PRE					
	AMS	2.5 % v/v	PRE					
	DURANGO DMA	24 fl oz/a	MP					
	AMS	2.5 % v/v	MP					
2	SONIC	4.5 oz/a	PRE	0	99	99	99	99
	DURANGO DMA	24 fl oz/a	PRE					
	AMS	2.5 % v/v	PRE					
	DURANGO DMA	24 fl oz/a	MP					
	AMS	2.5 % v/v	MP					
3	DURANGO DMA	24 fl oz/a	PRE	0	99	99	99	99
	AMS	2.5 % v/v	PRE					
	DURANGO DMA	24 fl oz/a	MP					
	FIRSTRATE	0.3 oz/a	MP					
	AMS	2.5 % v/v	MP					
	DURANGO DMA	24 fl oz/a	LP					
	AMS	2.5 % v/v	LP					
	LSD (P=.05)			0.0	0.0	0.0	0.0	0.0
	Standard Deviation			0.0	0.0	0.0	0.0	0.0
	CV			0.0	0.0	0.0	0.0	0.0
	Replicate F			0.000	0.000	0.000	0.000	0.000
	Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000
	Treatment F			0.000	0.000	0.000	0.000	0.000
	Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN

Trial ID: S12020                      Protocol ID: DOW-RRSB-102  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
Project ID: 1                              Investigator: Charles H 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

#### Crop Code

GLXMA, BSOY, *Glycine max*, = US

#### Rating Unit

PERCENT = percent

#### ARM Action Codes

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

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN

Trial ID: S12020 Protocol ID: DOW-RRSB-102  
 Location: LEXINGTON, KY Study Director: CHARLES SLACK  
 Project ID: 1 Investigator: Charles H 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:** 4-30-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312 **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747 **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312 **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747 **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232  
**BBCH Scale:** BSOY  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** GOOD good

**Planting Date:** 4-30-2012  
**Rate, Unit:** 210000 S/A

**Soil Temperature, Unit:** 70 F  
**Emergence Date:** 5-5-2012

### 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

### Site and Design

**Plot Width, Unit:** 8.5 FT  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 374 FT2  
**Replications:** 3

**Site Type:** FIELD field  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOBL Randomized Complete Block (RCB)

### Soil Description

**Description Name:** LANTON  
**% Sand:** 7 **% OM:** 4  
**% Silt:** 63 **pH:** 6.5  
**% Clay:** 30 **CEC:** 22

**Texture:** SIL silt loam  
**Soil Name:** LANTON SILT LOAM  
**Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.25 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

	<b>A</b>	<b>B</b>	<b>C</b>
<b>Application Date:</b>	4-30-2012	6-5-2012	7-3-2012
<b>Time of Day:</b>	10 AM	2 PM	10 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	MP	LP
<b>Application Placement:</b>	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	SARA CARTER
<b>Air Temperature, Unit:</b>	75 F	72 F	82 F
<b>% Relative Humidity:</b>	65	55	70
<b>Wind Velocity, Unit:</b>	4 MPH	3 MPH	3 MPH
<b>Wind Direction:</b>	SW	WSW	W
<b>Soil Temperature, Unit:</b>	70 F	73 F	85 F
<b>Soil Moisture:</b>	GOOD	WET	DRY
<b>% Cloud Cover:</b>	40	10	10
<b>Next Rain Occurred On:</b>	4-30-2012	6-11-2012	7-8-2012

### Crop Stage At Each Application

	<b>A</b>	<b>B</b>	<b>C</b>
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA	BSOY GLXMA	BSOY GLXMA BSOY
<b>Height, Unit:</b>		8 IN	12 IN

### Pest Stage At Each Application

	<b>A</b>	<b>B</b>	<b>C</b>
<b>Pest 1 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W
<b>Height, Unit:</b>		2 IN	5 IN
<b>Pest 2 Code, Type, Scale:</b>	AMBTR W	AMBTR W	AMBTR W
<b>Height, Unit:</b>		3 IN	8 IN
<b>Pest 3 Code, Type, Scale:</b>	IPOSS W	IPOSS W	IPOSS W
<b>Height, Unit:</b>		2 IN	4 IN
<b>Pest 4 Code, Type, Scale:</b>	ERICA W	ERICA W	ERICA W
<b>Height, Unit:</b>		2 IN	5 IN



# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

	<b>A</b>	<b>B</b>	<b>C</b>
<b>Appl. Equipment:</b>	ATV	ATV	BACKPACK
<b>Equipment Type:</b>	ALTEVE	ALTEVE	BELSPR
<b>Operation Pressure, Unit:</b>	30 PSI	30 PSI	30 PSI
<b>Nozzle Type:</b>	FLAT FAN	FLAT FAN	FLAT FAN
<b>Nozzle Size:</b>	8004 DG	8004 DG	8004 DG
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN	20 IN
<b>Boom Length, Unit:</b>	8.5 FT	8.5 FT	8.5 FT
<b>Boom Height, Unit:</b>	30 IN	30 IN	30 IN
<b>Ground Speed, Unit:</b>	4 MPH	4 MPH	4 MPH
<b>Carrier:</b>	WATER	WATER	WATER
<b>Spray Volume, Unit:</b>	24 GPA	24 GPA	24 GPA
<b>Mix Size, Unit:</b>	3 liters	3 liters	3 liters
<b>Propellant:</b>	CO2	CO2	CO2

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN II

Trial ID: S12021                      Protocol ID: FMC-ANTH-SB  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: RUSTY MITCHELL

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		
Description	AFTER APPL	AFTER APPL	AFTER APPL
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4
1	ANTHEM	8 oz/a	PRE	0	99	99	89
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
2	ANTHEM	6 oz/a	PRE	0	99	99	99
	AUTHORITY XL	4 oz/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
3	AUTHORITY XL	4 oz/a	PRE	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
4	AUTHORITY MTZ	12 oz/a	PRE	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
5	AUTHORITY FIRST	3.2 oz/a	PRE	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
6	VALOR XLT	4 oz/a	PRE	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
7	FIERCE	3 oz/a	PRE	0	99	98	98
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
8	PREFIX	32 oz/a	PRE	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
9	AUTHORITY XL	4 oz/a	PRE	0	99	99	99
	ANTHEM	5 oz/a	EP				
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
10	ANTHEM	8 oz/a	PRE	0	99	99	99
	F9324	7 oz/a	EP				
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				

# 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		
Description	AFTER APPL	AFTER APPL	AFTER APPL
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4
11	ANTHEM	6 oz/a	EP	0	99	99	98
	F9324	7 oz/a	EP				
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
12	PREFIX	32 oz/a	EP	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
13	FLEXSTAR GT	48 oz/a	EP	0	99	99	99
	AMS	3.7 % v/v	EP				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
14	ROUNDUP POWERMAX	22 oz/a	EP	0	99	99	99
	AMS	3.7 % v/v	EP				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
	LSD (P=.05)			0.0	0.0	1.0	7.5
	Standard Deviation			0.0	0.0	0.6	4.5
	CV			0.0	0.0	0.62	4.54
	Replicate F			0.000	0.000	1.000	1.640
	Replicate Prob(F)			1.0000	1.0000	0.3816	0.2135
	Treatment F			0.000	0.000	1.000	1.000
	Treatment Prob(F)			1.0000	1.0000	0.4786	0.4786

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	ERICA	SETFA	AMBTR
Pest Scientific Name	<i>Conyza canadensis</i>	<i>Setaria faberii</i>	<i>Ambrosia trifida</i>
Pest Name	Marestail	Giant foxtail	Giant ragweed
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Description	AFTER APPL	AFTER APPL	AFTER APPL
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	4 WEEK	4 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt	Treatment	Rate	Growth	5	6	7	8
No.	Name	Rate Unit	Stage				
1	ANTHEM	8 oz/a	PRE	70	0	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
2	ANTHEM	6 oz/a	PRE	83	0	99	99
	AUTHORITY XL	4 oz/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
3	AUTHORITY XL	4 oz/a	PRE	99	0	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
4	AUTHORITY MTZ	12 oz/a	PRE	67	0	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
5	AUTHORITY FIRST	3.2 oz/a	PRE	93	0	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
6	VALOR XLT	4 oz/a	PRE	93	0	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
7	FIERCE	3 oz/a	PRE	78	0	99	98
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
8	PREFIX	32 oz/a	PRE	78	0	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
9	AUTHORITY XL	4 oz/a	PRE	85	0	99	99
	ANTHEM	5 oz/a	EP				
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
10	ANTHEM	8 oz/a	PRE	86	0	99	99
	F9324	7 oz/a	EP				
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	ERICA	SETFA	AMBTR
Pest Scientific Name	Conyza canadens	Setaria faberi	Ambrosia trifidi
Pest Name	Marestail	Giant foxtail	Giant ragweed
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Description	AFTER APPL	AFTER APPL	AFTER APPL
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	4 WEEK	4 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	5	6	7	8
11	ANTHEM	6 oz/a	EP		63	0	99
	F9324	7 oz/a	EP				99
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
12	PREFIX	32 oz/a	EP		82	0	99
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
13	FLEXSTAR GT	48 oz/a	EP		90	0	99
	AMS	3.7 % v/v	EP				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
14	ROUNDUP POWERMAX	22 oz/a	EP		93	0	99
	AMS	3.7 % v/v	EP				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
	LSD (P=.05)			27.8	0.0	0.0	1.0
	Standard Deviation			16.6	0.0	0.0	0.6
	CV			20.05	0.0	0.0	0.62
	Replicate F			0.630	0.000	0.000	1.000
	Replicate Prob(F)			0.5405	1.0000	1.0000	0.3816
	Treatment F			1.249	0.000	0.000	1.000
	Treatment Prob(F)			0.3031	1.0000	1.0000	0.4786

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	ERICA	SETFA
Pest Scientific Name	Ipomoea sp.	Conyza canadens	Setaria faberi
Pest Name	Morning glory	Marestail	Giant foxtail
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Description	AFTER APPL	AFTER APPL	AFTER APPL
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	4 WEEK	4 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt	Treatment	Rate	Growth	9	10	11	12
No.	Name	Rate Unit	Stage				
1	ANTHEM	8 oz/a	PRE	89	70	0	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
2	ANTHEM	6 oz/a	PRE	99	83	0	99
	AUTHORITY XL	4 oz/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
3	AUTHORITY XL	4 oz/a	PRE	99	99	0	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
4	AUTHORITY MTZ	12 oz/a	PRE	99	67	0	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
5	AUTHORITY FIRST	3.2 oz/a	PRE	99	93	0	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
6	VALOR XLT	4 oz/a	PRE	99	93	0	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
7	FIERCE	3 oz/a	PRE	98	78	0	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
8	PREFIX	32 oz/a	PRE	99	78	0	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
9	AUTHORITY XL	4 oz/a	PRE	99	85	0	99
	ANTHEM	5 oz/a	EP				
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
10	ANTHEM	8 oz/a	PRE	99	86	0	99
	F9324	7 oz/a	EP				
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	ERICA	SETFA
Pest Scientific Name	Ipomoea sp.	Conyza canadensis	Setaria faberi
Pest Name	Morning glory	Marestail	Giant foxtail
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Description	AFTER APPL	AFTER APPL	AFTER APPL
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	4 WEEK	4 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	9	10	11	12
11	ANTHEM	6 oz/a	EP	98	63	0	99
	F9324	7 oz/a	EP				
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
12	PREFIX	32 oz/a	EP	99	82	0	99
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
13	FLEXSTAR GT	48 oz/a	EP	99	90	0	99
	AMS	3.7 % v/v	EP				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
14	ROUNDUP POWERMAX	22 oz/a	EP	99	93	0	99
	AMS	3.7 % v/v	EP				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
	LSD (P=.05)			7.5	27.8	0.0	0.0
	Standard Deviation			4.5	16.6	0.0	0.0
	CV			4.54	20.05	0.0	0.0
	Replicate F			1.640	0.630	0.000	0.000
	Replicate Prob(F)			0.2135	0.5405	1.0000	1.0000
	Treatment F			1.000	1.249	0.000	0.000
	Treatment Prob(F)			0.4786	0.3031	1.0000	1.0000

# 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			
Description	AFTER APPL	AFTER APPL	AFTER APPL
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt	Treatment	Rate	Growth			
No.	Name	Rate Unit	Stage	13	14	15
1	ANTHEM	8 oz/a	PRE	99	89	70
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
2	ANTHEM	6 oz/a	PRE	99	99	83
	AUTHORITY XL	4 oz/a	PRE			
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
3	AUTHORITY XL	4 oz/a	PRE	99	99	99
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
4	AUTHORITY MTZ	12 oz/a	PRE	99	99	67
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
5	AUTHORITY FIRST	3.2 oz/a	PRE	99	99	93
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
6	VALOR XLT	4 oz/a	PRE	99	99	93
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
7	FIERCE	3 oz/a	PRE	98	98	78
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
8	PREFIX	32 oz/a	PRE	99	99	78
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
9	AUTHORITY XL	4 oz/a	PRE	99	99	85
	ANTHEM	5 oz/a	EP			
	ROUNDUP POWERMAX	22 oz/a	EP			
	AMS	3.7 % v/v	EP			
10	ANTHEM	8 oz/a	PRE	99	99	86
	F9324	7 oz/a	EP			
	ROUNDUP POWERMAX	22 oz/a	EP			
	AMS	3.7 % v/v	EP			



# 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 trifida	Ipomoea sp.	Conyza canadensis
Pest Name	Giant ragweed	Morning glory	Marestail
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Description	AFTER APPL	AFTER APPL	AFTER APPL
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0
Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	
11 ANTHEM	6 oz/a	EP	99
F9324	7 oz/a	EP	98
ROUNDUP POWERMAX	22 oz/a	EP	63
AMS	3.7 % v/v	EP	
12 PREFIX	32 oz/a	EP	99
ROUNDUP POWERMAX	22 oz/a	EP	99
AMS	3.7 % v/v	EP	82
13 FLEXSTAR GT	48 oz/a	EP	99
AMS	3.7 % v/v	EP	99
ROUNDUP POWERMAX	22 oz/a	LP	90
AMS	3.7 % v/v	LP	
14 ROUNDUP POWERMAX	22 oz/a	EP	99
AMS	3.7 % v/v	EP	99
ROUNDUP POWERMAX	22 oz/a	LP	93
AMS	3.7 % v/v	LP	
LSD (P=.05)			1.0
Standard Deviation			7.5
CV			4.5
			27.8
			16.6
			20.05
Replicate F			1.000
Replicate Prob(F)			1.640
Treatment F			0.630
Treatment Prob(F)			0.3816
			0.2135
			1.000
			1.000
			1.249
			0.4786
			0.4786
			0.3031

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN II

Trial ID: S12021                      Protocol ID: FMC-ANTH-SB  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
Project ID:                              Investigator: Charles H 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  
IPOSS, *Ipomoea* sp., = US  
ERICA, *Conyza canadensis*, = US

#### Crop Code

GLXMA, BSOY, *Glycine max*, = US

#### Rating Unit

PERCENT = percent

#### ARM Action Codes

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

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN II

Trial ID: S12021                      Protocol ID: FMC-ANTH-SB  
 Location: LEXINGTON, KY        Study Director: CHARLES SLACK  
 Project ID:                            Investigator: Charles H 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:** 4-30-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK        **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312        **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK        **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312        **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232  
**BBCH Scale:** BSOY  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 7 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** NORMAL normal, adequate

**Planting Date:** 4-30-2012  
**Rate, Unit:** 210000 S/A

**Soil Temperature, Unit:** 69 F  
**Emergence Date:** 5-6-2012

### 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

### Site and Design

**Plot Width, Unit:** 8.5 FT  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 374 FT<sup>2</sup>  
**Replications:** 3

**Site Type:** FIELD field  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOBL Randomized Complete Block (RCB)

### Soil Description

**Description Name:** LANTON

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

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

	A	B	C
<b>Application Date:</b>	4-30-2012	5-24-2012	6-5-2012
<b>Time of Day:</b>	9 PM	1 PM	10 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	EP	LP
<b>Application Placement:</b>	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	70 F	82 F	68 F
<b>% Relative Humidity:</b>	30	60	65
<b>Wind Velocity, Unit:</b>	6 MPH	6 MPH	4 MPH
<b>Wind Direction:</b>	SW	S	SW
<b>Soil Temperature, Unit:</b>	70 F	76 F	73 F
<b>Soil Moisture:</b>	NORMAL	DRY	NORMAL
<b>% Cloud Cover:</b>	20	30	10
<b>Next Rain Occurred On:</b>	5-1-2012	5-28-2012	6-11-2012

### Crop Stage At Each Application

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA	BSOY GLXMA	BSOY GLXMA BSOY
<b>Height, Unit:</b>		4 IN	5 IN

### Pest Stage At Each Application

	A	B	C
<b>Pest 1 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W
<b>Height, Unit:</b>		2 IN	3 IN
<b>Pest 2 Code, Type, Scale:</b>	AMBTR W	AMBTR W	AMBTR W
<b>Height, Unit:</b>		3 IN	5 IN
<b>Pest 3 Code, Type, Scale:</b>	IPOSS W	IPOSS W	IPOSS W
<b>Height, Unit:</b>		1 IN	2 IN
<b>Pest 4 Code, Type, Scale:</b>	ERICA W	ERICA W	ERICA W
<b>Height, Unit:</b>		2 IN	3 IN

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

	A	B	C
<b>Appl. Equipment:</b>	ATV	ATV	ATV
<b>Equipment Type:</b>	ALTEVE	ALTEVE	ALTEVE
<b>Operation Pressure, Unit:</b>	30 PSI	30 PSI	30 PSI
<b>Nozzle Type:</b>	FLAT FAN	FLAT FAN	FLAT FAN
<b>Nozzle Size:</b>	8004 DG	8004 DG	8004 DG
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN	20 IN
<b>Boom Length, Unit:</b>	8.5 FT	8.5 FT	8.5 FT
<b>Boom Height, Unit:</b>	30 IN	30 IN	30 IN
<b>Ground Speed, Unit:</b>	4 MPH	4 MPH	4 MPH
<b>Carrier:</b>	WATER	WATER	WATER
<b>Spray Volume, Unit:</b>	24 GPA	24 GPA	24 GPA
<b>Mix Size, Unit:</b>	3 liters	3 liters	3 liters
<b>Propellant:</b>	CO2	CO2	CO2

Date	By	Notes
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4-30-2012	SARA CARTER	ENTIRE PLOT AREA OVERSPRAYED WITH 32 OZ/A ROUNDUP
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# Plant and Soil Science, U of KY

## Weed Science Research

### SOYBEAN PREMEERGENCE

Trial ID: S12021-2                      Protocol ID: FMC-ANTH-SB  
 Location: LEXINGTON, KY              Study Director: CHARLES SLACK  
 Project ID:                                  Investigator: Charles H Slack  
     Sponsor Contact: RUSTY MITCHELL

Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMACH	CHEAL
Pest Scientific Name	Setaria faberi	Amaranthus hyb>	Chenopodium al>
Pest Name	Giant foxtail	Smooth pigweed	Common lambsqu>
Crop Code	GLXMA		
BBCH Scale	BSOY		
Crop Scientific Name	Glycine max		
Crop Name	Soybean		
Description	AFTER APPL	AFTER APPL	AFTER APPL
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt	Treatment	Rate	Growth				
No.	Name	Rate Unit	Stage	1	2	3	4
1	ANTHEM	8 oz/a	PRE	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
2	ANTHEM	6 oz/a	PRE	0	99	99	99
	AUTHORITY XL	4 oz/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
3	AUTHORITY XL	4 oz/a	PRE	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
4	AUTHORITY MTZ	12 oz/a	PRE	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
5	AUTHORITY FIRST	3.2 oz/a	PRE	0	89	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
6	VALOR XLT	4 oz/a	PRE	0	89	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
7	FIERCE	3 oz/a	PRE	0	98	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
8	PREFIX	32 oz/a	PRE	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
9	AUTHORITY XL	4 oz/a	PRE	3	99	99	99
	ANTHEM	5 oz/a	EP				
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
10	ANTHEM	8 oz/a	PRE	3	99	99	99
	F9324	7 oz/a	EP				
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMACH	CHEAL
Pest Scientific Name	Setaria faberi	Amaranthus hyb>	Chenopodium al>
Pest Name	Giant foxtail	Smooth pigweed	Common lambsqu>
Crop Code	GLXMA		
BBCH Scale	BSOY		
Crop Scientific Name	Glycine max		
Crop Name	Soybean		
Description	AFTER APPL	AFTER APPL	AFTER APPL
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4
11	ANTHEM	6 oz/a	EP	20	99	99	99
	F9324	7 oz/a	EP				
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
12	PREFIX	32 oz/a	EP	7	99	99	99
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
13	FLEXSTAR GT	48 oz/a	EP	3	99	99	99
	AMS	3.7 % v/v	EP				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
14	ROUNDUP POWERMAX	22 oz/a	EP	0	99	99	99
	AMS	3.7 % v/v	EP				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
	LSD (P=.05)			5.2	10.1	0.0	0.0
	Standard Deviation			3.1	6.0	0.0	0.0
	CV			117.83	6.19	0.0	0.0
	Replicate F			1.000	2.508	0.000	0.000
	Replicate Prob(F)			0.3816	0.1010	1.0000	1.0000
	Treatment F			9.250	1.000	0.000	0.000
	Treatment Prob(F)			0.0001	0.4786	1.0000	1.0000



# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	IPOSS	SETFA	AMACH
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Amaranthus hyb>
Pest Name	Morning glory	Giant foxtail	Smooth pigweed
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Description	AFTER APPL	AFTER APPL	AFTER APPL
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	4 WEEK	4 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	5	6	7	8
1	ANTHEM	8 oz/a	PRE	78	0	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
2	ANTHEM	6 oz/a	PRE	99	0	99	99
	AUTHORITY XL	4 oz/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
3	AUTHORITY XL	4 oz/a	PRE	99	0	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
4	AUTHORITY MTZ	12 oz/a	PRE	90	0	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
5	AUTHORITY FIRST	3.2 oz/a	PRE	93	0	89	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
6	VALOR XLT	4 oz/a	PRE	99	0	89	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
7	FIERCE	3 oz/a	PRE	91	0	98	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
8	PREFIX	32 oz/a	PRE	89	0	99	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
9	AUTHORITY XL	4 oz/a	PRE	99	0	99	99
	ANTHEM	5 oz/a	EP				
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
10	ANTHEM	8 oz/a	PRE	99	0	99	99
	F9324	7 oz/a	EP				
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type		W Weed		W Weed		W Weed
Pest Code		IPOSS		SETFA		AMACH
Pest Scientific Name		Ipomoea sp.		Setaria faberi		Amaranthus hyb>
Pest Name		Morning glory		Giant foxtail		Smooth pigweed
Crop Code				GLXMA		
BBCH Scale				BSOY		
Crop Scientific Name				Glycine max		
Crop Name				Soybean		
Description		AFTER APPL	AFTER APPL	AFTER APPL		AFTER APPL
Rating Type		CONTROL	INJURY	CONTROL		CONTROL
Rating Unit		PERCENT	PERCENT	PERCENT		PERCENT
Number of Subsamples		1	1	1		1
Rating Timing		2 WEEK	4 WEEK	4 WEEK		4 WEEK
ARM Action Codes		P	P	P		P
Number of Decimals		0	0	0		0
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	5	6	7	8
11 ANTHEM	6 oz/a	EP	99	10	99	99
F9324	7 oz/a	EP				
ROUNDUP POWERMAX	22 oz/a	EP				
AMS	3.7 % v/v	EP				
12 PREFIX	32 oz/a	EP	99	0	99	99
ROUNDUP POWERMAX	22 oz/a	EP				
AMS	3.7 % v/v	EP				
13 FLEXSTAR GT	48 oz/a	EP	99	0	99	99
AMS	3.7 % v/v	EP				
ROUNDUP POWERMAX	22 oz/a	LP				
AMS	3.7 % v/v	LP				
14 ROUNDUP POWERMAX	22 oz/a	EP	99	0	99	99
AMS	3.7 % v/v	EP				
ROUNDUP POWERMAX	22 oz/a	LP				
AMS	3.7 % v/v	LP				
LSD (P=.05)			15.2	0.0	10.1	0.0
Standard Deviation			9.1	0.0	6.0	0.0
CV			9.53	0.0	6.19	0.0
Replicate F			1.395	0.000	2.508	0.000
Replicate Prob(F)			0.2657	1.0000	0.1010	1.0000
Treatment F			1.454	0.000	1.000	0.000
Treatment Prob(F)			0.2012	1.0000	0.4786	1.0000

# 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
Description	AFTER APPL	AFTER APPL	AFTER APPL
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	4 WEEK	4 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	9	10	11	12
1	ANTHEM	8 oz/a	PRE	99	78	0	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
2	ANTHEM	6 oz/a	PRE	99	99	0	99
	AUTHORITY XL	4 oz/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
3	AUTHORITY XL	4 oz/a	PRE	99	99	0	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
4	AUTHORITY MTZ	12 oz/a	PRE	99	90	0	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
5	AUTHORITY FIRST	3.2 oz/a	PRE	99	93	0	89
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
6	VALOR XLT	4 oz/a	PRE	99	99	0	89
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
7	FIERCE	3 oz/a	PRE	99	91	0	98
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
8	PREFIX	32 oz/a	PRE	99	89	0	99
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
9	AUTHORITY XL	4 oz/a	PRE	99	99	0	99
	ANTHEM	5 oz/a	EP				
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
10	ANTHEM	8 oz/a	PRE	99	99	0	99
	F9324	7 oz/a	EP				
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				

# 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
Description	AFTER APPL	AFTER APPL	AFTER APPL
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	4 WEEK	4 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	9	10	11	12
11	ANTHEM	6 oz/a	EP		99	99	10
	F9324	7 oz/a	EP				99
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
12	PREFIX	32 oz/a	EP	99	99	0	99
	ROUNDUP POWERMAX	22 oz/a	EP				
	AMS	3.7 % v/v	EP				
13	FLEXSTAR GT	48 oz/a	EP	99	99	0	99
	AMS	3.7 % v/v	EP				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
14	ROUNDUP POWERMAX	22 oz/a	EP	99	99	0	99
	AMS	3.7 % v/v	EP				
	ROUNDUP POWERMAX	22 oz/a	LP				
	AMS	3.7 % v/v	LP				
	LSD (P=.05)			0.0	15.2	0.0	10.1
	Standard Deviation			0.0	9.1	0.0	6.0
	CV			0.0	9.53	0.0	6.19
	Replicate F			0.000	1.395	0.000	2.508
	Replicate Prob(F)			1.0000	0.2657	1.0000	0.1010
	Treatment F			0.000	1.454	0.000	1.000
	Treatment Prob(F)			1.0000	0.2012	1.0000	0.4786

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMACH	CHEAL	IPOSS
Pest Scientific Name	Amaranthus hyb>	Chenopodium al>	Ipomoea sp.
Pest Name	Smooth pigweed	Common lambsqu>	Morning glory
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Description	AFTER APPL	AFTER APPL	AFTER APPL
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	13	14	15
1	ANTHEM	8 oz/a	PRE	99	99	78
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
2	ANTHEM	6 oz/a	PRE	99	99	99
	AUTHORITY XL	4 oz/a	PRE			
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
3	AUTHORITY XL	4 oz/a	PRE	99	99	99
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
4	AUTHORITY MTZ	12 oz/a	PRE	99	99	90
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
5	AUTHORITY FIRST	3.2 oz/a	PRE	99	99	93
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
6	VALOR XLT	4 oz/a	PRE	99	99	99
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
7	FIERCE	3 oz/a	PRE	99	99	91
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
8	PREFIX	32 oz/a	PRE	99	99	89
	ROUNDUP POWERMAX	22 oz/a	LP			
	AMS	3.7 % v/v	LP			
9	AUTHORITY XL	4 oz/a	PRE	99	99	99
	ANTHEM	5 oz/a	EP			
	ROUNDUP POWERMAX	22 oz/a	EP			
	AMS	3.7 % v/v	EP			
10	ANTHEM	8 oz/a	PRE	99	99	99
	F9324	7 oz/a	EP			
	ROUNDUP POWERMAX	22 oz/a	EP			
	AMS	3.7 % v/v	EP			

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		AMACH	CHEAL	IPOSS
Pest Scientific Name		Amaranthus hyb>	Chenopodium al>	Ipomoea sp.
Pest Name		Smooth pigweed	Common lambsqu>	Morning glory
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Description		AFTER APPL	AFTER APPL	AFTER APPL
Rating Type		CONTROL	CONTROL	CONTROL
Rating Unit		PERCENT	PERCENT	PERCENT
Number of Subsamples		1	1	1
Rating Timing		8 WEEK	8 WEEK	8 WEEK
ARM Action Codes		P	P	P
Number of Decimals		0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	13	14
				15
11 ANTHEM	6 oz/a	EP	99	99
F9324	7 oz/a	EP		
ROUNDUP POWERMAX	22 oz/a	EP		
AMS	3.7 % v/v	EP		
12 PREFIX	32 oz/a	EP	99	99
ROUNDUP POWERMAX	22 oz/a	EP		
AMS	3.7 % v/v	EP		
13 FLEXSTAR GT	48 oz/a	EP	99	99
AMS	3.7 % v/v	EP		
ROUNDUP POWERMAX	22 oz/a	LP		
AMS	3.7 % v/v	LP		
14 ROUNDUP POWERMAX	22 oz/a	EP	99	99
AMS	3.7 % v/v	EP		
ROUNDUP POWERMAX	22 oz/a	LP		
AMS	3.7 % v/v	LP		
LSD (P=.05)			0.0	0.0
Standard Deviation			0.0	0.0
CV			0.0	0.0
Replicate F			0.000	0.000
Replicate Prob(F)			1.0000	1.0000
Treatment F			0.000	0.000
Treatment Prob(F)			1.0000	1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

### SOYBEAN PREMEERGENCE

Trial ID: S12021-2                      Protocol ID: FMC-ANTH-SB  
Location: LEXINGTON, KY              Study Director: CHARLES SLACK  
Project ID:                                  Investigator: Charles H Slack  
    Sponsor Contact: RUSTY MITCHELL

#### Pest Type

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

#### Pest Code

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

#### Crop Code

GLXMA, BSOY, Glycine max, = US

#### Rating Unit

PERCENT = percent

#### ARM Action Codes

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

# Plant and Soil Science, U of KY Weed Science Research

## SOYBEAN PREMEERGENCE

Trial ID: S12021-2                      Protocol ID: FMC-ANTH-SB  
Location: LEXINGTON, KY              Study Director: CHARLES SLACK  
Project ID:                                      Investigator: Charles H 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:** 5-1-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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



# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG4232  
**BBCH Scale:** BSOY  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 2 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** SMOOTH smooth  
**Soil Moisture:** GOOD good

**Planting Date:** 5-1-2012  
**Rate, Unit:** 210000 S/A

**Soil Temperature, Unit:** 63 F  
**Emergence Date:** 5-6-2012

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

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

### Site and Design

**Plot Width, Unit:** 8.5 FT  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 374 FT<sup>2</sup>  
**Replications:** 3

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

### Soil Description

**Description Name:** MAURY

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

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP  
**Distance, Unit:** 2.25 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

	A	B	C
<b>Application Date:</b>	5-1-2012	5-21-2012	6-5-2012
<b>Time of Day:</b>	10 AM	11 AM	2 PM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	EP	LP
<b>Application Placement:</b>	BROSOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	65 F	70 F	70 F
<b>% Relative Humidity:</b>	40	60	60
<b>Wind Velocity, Unit:</b>	4 MPH	6 MPH	4 MPH
<b>Wind Direction:</b>	SW	WNW	NW
<b>Soil Temperature, Unit:</b>	63 F	66 F	65 F
<b>Soil Moisture:</b>	FAIR	GOOD	DRY
<b>% Cloud Cover:</b>	10	10	20
<b>Next Rain Occurred On:</b>	5-4-2012	5-28-2012	6-11-2012

### Crop Stage At Each Application

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA	BSOY GLXMA	BSOY GLXMA BSOY
<b>Height, Unit:</b>		4 IN	6 IN

### Pest Stage At Each Application

	A	B	C
<b>Pest 1 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W
<b>Height, Unit:</b>		2 IN	4 IN
<b>Pest 2 Code, Type, Scale:</b>	AMACH W	AMACH W	AMACH W
<b>Height, Unit:</b>		3 IN	5 IN
<b>Pest 3 Code, Type, Scale:</b>	CHEAL W	CHEAL W	CHEAL W
<b>Height, Unit:</b>		2 IN	4 IN
<b>Pest 4 Code, Type, Scale:</b>	IPOSS W	IPOSS W	IPOSS W
<b>Height, Unit:</b>		1 IN	2 IN

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

	A	B	C
<b>Appl. Equipment:</b>	ATV	ATV	ATV
<b>Equipment Type:</b>	ALTEVE	ALTEVE	ALTEVE
<b>Operation Pressure, Unit:</b>	30 PSI	30 PSI	30 PSI
<b>Nozzle Type:</b>	FLAT FAN	FLAT FAN	FLAT FAN
<b>Nozzle Size:</b>	8004 DG	8004 DG	8004 DG
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN	20 IN
<b>Boom Length, Unit:</b>	8.5 FT	8.5 FT	8.5 FT
<b>Boom Height, Unit:</b>	30 IN	30 IN	30 IN
<b>Ground Speed, Unit:</b>	4 MPH	4 MPH	4 MPH
<b>Carrier:</b>	WATER	WATER	WATER
<b>Spray Volume, Unit:</b>	24 GPA	24 GPA	24 GPA
<b>Mix Size, Unit:</b>	3 liters	3 liters	3 liters
<b>Propellant:</b>	CO2	CO2	CO2

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN III

Trial ID: S12022                      Protocol ID: SYN-HSC050A4  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: SCOTT CULLY

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	GLXMA				
BBCH Scale	BSOY				
Crop Scientific Name	Glycine max				
Crop Name	Soybean				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Growth Unit	Stage	1	2	3	4	5
1	PREFIX TOUCHDOWN TOTAL	2 pt/a		PRE 4"	0	99	99	99	63
2	BOUNDARY FLEXSTAR GT	1.5 pt/a		PRE 4"	0	99	99	99	83
	NIS	0.25 % v/v		4"					
	AMS	2.5 % v/v		4"					
3	SEQUENCE FLEXSTAR GT	2.5 pt/a		2 TRI 4"	0	99	99	99	91
	NIS	0.25 % v/v		4"					
	AMS	2.5 % v/v		4"					
4	BOUNDARY SEQUENCE FLEXSTAR GT	1.5 pt/a		PRE 2 TRI 4"	0	99	99	99	88
	NIS	0.25 % v/v		4"					
	AMS	2.5 % v/v		4"					
	LSD (P=.05)				0.0	0.0	0.0	0.0	37.3
	Standard Deviation				0.0	0.0	0.0	0.0	18.7
	CV				0.0	0.0	0.0	0.0	23.05
	Replicate F				0.000	0.000	0.000	0.000	1.134
	Replicate Prob(F)				1.0000	1.0000	1.0000	1.0000	0.3823
	Treatment F				0.000	0.000	0.000	0.000	1.296
	Treatment Prob(F)				1.0000	1.0000	1.0000	1.0000	0.3589

# 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	GLXMA								
BBCH Scale	BSOY								
Crop Scientific Name	Glycine max								
Crop Name	Soybean								
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1				
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK				
ARM Action Codes	P	P	P	P	P				
Number of Decimals	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Growth Unit	Stage	6	7	8	9	10
1	PREFIX TOUCHDOWN TOTAL	2 pt/a		PRE 4"	0	99	99	99	63
2	BOUNDARY FLEXSTAR GT	1.5 pt/a		PRE 4"	0	99	99	99	83
	NIS	3 pt/a		4"					
	AMS	0.25 % v/v		4"					
3	SEQUENCE FLEXSTAR GT	2.5 pt/a		2 TRI 4"	0	99	99	99	91
	NIS	3 pt/a		4"					
	AMS	0.25 % v/v		4"					
	AMS	2.5 % v/v		4"					
4	BOUNDARY SEQUENCE FLEXSTAR GT	1.5 pt/a		PRE 2 TRI 4"	0	99	99	99	88
	NIS	2.5 pt/a		4"					
	AMS	3 pt/a		4"					
	AMS	0.25 % v/v		4"					
	AMS	2.5 % v/v		4"					
	LSD (P=.05)				0.0	0.0	0.0	0.0	37.3
	Standard Deviation				0.0	0.0	0.0	0.0	18.7
	CV				0.0	0.0	0.0	0.0	23.05
	Replicate F				0.000	0.000	0.000	0.000	1.134
	Replicate Prob(F)				1.0000	1.0000	1.0000	1.0000	0.3823
	Treatment F				0.000	0.000	0.000	0.000	1.296
	Treatment Prob(F)				1.0000	1.0000	1.0000	1.0000	0.3589

# 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	GLXMA				
BBCH Scale	BSOY				
Crop Scientific Name	Glycine max				
Crop Name	Soybean				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Growth Unit	Stage	11	12	13	14	15
1	PREFIX TOUCHDOWN TOTAL	2 pt/a		PRE 4"	0	99	99	99	63
2	BOUNDARY FLEXSTAR GT	1.5 pt/a		PRE 4"	0	99	99	99	83
	NIS	0.25 % v/v		4"					
	AMS	2.5 % v/v		4"					
3	SEQUENCE FLEXSTAR GT	2.5 pt/a		2 TRI 4"	0	99	99	99	91
	NIS	0.25 % v/v		4"					
	AMS	2.5 % v/v		4"					
4	BOUNDARY SEQUENCE FLEXSTAR GT	1.5 pt/a		PRE 2 TRI 4"	0	99	99	99	88
	NIS	0.25 % v/v		4"					
	AMS	2.5 % v/v		4"					
	LSD (P=.05)				0.0	0.0	0.0	0.0	37.3
	Standard Deviation				0.0	0.0	0.0	0.0	18.7
	CV				0.0	0.0	0.0	0.0	23.05
	Replicate F				0.000	0.000	0.000	0.000	1.134
	Replicate Prob(F)				1.0000	1.0000	1.0000	1.0000	0.3823
	Treatment F				0.000	0.000	0.000	0.000	1.296
	Treatment Prob(F)				1.0000	1.0000	1.0000	1.0000	0.3589

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN III

Trial ID: S12022                      Protocol ID: SYN-HSC050A4  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
Project ID:                              Investigator: Charles H 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  
IPOSS, *Ipomoea* sp., = US  
ERICA, *Conyza canadensis*, = US

#### Crop Code

GLXMA, BSOY, *Glycine max*, = US

#### Rating Unit

PERCENT = percent

#### ARM Action Codes

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

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN III

Trial ID: S12022                      Protocol ID: SYN-HSC050A4  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
 Project ID:                              Investigator: Charles H 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:** 4-30-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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



# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232  
**BBCH Scale:** BSOY  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDUIM  
**Soil Moisture:** NORMAL normal, adequate

**Planting Date:** 4-30-2012  
**Rate, Unit:** 210000 S/A

**Soil Temperature, Unit:** 69 F  
**Emergence Date:** 5-5-2012

### 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

### Site and Design

**Plot Width, Unit:** 8.5 FT  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 374 FT2  
**Replications:** 3

**Site Type:** FIELD field  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOBL Randomized Complete Block (RCB)

### Soil Description

**Description Name:** LANTON

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

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

# Plant and Soil Science, U of KY Weed Science Research

## Application Description

	A	B	C
<b>Application Date:</b>	4-30-2012	5-24-2012	6-5-2012
<b>Time of Day:</b>	9 PM	1 PM	2 PM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	2 TRI	4"
<b>Application Placement:</b>	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	70 F	82 F	70 F
<b>% Relative Humidity:</b>	30	60	65
<b>Wind Velocity, Unit:</b>	6 MPH	6 MPH	4 MPH
<b>Wind Direction:</b>	SW	S	SE
<b>Soil Temperature, Unit:</b>	69 F	75 F	73 F
<b>Soil Moisture:</b>	NORMAL	DRY	GOOD
<b>% Cloud Cover:</b>	20	30	10
<b>Next Rain Occurred On:</b>	5-1-2012	5-28-2012	6-11-2012

## Crop Stage At Each Application

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA	BSOY	GLXMA BSOY
<b>Stage Scale Used:</b>		BBCH	
<b>Stage Majority, Percent:</b>		2 TRI	85
<b>Height, Unit:</b>		6 IN	8 IN

## Pest Stage At Each Application

	A	B	C
<b>Pest 1 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W
<b>Height, Unit:</b>		2 IN	2 IN
<b>Pest 2 Code, Type, Scale:</b>	AMBTR W	AMBTR W	AMBTR W
<b>Height, Unit:</b>		3 IN	4 IN
<b>Pest 3 Code, Type, Scale:</b>	IPOSS W	IPOSS W	IPOSS W
<b>Height, Unit:</b>		2 IN	3 IN
<b>Pest 4 Code, Type, Scale:</b>	ERICA W	ERICA W	ERICA W
<b>Height, Unit:</b>		2 IN	3 IN

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

	A	B	C
<b>Appl. Equipment:</b>	ATV	ATV	ATV
<b>Equipment Type:</b>	ALTEVE	ALTEVE	ALTEVE
<b>Operation Pressure, Unit:</b>	30 PSI	30 PSI	30 PSI
<b>Nozzle Type:</b>	FLAT FAN	FLAT FAN	FLAT FAN
<b>Nozzle Size:</b>	8004 DG	8004 DG	8004 DG
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN	20 IN
<b>Boom Length, Unit:</b>	8.5 FT	8.5 FT	8.5 FT
<b>Boom Height, Unit:</b>	30 IN	30 IN	30 IN
<b>Ground Speed, Unit:</b>	4 MPH	4 MPH	4 MPH
<b>Carrier:</b>	WATER	WATER	WATER
<b>Spray Volume, Unit:</b>	24 GPA	24 GPA	24 GPA
<b>Mix Size, Unit:</b>	3 liters	3 liters	3 liters
<b>Propellant:</b>	CO2	CO2	CO2

Date	By	Notes
4-30-2012	SARA CARTER	ENTIRE TRIAL OVERSPRAYED WITH GLYPHOSATE



# 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		SETFA
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi
Pest Name	Giant foxtail	Giant ragweed	Morning glory		Giant foxtail
Crop Code				GLXMA	
BBCH Scale				BSOY	
Crop Scientific Name				Glycine max	
Crop Name				Soybean	
Rating Date					
Rating Type	CONTROL	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.					
Plant-Eval Interval					
Days After Emergence					
ARM Action Codes					
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	6	7	8	9	10
1	PREFIX	2 pt/a	PRE	99	99	99	0	99
	TOUCHDOWN TOTAL	24 oz/a	4"					
2	BOUNDARY	1.5 pt/a	PRE	99	99	99	0	99
	FLEXSTAR GT	3 pt/a	4"					
	NIS	0.25 % v/v	4"					
	AMS	2.5 % v/v	4"					
3	SEQUENCE	2.5 pt/a	2 TRI	99	99	99	0	99
	FLEXSTAR GT	3 pt/a	4"					
	NIS	0.25 % v/v	4"					
	AMS	2.5 % v/v	4"					
4	BOUNDARY	1.5 pt/a	PRE	99	99	99	0	99
	SEQUENCE	2.5 pt/a	2 TRI					
	FLEXSTAR GT	3 pt/a	4"					
	NIS	0.25 % v/v	4"					
	AMS	2.5 % v/v	4"					
	LSD (P=.05)			0.0	0.0	0.0	0.0	0.0
	Standard Deviation			0.0	0.0	0.0	0.0	0.0
	CV			0.0	0.0	0.0	0.0	0.0
	Replicate F			0.000	0.000	0.000	0.000	0.000
	Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000
	Treatment F			0.000	0.000	0.000	0.000	0.000
	Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	
Pest Name	Giant ragweed	Morning glory	
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Rating Date			10-11-2012
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			154 119
Plant-Eval Interval			154 DP-1
Days After Emergence			147 DE-1
ARM Action Codes			TY1
Number of Decimals	0	0	1

Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	11	12	16
1 PREFIX	2 pt/a	PRE	99	99	24.9
TOUCHDOWN TOTAL	24 oz/a	4"			
2 BOUNDARY	1.5 pt/a	PRE	99	99	24.1
FLEXSTAR GT	3 pt/a	4"			
NIS	0.25 % v/v	4"			
AMS	2.5 % v/v	4"			
3 SEQUENCE	2.5 pt/a	2 TRI	99	99	26.9
FLEXSTAR GT	3 pt/a	4"			
NIS	0.25 % v/v	4"			
AMS	2.5 % v/v	4"			
4 BOUNDARY	1.5 pt/a	PRE	99	99	27.9
SEQUENCE	2.5 pt/a	2 TRI			
FLEXSTAR GT	3 pt/a	4"			
NIS	0.25 % v/v	4"			
AMS	2.5 % v/v	4"			
LSD (P=.05)			0.0	0.0	4.67
Standard Deviation			0.0	0.0	2.92
CV			0.0	0.0	11.26
Replicate F			0.000	0.000	2.102
Replicate Prob(F)			1.0000	1.0000	0.1703
Treatment F			0.000	0.000	1.415
Treatment Prob(F)			1.0000	1.0000	0.3011

# Plant and Soil Science, U of KY

## Weed Science Research

### SOYBEAN POSTEMERGENCE

Trial ID: S12022-2                      Protocol ID: SYN-HSC050A4  
Location: LEXINGTON, KY              Study Director: CHARLES SLACK  
Project ID:                                  Investigator: Charles H 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  
IPOSS, Ipomoea sp., = US

#### Crop Code

GLXMA, BSOY, Glycine max, = US

#### Rating Type

YIELD = yield

#### Rating Unit

PERCENT = percent  
BU = bushel

#### Plant-Eval Interval

154 DP-1 = 1 GLXMA 5-10-2012

#### ARM Action Codes

TY1 =  $5.185714 * [14] * (100 - [15]) / 87$

# Plant and Soil Science, U of KY

## Weed Science Research

### SOYBEAN POSTEMERGENCE

Trial ID: S12022-2      Protocol ID: SYN-HSC050A4  
 Location: LEXINGTON, KY      Study Director: CHARLES SLACK  
 Project ID:      Investigator: Charles H 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:** 5-10-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747      **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747      **Mobile No.:** 859-227-3355

### Other Personnel

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



# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232  
**BBCH Scale:** BSOY  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** SMOOTH smooth  
**Soil Moisture:** GOOD good  
**Harvest Date:** 10-11-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 13.0

**Planting Date:** 5-10-2012  
**Rate, Unit:** 190000 S/A  
**Soil Temperature, Unit:** 62 F  
**Emergence Date:** 5-17-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 28 FT

### Pest Description

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

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

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

### Site and Design

**Plot Width, Unit:** 10 FT **Site Type:** FIELD field  
**Plot Length, Unit:** 33 FT  
**Plot Area, Unit:** 330 FT<sup>2</sup> **Tillage Type:** CONTIL conventional-till  
**Replications:** 4 **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:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2.25 MI

# Plant and Soil Science, U of KY Weed Science Research

## Application Description

	A	B	C
<b>Application Date:</b>	5-10-2012	6-5-2012	6-14-2012
<b>Time of Day:</b>	2 PM	1 PM	4 PM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	2 TRI	4"W
<b>Application Placement:</b>	BROSOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	65 F	70 F	80 F
<b>% Relative Humidity:</b>	60	65	30
<b>Wind Velocity, Unit:</b>	4 MPH	3 MPH	6 MPH
<b>Wind Direction:</b>	SE	SSW	E
<b>Soil Temperature, Unit:</b>	62 F	66 F	69 F
<b>Soil Moisture:</b>	GOOD	GOOD	NORMAL
<b>% Cloud Cover:</b>	20	15	10
<b>Next Rain Occurred On:</b>	5-12-2012	6-11-2012	6-17-2012

## Crop Stage At Each Application

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA	BSOY	GLXMA BSOY
<b>Stage Scale Used:</b>		BBCH	
<b>Stage Majority, Percent:</b>		2 TRI 85	
<b>Height, Unit:</b>		8 IN	10 IN

## Pest Stage At Each Application

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

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



# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type		W Weed	W Weed	W Weed
Pest Code		STEME	LAMAM	ERICA
Pest Scientific Name		Stellaria media	Lamium amplexi>	Conyza canadens>
Pest Name		Common chickwe>	Henbit	Marestail
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Description		EPP/PRE	EPP/PRE	EPP/PRE
Rating Type		CONTROL	CONTROL	CONTROL
Rating Unit		PERCENT	PERCENT	PERCENT
Number of Subsamples		1	1	1
Rating Timing		2 WEEK	2 WEEK	2 WEEK
ARM Action Codes				
Number of Decimals		0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	1	2
			3	
5 ENVIVE	3.5 oz/a	PRE	99	99
GRAMOXONE INTEON	48 fl oz/a	PRE		
NIS	0.25 % v/v	PRE		
ROUNDUP POWERMAX	22 fl oz/a	MP		
PREFIX	32 fl oz/a	MP		
6 CANOPY	6 oz/a	PRE	99	99
GRAMOXONE INTEON	48 fl oz/a	PRE		
NIS	0.25 % v/v	PRE		
ROUNDUP POWERMAX	22 fl oz/a	MP		
PREFIX	32 fl oz/a	MP		
7 CANOPY	4 oz/a	PRE	99	99
GRAMOXONE INTEON	48 fl oz/a	PRE		
CINCH	16 fl oz/a	PRE		
NIS	0.25 % v/v	PRE		
ROUNDUP POWERMAX	22 fl oz/a	MP		
PREFIX	32 fl oz/a	MP		
LSD (P=.05)			0.0	0.0
Standard Deviation			0.0	0.0
CV			0.0	0.0
Replicate F			0.000	0.000
Replicate Prob(F)			1.0000	1.0000
Treatment F			0.000	0.000
Treatment Prob(F)			1.0000	1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMAM	SETFA	AMBTR
Pest Scientific Name	Stellaria media	Lamium amplexi>	Setaria faberi	Ambrosia trifi>
Pest Name	Common chickwe>	Henbit	Giant foxtail	Giant ragweed
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Description	AT PLANTING	AT PLANTING	AT PLANTING	AT PLANTING
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt	Treatment	Rate	Growth	4	5	6	7
No.	Name	Rate Unit	Stage				
1	LEADOFF	1.5 oz/a	30D EPP	99	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP				
	WEEDONE LV4	2 pt/a	30D EPP				
	GRAMOXONE INTEON	48 fl oz/a	PRE				
	ENVIVE	3.5 oz/a	PRE				
	NIS	0.25 % v/v	PRE				
	ROUNDUP POWERMAX	22 fl oz/a	MP				
	PREFIX	32 fl oz/a	MP				
2	CANOPY EX	1.5 oz/a	30D EPP	99	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP				
	WEEDONE LV4	2 pt/a	30D EPP				
	GRAMOXONE INTEON	48 fl oz/a	PRE				
	ENVIVE	3.5 oz/a	PRE				
	NIS	0.25 % v/v	PRE				
	ROUNDUP POWERMAX	22 fl oz/a	MP				
	PREFIX	32 fl oz/a	MP				
3	ENVIVE	3.5 oz/a	30D EPP	99	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP				
	WEEDONE LV4	2 pt/a	30D EPP				
	GRAMOXONE INTEON	48 fl oz/a	PRE				
	CINCH	16 fl oz/a	PRE				
	NIS	0.25 % v/v	PRE				
	ROUNDUP POWERMAX	22 fl oz/a	MP				
	PREFIX	32 fl oz/a	MP				
4	FIRSTSHOT		30D EPP	99	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP				
	WEEDONE LV4	2 pt/a	30D EPP				
	GRAMOXONE INTEON	48 fl oz/a	PRE				
	ENVIVE	3.5 oz/a	PRE				
	NIS	0.25 % v/v	PRE				
	ROUNDUP POWERMAX	22 fl oz/a	MP				
	PREFIX	32 fl oz/a	MP				

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMAM	SETFA	AMBTR
Pest Scientific Name	Stellaria media	Lamium amplexi>	Setaria faberi	Ambrosia trifi>
Pest Name	Common chickwe>	Henbit	Giant foxtail	Giant ragweed
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Description	AT PLANTING	AT PLANTING	AT PLANTING	AT PLANTING
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	4	5
5 ENVIVE	3.5 oz/a	PRE	99	99
GRAMOXONE INTEON	48 fl oz/a	PRE		
NIS	0.25 % v/v	PRE		
ROUNDUP POWERMAX	22 fl oz/a	MP		
PREFIX	32 fl oz/a	MP		
6 CANOPY	6 oz/a	PRE	99	99
GRAMOXONE INTEON	48 fl oz/a	PRE		
NIS	0.25 % v/v	PRE		
ROUNDUP POWERMAX	22 fl oz/a	MP		
PREFIX	32 fl oz/a	MP		
7 CANOPY	4 oz/a	PRE	99	99
GRAMOXONE INTEON	48 fl oz/a	PRE		
CINCH	16 fl oz/a	PRE		
NIS	0.25 % v/v	PRE		
ROUNDUP POWERMAX	22 fl oz/a	MP		
PREFIX	32 fl oz/a	MP		
LSD (P=.05)			0.0	0.0
Standard Deviation			0.0	0.0
CV			0.0	0.0
Replicate F			0.000	0.000
Replicate Prob(F)			1.0000	1.0000
Treatment F			0.000	0.000
Treatment Prob(F)			1.0000	1.0000

# 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			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Description	AT PLANTING	AT PLANTING	AFTER PLANTING
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	4 WEEK	4 WEEK	2 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	8	9	10
1	LEADOFF	1.5 oz/a	30D EPP	99	99	0
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP			
	WEEDONE LV4	2 pt/a	30D EPP			
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	ENVIVE	3.5 oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
2	CANOPY EX	1.5 oz/a	30D EPP	99	99	0
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP			
	WEEDONE LV4	2 pt/a	30D EPP			
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	ENVIVE	3.5 oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
3	ENVIVE	3.5 oz/a	30D EPP	99	99	0
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP			
	WEEDONE LV4	2 pt/a	30D EPP			
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	CINCH	16 fl oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
4	FIRSTSHOT		30D EPP	99	99	0
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP			
	WEEDONE LV4	2 pt/a	30D EPP			
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	ENVIVE	3.5 oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			



# 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			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Description	AT PLANTING	AT PLANTING AFTER PLANTING	
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	4 WEEK	4 WEEK	2 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	8	9	10
5	ENVIVE	3.5 oz/a	PRE	99	99	0
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
6	CANOPY	6 oz/a	PRE	99	99	0
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
7	CANOPY	4 oz/a	PRE	99	99	0
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	CINCH	16 fl oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
	LSD (P=.05)			0.0	0.0	0.0
	Standard Deviation			0.0	0.0	0.0
	CV			0.0	0.0	0.0
	Replicate F			0.000	0.000	0.000
	Replicate Prob(F)			1.0000	1.0000	1.0000
	Treatment F			0.000	0.000	0.000
	Treatment Prob(F)			1.0000	1.0000	1.0000

# 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			
Description	AFTER PLANTING	AFTER PLANTING	AFTER PLANTING
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt	Treatment	Rate	Growth			
No.	Name	Rate Unit	Stage	11	12	13
1	LEADOFF	1.5 oz/a	30D EPP	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP			
	WEEDONE LV4	2 pt/a	30D EPP			
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	ENVIVE	3.5 oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
2	CANOPY EX	1.5 oz/a	30D EPP	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP			
	WEEDONE LV4	2 pt/a	30D EPP			
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	ENVIVE	3.5 oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
3	ENVIVE	3.5 oz/a	30D EPP	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP			
	WEEDONE LV4	2 pt/a	30D EPP			
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	CINCH	16 fl oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
4	FIRSTSHOT		30D EPP	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP			
	WEEDONE LV4	2 pt/a	30D EPP			
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	ENVIVE	3.5 oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/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 trifid	Ipomoea sp.		
Pest Name		Giant foxtail	Giant ragweed	Morning glory		
Crop Code						
BBCH Scale						
Crop Scientific Name						
Crop Name						
Description		AFTER PLANTING	AFTER PLANTING	AFTER PLANTING		
Rating Type		CONTROL	CONTROL	CONTROL		
Rating Unit		PERCENT	PERCENT	PERCENT		
Number of Subsamples		1	1	1		
Rating Timing		2 WEEK	2 WEEK	2 WEEK		
ARM Action Codes		P	P	P		
Number of Decimals		0	0	0		
Trt No.	Treatment Name	Rate	Growth Stage	11	12	13
5	ENVIVE	3.5 oz/a	PRE	99	99	99
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
6	CANOPY	6 oz/a	PRE	99	99	99
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
7	CANOPY	4 oz/a	PRE	99	99	99
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	CINCH	16 fl oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
	LSD (P=.05)			0.0	0.0	0.0
	Standard Deviation			0.0	0.0	0.0
	CV			0.0	0.0	0.0
	Replicate F			0.000	0.000	0.000
	Replicate Prob(F)			1.0000	1.0000	1.0000
	Treatment F			0.000	0.000	0.000
	Treatment Prob(F)			1.0000	1.0000	1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed
Pest Code	ERICA	SETFA
Pest Scientific Name	Conyza canadens>	Setaria faberi
Pest Name	Marestail	Giant foxtail
Crop Code		GLXMA
BBCH Scale		BSOY
Crop Scientific Name		Glycine max
Crop Name		Soybean
Description	AFTER PLANTING	AFTER PLANTING
Rating Type	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT
Number of Subsamples	1	1
Rating Timing	2 WEEK	4 WEEK
ARM Action Codes	P	P
Number of Decimals	0	0

Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	14	15	16
1 LEADOFF	1.5 oz/a	30D EPP			
ROUNDUP POWERMAX	22 fl oz/a	30D EPP	99	0	99
WEEDONE LV4	2 pt/a	30D EPP			
GRAMOXONE INTEON	48 fl oz/a	PRE			
ENVIVE	3.5 oz/a	PRE			
NIS	0.25 % v/v	PRE			
ROUNDUP POWERMAX	22 fl oz/a	MP			
PREFIX	32 fl oz/a	MP			
2 CANOPY EX	1.5 oz/a	30D EPP	99	0	99
ROUNDUP POWERMAX	22 fl oz/a	30D EPP			
WEEDONE LV4	2 pt/a	30D EPP			
GRAMOXONE INTEON	48 fl oz/a	PRE			
ENVIVE	3.5 oz/a	PRE			
NIS	0.25 % v/v	PRE			
ROUNDUP POWERMAX	22 fl oz/a	MP			
PREFIX	32 fl oz/a	MP			
3 ENVIVE	3.5 oz/a	30D EPP	99	0	99
ROUNDUP POWERMAX	22 fl oz/a	30D EPP			
WEEDONE LV4	2 pt/a	30D EPP			
GRAMOXONE INTEON	48 fl oz/a	PRE			
CINCH	16 fl oz/a	PRE			
NIS	0.25 % v/v	PRE			
ROUNDUP POWERMAX	22 fl oz/a	MP			
PREFIX	32 fl oz/a	MP			
4 FIRSTSHOT		30D EPP	99	0	99
ROUNDUP POWERMAX	22 fl oz/a	30D EPP			
WEEDONE LV4	2 pt/a	30D EPP			
GRAMOXONE INTEON	48 fl oz/a	PRE			
ENVIVE	3.5 oz/a	PRE			
NIS	0.25 % v/v	PRE			
ROUNDUP POWERMAX	22 fl oz/a	MP			
PREFIX	32 fl oz/a	MP			

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed
Pest Code	ERICA	SETFA
Pest Scientific Name	<i>Conyza canadensis</i>	<i>Setaria faberii</i>
Pest Name	Marestail	Giant foxtail
Crop Code		GLXMA
BBCH Scale		BSOY
Crop Scientific Name		Glycine max
Crop Name		Soybean
Description	AFTER PLANTING	AFTER PLANTING
Rating Type	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT
Number of Subsamples	1	1
Rating Timing	2 WEEK	4 WEEK
ARM Action Codes	P	P
Number of Decimals	0	0

Trt No.	Treatment Name	Rate	Growth Stage	14	15	16
5	ENVIVE	3.5 oz/a	PRE	99	0	99
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
6	CANOPY	6 oz/a	PRE	99	0	99
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
7	CANOPY	4 oz/a	PRE	99	0	99
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	CINCH	16 fl oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
	LSD (P=.05)			0.0	0.0	0.0
	Standard Deviation			0.0	0.0	0.0
	CV			0.0	0.0	0.0
	Replicate F			0.000	0.000	0.000
	Replicate Prob(F)			1.0000	1.0000	1.0000
	Treatment F			0.000	0.000	0.000
	Treatment Prob(F)			1.0000	1.0000	1.0000

# 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 canadens>
Pest Name	Giant ragweed	Morning glory	Marestail
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Description	AFTER PLANTING	AFTER PLANTING	AFTER PLANTING
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	4 WEEK	4 WEEK	4 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt	Treatment	Rate	Growth	17	18	19
No.	Name	Rate Unit	Stage			
1	LEADOFF	1.5 oz/a	30D EPP	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP			
	WEEDONE LV4	2 pt/a	30D EPP			
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	ENVIVE	3.5 oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
2	CANOPY EX	1.5 oz/a	30D EPP	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP			
	WEEDONE LV4	2 pt/a	30D EPP			
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	ENVIVE	3.5 oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
3	ENVIVE	3.5 oz/a	30D EPP	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP			
	WEEDONE LV4	2 pt/a	30D EPP			
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	CINCH	16 fl oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
4	FIRSTSHOT		30D EPP	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP			
	WEEDONE LV4	2 pt/a	30D EPP			
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	ENVIVE	3.5 oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/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				
Description		AFTER PLANTING	AFTER PLANTING	AFTER PLANTING
Rating Type		CONTROL	CONTROL	CONTROL
Rating Unit		PERCENT	PERCENT	PERCENT
Number of Subsamples		1	1	1
Rating Timing		4 WEEK	4 WEEK	4 WEEK
ARM Action Codes		P	P	P
Number of Decimals		0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	17	18
				19
5 ENVIVE	3.5 oz/a	PRE	99	99
GRAMOXONE INTEON	48 fl oz/a	PRE		
NIS	0.25 % v/v	PRE		
ROUNDUP POWERMAX	22 fl oz/a	MP		
PREFIX	32 fl oz/a	MP		
6 CANOPY	6 oz/a	PRE	99	99
GRAMOXONE INTEON	48 fl oz/a	PRE		
NIS	0.25 % v/v	PRE		
ROUNDUP POWERMAX	22 fl oz/a	MP		
PREFIX	32 fl oz/a	MP		
7 CANOPY	4 oz/a	PRE	99	99
GRAMOXONE INTEON	48 fl oz/a	PRE		
CINCH	16 fl oz/a	PRE		
NIS	0.25 % v/v	PRE		
ROUNDUP POWERMAX	22 fl oz/a	MP		
PREFIX	32 fl oz/a	MP		
LSD (P=.05)			0.0	0.0
Standard Deviation			0.0	0.0
CV			0.0	0.0
Replicate F			0.000	0.000
Replicate Prob(F)			1.0000	1.0000
Treatment F			0.000	0.000
Treatment Prob(F)			1.0000	1.0000

# 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 trifida
Pest Name		Giant foxtail	Giant ragweed
Crop Code	GLXMA		
BBCH Scale	BSOY		
Crop Scientific Name	Glycine max		
Crop Name	Soybean		
Description	AFTER PLANTING	AFTER PLANTING	AFTER PLANTING
Rating Type	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	20	21	22	
1 LEADOFF	1.5 oz/a	30D EPP				
ROUNDUP POWERMAX	22 fl oz/a	30D EPP	0	99	99	
WEEDONE LV4	2 pt/a	30D EPP				
GRAMOXONE INTEON	48 fl oz/a	PRE				
ENVIVE	3.5 oz/a	PRE				
NIS	0.25 % v/v	PRE				
ROUNDUP POWERMAX	22 fl oz/a	MP				
PREFIX	32 fl oz/a	MP				
2 CANOPY EX	1.5 oz/a	30D EPP	0	99	99	
ROUNDUP POWERMAX	22 fl oz/a	30D EPP				
WEEDONE LV4	2 pt/a	30D EPP				
GRAMOXONE INTEON	48 fl oz/a	PRE				
ENVIVE	3.5 oz/a	PRE				
NIS	0.25 % v/v	PRE				
ROUNDUP POWERMAX	22 fl oz/a	MP				
PREFIX	32 fl oz/a	MP				
3 ENVIVE	3.5 oz/a	30D EPP	0	99	99	
ROUNDUP POWERMAX	22 fl oz/a	30D EPP				
WEEDONE LV4	2 pt/a	30D EPP				
GRAMOXONE INTEON	48 fl oz/a	PRE				
CINCH	16 fl oz/a	PRE				
NIS	0.25 % v/v	PRE				
ROUNDUP POWERMAX	22 fl oz/a	MP				
PREFIX	32 fl oz/a	MP				
4 FIRSTSHOT		30D EPP	0	99	99	
ROUNDUP POWERMAX	22 fl oz/a	30D EPP				
WEEDONE LV4	2 pt/a	30D EPP				
GRAMOXONE INTEON	48 fl oz/a	PRE				
ENVIVE	3.5 oz/a	PRE				
NIS	0.25 % v/v	PRE				
ROUNDUP POWERMAX	22 fl oz/a	MP				
PREFIX	32 fl oz/a	MP				



# 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					
Description	AFTER PLANTING	AFTER PLANTING	AFTER PLANTING			
Rating Type	INJURY	CONTROL	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT			
Number of Subsamples	1	1	1			
Rating Timing	8 WEEK	8 WEEK	8 WEEK			
ARM Action Codes	P	P	P			
Number of Decimals	0	0	0			
Trt No.	Treatment Name	Rate	Growth Stage	20	21	22
5	ENVIVE	3.5 oz/a	PRE	0	99	99
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
6	CANOPY	6 oz/a	PRE	0	99	99
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
7	CANOPY	4 oz/a	PRE	0	99	99
	GRAMOXONE INTEON	48 fl oz/a	PRE			
	CINCH	16 fl oz/a	PRE			
	NIS	0.25 % v/v	PRE			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	PREFIX	32 fl oz/a	MP			
LSD (P=.05)				0.0	0.0	0.0
Standard Deviation				0.0	0.0	0.0
CV				0.0	0.0	0.0
Replicate F				0.000	0.000	0.000
Replicate Prob(F)				1.0000	1.0000	1.0000
Treatment F				0.000	0.000	0.000
Treatment Prob(F)				1.0000	1.0000	1.0000

# 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 canadens
Pest Name	Morning glory	Marestail
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description	AFTER PLANTING	AFTER PLANTING
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
Number of Subsamples	1	1
Rating Timing	8 WEEK	8 WEEK
ARM Action Codes	P	P
Number of Decimals	0	0

Trt No.	Treatment Name	Rate	Growth Stage	23	24
1	LEADOFF	1.5 oz/a	30D EPP	99	99
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP		
	WEEDONE LV4	2 pt/a	30D EPP		
	GRAMOXONE INTEON	48 fl oz/a	PRE		
	ENVIVE	3.5 oz/a	PRE		
	NIS	0.25 % v/v	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	MP		
	PREFIX	32 fl oz/a	MP		
2	CANOPY EX	1.5 oz/a	30D EPP	99	99
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP		
	WEEDONE LV4	2 pt/a	30D EPP		
	GRAMOXONE INTEON	48 fl oz/a	PRE		
	ENVIVE	3.5 oz/a	PRE		
	NIS	0.25 % v/v	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	MP		
	PREFIX	32 fl oz/a	MP		
3	ENVIVE	3.5 oz/a	30D EPP	99	99
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP		
	WEEDONE LV4	2 pt/a	30D EPP		
	GRAMOXONE INTEON	48 fl oz/a	PRE		
	CINCH	16 fl oz/a	PRE		
	NIS	0.25 % v/v	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	MP		
	PREFIX	32 fl oz/a	MP		
4	FIRSTSHOT		30D EPP	99	99
	ROUNDUP POWERMAX	22 fl oz/a	30D EPP		
	WEEDONE LV4	2 pt/a	30D EPP		
	GRAMOXONE INTEON	48 fl oz/a	PRE		
	ENVIVE	3.5 oz/a	PRE		
	NIS	0.25 % v/v	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	MP		
	PREFIX	32 fl oz/a	MP		

# 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		
Description	AFTER PLANTING	AFTER PLANTING
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
Number of Subsamples	1	1
Rating Timing	8 WEEK	8 WEEK
ARM Action Codes	P	P
Number of Decimals	0	0

Trt No.	Treatment Name	Rate	Growth Stage	23	24
5	ENVIVE	3.5 oz/a	PRE	99	99
	GRAMOXONE INTEON	48 fl oz/a	PRE		
	NIS	0.25 % v/v	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	MP		
	PREFIX	32 fl oz/a	MP		
6	CANOPY	6 oz/a	PRE	99	99
	GRAMOXONE INTEON	48 fl oz/a	PRE		
	NIS	0.25 % v/v	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	MP		
	PREFIX	32 fl oz/a	MP		
7	CANOPY	4 oz/a	PRE	99	99
	GRAMOXONE INTEON	48 fl oz/a	PRE		
	CINCH	16 fl oz/a	PRE		
	NIS	0.25 % v/v	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	MP		
	PREFIX	32 fl oz/a	MP		
	LSD (P=.05)			0.0	0.0
	Standard Deviation			0.0	0.0
	CV			0.0	0.0
	Replicate F			0.000	0.000
	Replicate Prob(F)			1.0000	1.0000
	Treatment F			0.000	0.000
	Treatment Prob(F)			1.0000	1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN EARLY PREPLANT

Trial ID: S12023                      Protocol ID: DUPONT-USA-12-907  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK & SARA CARTER  
Project ID:                              Investigator: Charles H Slack  
Sponsor Contact: DAN SMITH

#### Pest Type

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

#### Pest Code

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

#### Crop Code

GLXMA, BSOY, *Glycine max*, = US

#### Rating Unit

PERCENT = percent

#### ARM Action Codes

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

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN EARLY PREPLANT

Trial ID: S12023                      Protocol ID: DUPONT-USA-12-907  
 Location: LEXINGTON, KY        Study Director: CHARLES SLACK & SARA CARTER  
 Project ID:                            Investigator: Charles H Slack  
    Sponsor Contact: DAN SMITH

### 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:** 4-3-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232  
**BBCH Scale:** BSOY  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** GOOD good

**Planting Date:** 4-30-2012  
**Rate, Unit:** 210000 S/A

**Soil Temperature, Unit:** 68 F  
**Emergence Date:** 5-5-2012

### 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:** Marestalk

**Pest 4 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 5 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest 6 Type:** W **Code:** IPOSS *Ipomoea sp.*  
**Common Name:** Morning glory

### Site and Design

**Plot Width, Unit:** 7 FT  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 308 FT<sup>2</sup>  
**Replications:** 3

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

### Soil Description

**Description Name:** LANTON

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

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP  
**Distance, Unit:** 2 MI

# Plant and Soil Science, U of KY Weed Science Research

## Application Description

	A	B	C
<b>Application Date:</b>	4-3-2012	4-30-2012	6-5-2012
<b>Time of Day:</b>	4 PM	1 PM	3 PM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	30D EPP	PRE	MP
<b>Application Placement:</b>	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	80 F	78 F	72 F
<b>% Relative Humidity:</b>	50	65	45
<b>Wind Velocity, Unit:</b>	3 MPH	4 MPH	4 MPH
<b>Wind Direction:</b>	SW	SW	SE
<b>Soil Temperature, Unit:</b>	67 F	70 F	73 F
<b>Soil Moisture:</b>	GOOD	GOOD	GOOD
<b>% Cloud Cover:</b>	10	20	20
<b>Next Rain Occurred On:</b>	4-4-2012	5-1-2012	6-11-2012

## Crop Stage At Each Application

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA	BSOY GLXMA	BSOY GLXMA BSOY
<b>Height, Unit:</b>		8	IN

## Pest Stage At Each Application

	A	B	C
<b>Pest 1 Code, Type, Scale:</b>	STEME W	STEME W	STEME W
<b>Height, Unit:</b>	3 IN	4 IN	
<b>Pest 2 Code, Type, Scale:</b>	LAMAM W	LAMAM W	LAMAM W
<b>Height, Unit:</b>	3 IN	4 IN	
<b>Pest 3 Code, Type, Scale:</b>	ERICA W	ERICA W	ERICA W
<b>Height, Unit:</b>	2 IN	3 IN	4 IN
<b>Pest 4 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W
<b>Height, Unit:</b>		1 IN	3 IN
<b>Pest 5 Code, Type, Scale:</b>	AMBTR W	AMBTR W	AMBTR W
<b>Height, Unit:</b>		2 IN	4 IN
<b>Pest 6 Code, Type, Scale:</b>	IPOSS W	IPOSS W	IPOSS W
<b>Height, Unit:</b>		1 IN	2

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

	A	B	C
<b>Appl. Equipment:</b>	ATV	ATV	ATV
<b>Equipment Type:</b>	ALTEVE	ALTEVE	ALTEVE
<b>Operation Pressure, Unit:</b>	30 PSI	30 PSI	30 PSI
<b>Nozzle Type:</b>	FLAT FAN	FLAT FAN	FLAT FAN
<b>Nozzle Size:</b>	8004 DG	8004 DG	8004 DG
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN	20 IN
<b>Boom Length, Unit:</b>	6.67 FT	6.67 FT	6.67 FT
<b>Boom Height, Unit:</b>	30 IN	30 IN	30 IN
<b>Ground Speed, Unit:</b>	4 MPH	4 MPH	4 MPH
<b>Carrier:</b>	WATER	WATER	WATER
<b>Spray Volume, Unit:</b>	24 GPA	24 GPA	24 GPA
<b>Mix Size, Unit:</b>	2 liters	2 liters	2 liters
<b>Propellant:</b>	CO2	CO2	CO2





# 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	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Description	AFTER APPL	AFTER APPL	AFTER APPL	AFTER APPL
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt	Treatment	Rate	Growth	6	7	8	9	10
No.	Name	Rate Unit	Stage					
1	UNTREATED			0	0	0	0	0
2	COBRA	10 fl oz/a	EP	0	99	99	99	80
	COC	1 pt/a	EP					
3	COBRA	12 fl oz/a	EP	0	99	99	99	73
	COC	1 pt/a	EP					
4	COBRA	10 fl oz/a	EP	0	99	99	99	73
	V-10206	1.5 oz wt/a	EP					
	COC	1 pt/a	EP					
5	COBRA	12 fl oz/a	EP	0	99	99	99	77
	V-10206	1.8 oz wt/a	EP					
	COC	1 pt/a	EP					
6	PREFIX	1.5 pt/a	EP	0	99	99	99	76
	COC	1 pt/a	EP					
7	COBRA	10 fl oz/a	LP	10	99	99	99	83
	COC	1 pt/a	LP					
8	COBRA	12 fl oz/a	LP	10	99	99	99	83
	COC	1 pt/a	LP					
9	COBRA	10 fl oz/a	LP	7	99	99	99	86
	V-10206	1.5 oz wt/a	LP					
	COC	1 pt/a	LP					
10	COBRA	12 fl oz/a	LP	10	99	99	99	87
	V-10206	1.8 oz wt/a	LP					
	COC	1 pt/a	LP					
11	PREFIX	1.5 pt/a	LP	0	99	99	99	89
	COC	1 pt/a	LP					
LSD (P=.05)				3.0	0.0	0.0	0.0	16.6
Standard Deviation				1.7	0.0	0.0	0.0	9.7
CV				52.22	0.0	0.0	0.0	13.28
Replicate F				1.000	0.000	0.000	0.000	0.783
Replicate Prob(F)				0.3855	1.0000	1.0000	1.0000	0.4707
Treatment F				22.000	0.000	0.000	0.000	19.688
Treatment Prob(F)				0.0001	1.0000	1.0000	1.0000	0.0001

# 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	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Description	AFTER APPL	AFTER APPL	AFTER APPL	AFTER APPL
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt	Treatment	Rate	Growth	11	12	13	14	15
No.	Name	Rate Unit	Stage					
1	UNTREATED			0	0	0	0	0
2	COBRA	10 fl oz/a	EP	0	99	99	99	80
	COC	1 pt/a	EP					
3	COBRA	12 fl oz/a	EP	0	99	99	99	73
	COC	1 pt/a	EP					
4	COBRA	10 fl oz/a	EP	0	99	99	99	73
	V-10206	1.5 oz wt/a	EP					
	COC	1 pt/a	EP					
5	COBRA	12 fl oz/a	EP	0	99	99	99	77
	V-10206	1.8 oz wt/a	EP					
	COC	1 pt/a	EP					
6	PREFIX	1.5 pt/a	EP	0	99	99	99	76
	COC	1 pt/a	EP					
7	COBRA	10 fl oz/a	LP	0	99	99	99	83
	COC	1 pt/a	LP					
8	COBRA	12 fl oz/a	LP	0	99	99	99	83
	COC	1 pt/a	LP					
9	COBRA	10 fl oz/a	LP	0	99	99	99	86
	V-10206	1.5 oz wt/a	LP					
	COC	1 pt/a	LP					
10	COBRA	12 fl oz/a	LP	0	99	99	99	87
	V-10206	1.8 oz wt/a	LP					
	COC	1 pt/a	LP					
11	PREFIX	1.5 pt/a	LP	0	99	99	99	89
	COC	1 pt/a	LP					
	LSD (P=.05)			0.0	0.0	0.0	0.0	16.6
	Standard Deviation			0.0	0.0	0.0	0.0	9.7
	CV			0.0	0.0	0.0	0.0	13.28
	Replicate F			0.000	0.000	0.000	0.000	0.783
	Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	0.4707
	Treatment F			0.000	0.000	0.000	0.000	19.688
	Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN IV

Trial ID: S12024                      Protocol ID: VAL-SB-V10206  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
Project ID:                              Investigator: Charles H 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

#### Crop Code

GLXMA, BSOY, Glycine max, = US

#### Rating Unit

PERCENT = percent

#### ARM Action Codes

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

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN IV

Trial ID: S12024                      Protocol ID: VAL-SB-V10206  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: JOHN CRANMER

### General Trial Information

**Study Director:** CHARLES SLACK    **Title:** RESEARCH SPECIALIST  
**Investigator:** Charles H Slack    **Title:** RESEARCH SPECIALIST WEED SCIENCE

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-30-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK    **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312    **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355  
**Investigator:** Charles H Slack    **Title:** RESEARCH SPECIALIST WEED SCIENCE  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546    **E-mail:** cslack@uky.edu  
**Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**BBCH Scale:** BSOY  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDTRA medium/trashy  
**Soil Moisture:** NORMAL normal, adequate  
**Planting Date:** 4-30-2012  
**Rate, Unit:** 210000 S/A  
**Soil Temperature, Unit:** 69 F  
**Emergence Date:** 5-6-2012

### 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

### Site and Design

**Plot Width, Unit:** 8.5 FT  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 374 FT2  
**Replications:** 3  
**Site Type:** FIELD field  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

### Soil Description

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

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

	<b>A</b>	<b>B</b>
<b>Application Date:</b>	5-24-2012	6-5-2012
<b>Time of Day:</b>	9 PM	1 PM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	EP	LP
<b>Application Placement:</b>	BROSOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	70 F	82 F
<b>% Relative Humidity:</b>	30	60
<b>Wind Velocity, Unit:</b>	6 MPH	6 MPH
<b>Wind Direction:</b>	SW	S
<b>Soil Temperature, Unit:</b>	75 F	73 F
<b>Soil Moisture:</b>	NORMAL	DRY
<b>% Cloud Cover:</b>	20	30
<b>Next Rain Occurred On:</b>	5-28-2012	6-11-2012

### Crop Stage At Each Application

	<b>A</b>	<b>B</b>
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA	BSOY GLXMA
<b>Height, Unit:</b>	4 IN	6 IN

### Pest Stage At Each Application

	<b>A</b>	<b>B</b>
<b>Pest 1 Code, Type, Scale:</b>	SETFA W	SETFA W
<b>Height, Unit:</b>	2 IN	4 IN
<b>Pest 2 Code, Type, Scale:</b>	AMBTR W	AMBTR W
<b>Height, Unit:</b>	4 IN	6 IN
<b>Pest 3 Code, Type, Scale:</b>	IPOSS W	IPOSS W
<b>Height, Unit:</b>	1 IN	2 IN
<b>Pest 4 Code, Type, Scale:</b>	ERICA W	ERICA W
<b>Height, Unit:</b>	3 IN	4 IN

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

	<b>A</b>	<b>B</b>
<b>Appl. Equipment:</b>	ATV	ATV
<b>Equipment Type:</b>	ALTEVE	ALTEVE
<b>Operation Pressure, Unit:</b>	30 PSI	30 PSI
<b>Nozzle Type:</b>	FLAT FAN	FLAT FAN
<b>Nozzle Size:</b>	8004 DG	8004 DG
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN
<b>Boom Length, Unit:</b>	8.5 FT	8.5 FT
<b>Boom Height, Unit:</b>	30 IN	30 IN
<b>Ground Speed, Unit:</b>	4 MPH	4 MPH
<b>Carrier:</b>	WATER	WATER
<b>Spray Volume, Unit:</b>	24 GPA	24 GPA
<b>Mix Size, Unit:</b>	3 liters	3 liters
<b>Propellant:</b>	CO2	CO2



# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN V

Trial ID: S12025                      Protocol ID: VAL-SB-FIERCEXLT  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: JOHN CRANMER

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	Marestial		
Crop Code	GLXMA						
BBCH Scale	BSOY						
Crop Scientific Name	Glycine max						
Crop Name	Soybean						
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
Number of Subsamples	1	1	1	1	1		
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK		
ARM Action Codes	P	P	P	P	P		
Number of Decimals	0	0	0	0	0		
Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	1	2	3	4	5
1 UNTREATED			0	0	0	0	0
2 GANGSTER FR	0.6 oz wt/a PRE		0	96	94	96	88
GANGSTER V	3 oz wt/a PRE						
3 VALOR XLT	3 oz wt/a PRE		3	99	96	96	86
4 VALOR XLT	4 oz wt/a PRE		0	99	98	99	99
5 AUTHORITY FIRST	6.45 oz wt/a PRE		0	99	99	99	99
6 FIERCE XLT	4 oz/a PRE		7	99	99	99	99
7 FIERCE XLT	5 oz/a PRE		7	99	90	93	96
8 FIERCE XLT	6 oz/a PRE		10	99	96	96	88
9 STALWART METZ	1.5 pt/a PRE		7	99	87	87	77
LSD (P=.05)			9.3	3.0	8.1	8.2	12.6
Standard Deviation			5.4	1.7	4.7	4.7	7.3
CV			144.65	1.98	5.58	5.58	8.98
Replicate F			0.129	1.000	1.385	1.349	4.229
Replicate Prob(F)			0.8799	0.3897	0.2787	0.2874	0.0335
Treatment F			1.581	1081.750	137.564	137.745	55.564
Treatment Prob(F)			0.2072	0.0001	0.0001	0.0001	0.0001

# 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	GLXMA							
BBCH Scale	BSOY							
Crop Scientific Name	Glycine max							
Crop Name	Soybean							
Rating Type	INJURY	CONTROL	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1				
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK				
ARM Action Codes	P	P	P	P				
Number of Decimals	0	0	0	0				
Trt	Treatment	Rate	Growth	6	7	8	9	10
No.	Name	Rate Unit	Stage					
1	UNTREATED			0	0	0	0	0
2	GANGSTER FR	0.6 oz wt/a	PRE	0	96	93	96	83
	GANGSTER V	3 oz wt/a	PRE					
3	VALOR XLT	3 oz wt/a	PRE	0	99	95	96	83
4	VALOR XLT	4 oz wt/a	PRE	0	99	96	99	99
5	AUTHORITY FIRST	6.45 oz wt/a	PRE	0	99	99	99	99
6	FIERCE XLT	4 oz/a	PRE	0	99	99	99	99
7	FIERCE XLT	5 oz/a	PRE	7	99	87	93	93
8	FIERCE XLT	6 oz/a	PRE	0	99	96	96	83
9	STALWART METZ	1.5 pt/a	PRE	0	99	82	87	77
	LSD (P=.05)			3.3	3.0	9.2	8.2	8.6
	Standard Deviation			1.9	1.7	5.3	4.7	5.0
	CV			259.81	1.98	6.4	5.58	6.27
	Replicate F			1.000	1.000	1.089	1.349	5.255
	Replicate Prob(F)			0.3897	0.3897	0.3604	0.2874	0.0176
	Treatment F			4.000	1081.750	106.365	137.745	116.098
	Treatment Prob(F)			0.0088	0.0001	0.0001	0.0001	0.0001

# 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		GLXMA					
BBCH Scale		BSOY					
Crop Scientific Name		Glycine max					
Crop Name		Soybean					
Rating Type		INJURY	CONTROL	CONTROL	CONTROL	CONTROL	
Rating Unit		PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	
Number of Subsamples		1	1	1	1	1	
Rating Timing		8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
ARM Action Codes		P	P	P	P	P	
Number of Decimals		0	0	0	0	0	
Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	11	12	13	14	15
1 UNTREATED			0	0	0	0	0
2 GANGSTER FR	0.6 oz wt/a PRE		0	96	93	96	83
GANGSTER V	3 oz wt/a PRE						
3 VALOR XLT	3 oz wt/a PRE		0	99	95	96	83
4 VALOR XLT	4 oz wt/a PRE		0	99	96	99	99
5 AUTHORITY FIRST	6.45 oz wt/a PRE		0	99	99	99	99
6 FIERCE XLT	4 oz/a PRE		0	99	99	99	99
7 FIERCE XLT	5 oz/a PRE		3	99	87	93	93
8 FIERCE XLT	6 oz/a PRE		0	99	96	96	83
9 STALWART METZ	1.5 pt/a PRE		0	99	82	87	77
LSD (P=.05)			3.3	3.0	9.2	8.2	8.6
Standard Deviation			1.9	1.7	5.3	4.7	5.0
CV			519.62	1.98	6.4	5.58	6.27
Replicate F			1.000	1.000	1.089	1.349	5.255
Replicate Prob(F)			0.3897	0.3897	0.3604	0.2874	0.0176
Treatment F			1.000	1081.750	106.365	137.745	116.098
Treatment Prob(F)			0.4726	0.0001	0.0001	0.0001	0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN V

Trial ID: S12025                      Protocol ID: VAL-SB-FIERCEXLT  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
Project ID:                              Investigator: Charles H 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

#### Crop Code

GLXMA, BSOY, *Glycine max*, = US

#### Rating Unit

PERCENT = percent

#### ARM Action Codes

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

# Plant and Soil Science, U of KY

## Weed Science Research

NO TILL SOYBEAN V

Trial ID: S12025                      Protocol ID: VAL-SB-FIERCEXL  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
 Project ID:                              Investigator: Charles H 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:** 4-30-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**BBCH Scale:** BSOY  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDTRA medium/trashy  
**Soil Moisture:** NORMAL normal, adequate  
**Planting Date:** 4-30-2012  
**Rate, Unit:** 210000 S/A  
**Soil Temperature, Unit:** 70 F  
**Emergence Date:** 5-6-2012

### 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

### Site and Design

**Plot Width, Unit:** 10 FT  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 440 FT<sup>2</sup>  
**Replications:** 3  
**Site Type:** FIELD field  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

### Soil Description

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

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

**A**  
**Application Date:** 4-30-2012  
**Time of Day:** 1 PM  
**Application Method:** SPRAY  
**Application Timing:** PRE  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 78 F  
**% Relative Humidity:** 60  
**Wind Velocity, Unit:** 4 MPH  
**Wind Direction:** SW  
**Soil Temperature, Unit:** 70 F  
**Soil Moisture:** NORMAL  
**% Cloud Cover:** 10  
**Next Rain Occurred On:** 5-1-2012

### 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  
**Height, Unit:** 1 IN  
**Pest 2 Code, Type, Scale:** AMBTR W  
**Height, Unit:** 2 IN  
**Pest 3 Code, Type, Scale:** IPOSS W  
**Height, Unit:** 0.5 IN  
**Pest 4 Code, Type, Scale:** ERICA W  
**Height, Unit:** 2 IN

# Plant and Soil Science, U of KY Weed Science Research

## Application Equipment

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





# 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	GLXMA				
BBCH Scale	BSOY				
Crop Scientific Name	Glycine max				
Crop Name	Soybean				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0

  

Trt	Treatment	Rate	Growth	6	7	8	9	10
No.	Name	Rate Unit	Stage					
1	UNTREATED			0	0	0	0	0
2	COBRA	10 fl oz/a LP		10	99	99	99	99
	RESOURCE	4 fl oz/a LP						
	COC	1 pt/a LP						
	NIS	0.25 % v/v LP						
	AMS	3.7 % v/v LP						
3	COBRA	12 fl oz/a LP		10	99	99	99	99
	RESOURCE	6 fl oz/a LP						
	COC	1 pt/a LP						
	NIS	0.25 % v/v LP						
	AMS	3.7 % v/v LP						
4	CADET	0.7 fl oz/a LP		8	99	99	99	91
	NIS	0.25 % v/v LP						
	LSD (P=.05)			2.9	0.0	0.0	0.0	7.4
	Standard Deviation			1.4	0.0	0.0	0.0	3.7
	CV			20.38	0.0	0.0	0.0	5.11
	Replicate F			1.000	0.000	0.000	0.000	1.000
	Replicate Prob(F)			0.4219	1.0000	1.0000	1.0000	0.4219
	Treatment F			33.000	0.000	0.000	0.000	514.626
	Treatment Prob(F)			0.0004	1.0000	1.0000	1.0000	0.0001

# 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	GLXMA				
BBCH Scale	BSOY				
Crop Scientific Name	Glycine max				
Crop Name	Soybean				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0

  

Trt	Treatment	Rate	Growth	11	12	13	14	15
No.	Name	Rate Unit	Stage					
1	UNTREATED			0	0	0	0	0
2	COBRA	10 fl oz/a LP		0	99	99	99	99
	RESOURCE	4 fl oz/a LP						
	COC	1 pt/a LP						
	NIS	0.25 % v/v LP						
	AMS	3.7 % v/v LP						
3	COBRA	12 fl oz/a LP		0	99	99	99	99
	RESOURCE	6 fl oz/a LP						
	COC	1 pt/a LP						
	NIS	0.25 % v/v LP						
	AMS	3.7 % v/v LP						
4	CADET	0.7 fl oz/a LP		0	99	99	99	91
	NIS	0.25 % v/v LP						
	LSD (P=.05)			0.0	0.0	0.0	0.0	7.4
	Standard Deviation			0.0	0.0	0.0	0.0	3.7
	CV			0.0	0.0	0.0	0.0	5.11
	Replicate F			0.000	0.000	0.000	0.000	1.000
	Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	0.4219
	Treatment F			0.000	0.000	0.000	0.000	514.626
	Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN VI

Trial ID: S12026                      Protocol ID: VAL-SB-RESOURCE  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
Project ID:                              Investigator: Charles H 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

#### Crop Code

GLXMA, BSOY, *Glycine max*, = US

#### Rating Unit

PERCENT = percent

#### ARM Action Codes

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

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN VI

Trial ID: S12026                      Protocol ID: VAL-SB-RESOURCE  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
 Project ID:                              Investigator: Charles H 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:** 4-30-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**BBCH Scale:** BSOY  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDTRA medium/trashy  
**Soil Moisture:** NORMAL normal, adequate  
**Planting Date:** 4-30-2012  
**Rate, Unit:** 210000 S/A  
**Soil Temperature, Unit:** 70 F  
**Emergence Date:** 5-6-2012

### 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

### Site and Design

**Plot Width, Unit:** 8.5 FT  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 374 FT2  
**Replications:** 3  
**Site Type:** FIELD field  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

### Soil Description

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

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

**A**  
**Application Date:** 6-5-2012  
**Time of Day:** 2 PM  
**Application Method:** SPRAY  
**Application Timing:** LP  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 68 F  
**% Relative Humidity:** 70  
**Wind Velocity, Unit:** 5 MPH  
**Wind Direction:** SSW  
**Soil Temperature, Unit:** 73 F  
**Soil Moisture:** NORMAL  
**% Cloud Cover:** 15  
**Next Rain Occurred On:** 6-11-2012

### Crop Stage At Each Application

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

### Pest Stage At Each Application

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

# Plant and Soil Science, U of KY Weed Science Research

## Application Equipment

	<b>A</b>
<b>Appl. Equipment:</b>	ATV
<b>Equipment Type:</b>	ALTEVE
<b>Operation Pressure, Unit:</b>	30 PSI
<b>Nozzle Type:</b>	FLAT FAN
<b>Nozzle Size:</b>	8004 DG
<b>Nozzle Spacing, Unit:</b>	20 IN
<b>Boom Length, Unit:</b>	8.5 FT
<b>Boom Height, Unit:</b>	30 IN
<b>Ground Speed, Unit:</b>	4 MPH
<b>Carrier:</b>	WATER
<b>Spray Volume, Unit:</b>	24 GPA
<b>Mix Size, Unit:</b>	3 liters
<b>Propellant:</b>	CO2





# 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	GLXMA				
BBCH Scale	BSOY				
Crop Scientific Name	Glycine max				
Crop Name	Soybean				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0

Trt	Treatment	Rate	Growth	6	7	8	9	10
No.	Name	Rate Unit	Stage					
1	ALERT	21.3 fl oz/a	PRE	0	99	53	85	95
2	ALERT	32 fl oz/a	PRE	0	99	83	87	93
3	ALERT	42.7 fl oz/a	PRE	0	99	73	92	95
4	ALERT	21.3 fl oz/a	PRE	0	99	94	95	96
	DAWN	24 fl oz/a	PRE					
5	ALERT	32 fl oz/a	PRE	0	99	96	94	94
	DAWN	24 fl oz/a	PRE					
6	DUAL II MAGNUM	16.8 fl oz/a	PRE	0	99	40	47	50
7	PREFIX	16.8 fl oz/a	PRE	0	99	93	93	93
8	UNTREATED			0	0	0	0	0
	LSD (P=.05)			0.0	0.0	20.6	9.1	5.8
	Standard Deviation			0.0	0.0	11.7	5.2	3.3
	CV			0.0	0.0	17.63	7.01	4.27
	Replicate F			0.000	0.000	1.222	3.047	7.155
	Replicate Prob(F)			1.0000	1.0000	0.3242	0.0797	0.0072
	Treatment F			0.000	0.000	24.749	127.609	335.530
	Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001	0.0001

# 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	GLXMA				
BBCH Scale	BSOY				
Crop Scientific Name	Glycine max				
Crop Name	Soybean				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0

Trt	Treatment	Rate	Growth					
No.	Name	Rate Unit	Stage	11	12	13	14	15
1	ALERT	21.3 fl oz/a	PRE	0	99	50	60	93
2	ALERT	32 fl oz/a	PRE	0	99	70	85	93
3	ALERT	42.7 fl oz/a	PRE	0	99	63	83	95
4	ALERT	21.3 fl oz/a	PRE	0	99	86	90	96
	DAWN	24 fl oz/a	PRE					
5	ALERT	32 fl oz/a	PRE	0	99	92	89	94
	DAWN	24 fl oz/a	PRE					
6	DUAL II MAGNUM	16.8 fl oz/a	PRE	0	99	53	50	60
7	PREFIX	16.8 fl oz/a	PRE	0	99	80	87	93
8	UNTREATED			0	0	0	0	0
	LSD (P=.05)			0.0	0.0	32.8	30.9	10.3
	Standard Deviation			0.0	0.0	18.7	17.6	5.9
	CV			0.0	0.0	30.22	25.94	7.54
	Replicate F			0.000	0.000	3.627	0.999	5.738
	Replicate Prob(F)			1.0000	1.0000	0.0538	0.3932	0.0151
	Treatment F			0.000	0.000	7.301	9.361	98.497
	Treatment Prob(F)			1.0000	1.0000	0.0009	0.0002	0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN VII

Trial ID: S12027                      Protocol ID: CHEM-C1201  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
Project ID:                              Investigator: Charles H 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

#### Crop Code

GLXMA, BSOY, *Glycine max*, = US

#### Rating Unit

PERCENT = percent

#### ARM Action Codes

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

# Plant and Soil Science, U of KY Weed Science Research

## NO TILL SOYBEAN VII

Trial ID: S12027                      Protocol ID: CHEM-C1201  
Location: LEXINGTON, KY        Study Director: CHARLES SLACK  
Project ID:                              Investigator: Charles H Slack  
Sponsor Contact: BRENT JACOBSON

### 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:** 4-30-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232  
**BBCH Scale:** BSOY  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** GOOD good

**Planting Date:** 4-30-2012  
**Rate, Unit:** 210000 S/A

**Soil Temperature, Unit:** 69 F  
**Emergence Date:** 5-5-2012

### 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

### Site and Design

**Plot Width, Unit:** 8.5 FT  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 374 FT<sup>2</sup>  
**Replications:** 3

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6  
**% Silt:** 62 **pH:** 6.4  
**% Clay:** 32 **CEC:** 18

**Texture:** SIL silt loam  
**Soil Name:** MAURY SILT LOAM  
**Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

**A**  
**Application Date:** 5-1-2012  
**Time of Day:** 10 AM  
**Application Method:** SPRAY  
**Application Timing:** PRE  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 77 F  
**% Relative Humidity:** 70  
**Wind Velocity, Unit:** 3 MPH  
**Wind Direction:** SE  
**Soil Temperature, Unit:** 69 F  
**Soil Moisture:** GOOD  
**% Cloud Cover:** 30  
**Next Rain Occurred On:** 5-4-2012

### 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  
**Height, Unit:** 1 IN  
**Pest 2 Code, Type, Scale:** AMBTR W  
**Height, Unit:** 2 IN  
**Pest 3 Code, Type, Scale:** IPOSS W  
**Height, Unit:** 0.5 IN  
**Pest 4 Code, Type, Scale:** ERICA W  
**Height, Unit:** 2 IN

# Plant and Soil Science, U of KY Weed Science Research

## Application Equipment

**Appl. Equipment:** A  
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:** 3 liters  
**Propellant:** CO2

Date	By	Notes
5-1-2012	SARA CARTER	ENTIRE PLOT AREA OVERSPRAYED WITH GLYPHOSATE



# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN VIII

Trial ID: S12028                      Protocol ID: CHEM-F1203  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: BRENT JACOBSON

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	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trit	Treatment	Rate	Growth					
No.	Name	Rate Unit	Stage	1	2	3	4	5
1	CHA-044	32 fl oz/a	PRE	0	99	93	95	95
2	CHA-044	40 fl oz/a	PRE	0	99	95	95	94
3	DAWN	24 fl oz/a	PRE	0	99	99	99	94
	ALERT	21.3 fl oz/a	PRE					
4	PREFIX	32 fl oz/a	PRE	0	99	99	99	99
5	PREFIX	40 fl oz/a	PRE	0	99	99	99	99
6	UNTREATED			0	0	0	0	0
	LSD (P=.05)			0.0	0.0	4.2	4.5	7.8
	Standard Deviation			0.0	0.0	2.3	2.5	4.3
	CV			0.0	0.0	2.89	3.09	5.35
	Replicate F			0.000	0.000	2.210	1.501	1.341
	Replicate Prob(F)			1.0000	1.0000	0.1604	0.2691	0.3049
	Treatment F			0.000	0.000	866.900	758.354	252.339
	Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001	0.0001

# 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	GLXMA				
BBCH Scale	BSOY				
Crop Scientific Name	Glycine max				
Crop Name	Soybean				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0

  

Trt	Treatment	Rate	Growth	6	7	8	9	10
No.	Name	Rate Unit	Stage					
1	CHA-044	32 fl oz/a	PRE	0	99	93	95	95
2	CHA-044	40 fl oz/a	PRE	0	99	94	95	94
3	DAWN	24 fl oz/a	PRE	0	99	99	99	94
	ALERT	21.3 fl oz/a	PRE					
4	PREFIX	32 fl oz/a	PRE	0	99	99	99	99
5	PREFIX	40 fl oz/a	PRE	0	99	99	99	99
6	UNTREATED			0	0	0	0	0
	LSD (P=.05)			0.0	0.0	5.2	4.5	7.8
	Standard Deviation			0.0	0.0	2.9	2.5	4.3
	CV			0.0	0.0	3.54	3.09	5.35
	Replicate F			0.000	0.000	2.102	1.501	1.341
	Replicate Prob(F)			1.0000	1.0000	0.1730	0.2691	0.3049
	Treatment F			0.000	0.000	576.392	758.354	252.339
	Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001	0.0001

# 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	GLXMA				
BBCH Scale	BSOY				
Crop Scientific Name	Glycine max				
Crop Name	Soybean				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0

  

Trt	Treatment	Rate	Growth	11	12	13	14	15
No.	Name	Rate Unit	Stage					
1	CHA-044	32 fl oz/a	PRE	0	99	92	94	95
2	CHA-044	40 fl oz/a	PRE	0	99	92	92	94
3	DAWN	24 fl oz/a	PRE	0	99	93	93	94
	ALERT	21.3 fl oz/a	PRE					
4	PREFIX	32 fl oz/a	PRE	0	99	92	92	99
5	PREFIX	40 fl oz/a	PRE	0	99	92	92	99
6	UNTREATED			0	0	0	0	0
	LSD (P=.05)			0.0	0.0	6.2	6.4	7.8
	Standard Deviation			0.0	0.0	3.4	3.5	4.3
	CV			0.0	0.0	4.4	4.55	5.35
	Replicate F			0.000	0.000	4.825	3.846	1.341
	Replicate Prob(F)			1.0000	1.0000	0.0341	0.0577	0.3049
	Treatment F			0.000	0.000	371.822	347.629	252.339
	Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001	0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN VIII

Trial ID: S12028                      Protocol ID: CHEM-F1203  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
Project ID:                              Investigator: Charles H 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

#### Crop Code

GLXMA, BSOY, *Glycine max*, = US

#### Rating Unit

PERCENT = percent

#### ARM Action Codes

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

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN VIII

Trial ID: S12028                      Protocol ID: CHEM-F1203  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: BRENT JACOBSON

### 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:** 4-30-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232  
**BBCH Scale:** BSOY  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** GOOD good

**Planting Date:** 4-30-2012  
**Rate, Unit:** 210000 S/A

**Soil Temperature, Unit:** 69 F  
**Emergence Date:** 5-5-2012

### 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

### Site and Design

**Plot Width, Unit:** 8.5 FT  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 374 FT<sup>2</sup>  
**Replications:** 3

**Site Type:** FIELD field  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOBL Randomized Complete Block (RCB)

### Soil Description

**Description Name:** MAURY

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

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

**A**  
**Application Date:** 5-1-2012  
**Time of Day:** 3 PM  
**Application Method:** SPRAY  
**Application Timing:** PRE  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 78 F  
**% Relative Humidity:** 65  
**Wind Velocity, Unit:** 3 MPH  
**Wind Direction:** SE  
**Soil Temperature, Unit:** 69 F  
**Soil Moisture:** GOOD  
**% Cloud Cover:** 30  
**Next Rain Occurred On:** 5-4-2012

### 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  
**Height, Unit:** 1 IN  
**Pest 2 Code, Type, Scale:** AMBTR W  
**Height, Unit:** 2 IN  
**Pest 3 Code, Type, Scale:** IPOSS W  
**Height, Unit:** 0.5 IN  
**Pest 4 Code, Type, Scale:** ERICA W  
**Height, Unit:** 2 IN

# Plant and Soil Science, U of KY Weed Science Research

## Application Equipment

**Appl. Equipment:** A  
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:** 3 liters  
**Propellant:** CO2

Date	By	Notes
5-1-2012	SARA CARTER	ENTIRE PLOT AREA OVERSPRAYED WITH GLYPHOSATE





# 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	GLXMA				
BBCH Scale	BSOY				
Crop Scientific Name	Glycine max				
Crop Name	Soybean				
Rating Date	7-3-2012	7-3-2012	7-3-2012	7-3-2012	7-3-2012
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	28 28	28 28	28 28	28 28	28 28
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A
Plant-Eval Interval	64 DP-1	64 DP-1	64 DP-1	64 DP-1	64 DP-1
Days After Emergence	59 DE-1	59 DE-1	59 DE-1	59 DE-1	59 DE-1
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0

Trt	Treatment	Rate	Growth	6	7	8	9	10
No.	Name	Rate Unit	Stage					
1	CHA-044	32 fl oz/a	EP	0	99	99	99	99
	GLYFOS X-TRA	0.75 lb ae/a	EP					
2	CHA-044	40 fl oz/a	EP	0	99	99	99	99
	GLYFOS X-TRA	0.75 lb ae/a	EP					
3	RHYTHM	25.5 fl oz/a	EP	0	99	99	99	99
	GLYFOS X-TRA	0.75 lb ae/a	EP					
4	DAWN	24 fl oz/a	EP	0	99	99	99	99
	GLYFOS X-TRA	0.75 lb ae/a	EP					
5	PREFIX	32 fl oz/a	EP	0	99	99	99	99
	GLYFOS X-TRA	0.75 lb ae/a	EP					
6	PREFIX	40 fl oz/a	EP	0	99	99	99	99
	GLYFOS X-TRA	0.75 lb ae/a	EP					
7	UNTREATED			0	0	0	0	0
	LSD (P=.05)			0.0	0.0	0.0	0.0	0.0
	Standard Deviation			0.0	0.0	0.0	0.0	0.0
	CV			0.0	0.0	0.0	0.0	0.0
	Replicate F			0.000	0.000	0.000	0.000	0.000
	Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000
	Treatment F			0.000	0.000	0.000	0.000	0.000
	Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000

# 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	GLXMA				
BBCH Scale	BSOY				
Crop Scientific Name	Glycine max				
Crop Name	Soybean				
Rating Date	7-31-2012	7-31-2012	7-31-2012	7-31-2012	7-31-2012
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	56 56	56 56	56 56	56 56	56 56
Trt-Eval Interval	57 DA-A	57 DA-A	57 DA-A	57 DA-A	57 DA-A
Plant-Eval Interval	92 DP-1	92 DP-1	92 DP-1	92 DP-1	92 DP-1
Days After Emergence	87 DE-1	87 DE-1	87 DE-1	87 DE-1	87 DE-1
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0

Trt Treatment No. Name	Rate Unit	Growth Stage	11	12	13	14	15
1 CHA-044	32 fl oz/a	EP	0	99	98	99	99
GLYFOS X-TRA	0.75 lb ae/a	EP					
2 CHA-044	40 fl oz/a	EP	7	99	99	99	99
GLYFOS X-TRA	0.75 lb ae/a	EP					
3 RHYTHM	25.5 fl oz/a	EP	3	99	99	99	99
GLYFOS X-TRA	0.75 lb ae/a	EP					
4 DAWN	24 fl oz/a	EP	2	99	98	98	99
GLYFOS X-TRA	0.75 lb ae/a	EP					
5 PREFIX	32 fl oz/a	EP	7	99	99	99	99
GLYFOS X-TRA	0.75 lb ae/a	EP					
6 PREFIX	40 fl oz/a	EP	3	99	99	99	99
GLYFOS X-TRA	0.75 lb ae/a	EP					
7 UNTREATED			0	0	0	0	0
LSD (P=.05)			6.6	0.0	2.3	1.6	0.0
Standard Deviation			3.7	0.0	1.3	0.9	0.0
CV			120.4	0.0	1.52	1.03	0.0
Replicate F			4.200	0.000	0.462	1.000	0.000
Replicate Prob(F)			0.0414	1.0000	0.6410	0.3966	1.0000
Treatment F			1.686	0.000	2522.414	5489.313	0.000
Treatment Prob(F)			0.2077	1.0000	0.0001	0.0001	1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN IX

Trial ID: S12029                      Protocol ID: CHEM-F1204  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
Project ID:                              Investigator: Charles H 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

#### Crop Code

GLXMA, BSOY, *Glycine max*, = US

#### Rating Unit

PERCENT = percent

#### Plant-Eval Interval

50 DP-1 = 1 GLXMA 4-30-2012  
64 DP-1 = 1 GLXMA 4-30-2012  
92 DP-1 = 1 GLXMA 4-30-2012

#### ARM Action Codes

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

# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN IX

Trial ID: S12029                      Protocol ID: CHEM-F1204  
 Location: LEXINGTON, KY        Study Director: CHARLES SLACK  
 Project ID:                            Investigator: Charles H Slack  
    Sponsor Contact: BRENT JACOBSON

### 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:** 4-30-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK        **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312        **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK        **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312        **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232  
**BBCH Scale:** BSOY  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** GOOD good  
**Planting Date:** 4-30-2012  
**Rate, Unit:** 210000 S/A  
**Soil Temperature, Unit:** 69 F  
**Emergence Date:** 5-5-2012

### 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

### Site and Design

**Plot Width, Unit:** 8.5 FT  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 374 FT<sup>2</sup>  
**Replications:** 3  
**Site Type:** FIELD field  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOBL Randomized Complete Block (RCB)

### Soil Description

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

### Moisture and Weather Conditions

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

**A**  
**Application Date:** 6-5-2012  
**Time of Day:** 1 PM  
**Application Method:** SPRAY  
**Application Timing:** EP  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 68 F  
**% Relative Humidity:** 75  
**Wind Velocity, Unit:** 6 MPH  
**Wind Direction:** SE  
**Soil Temperature, Unit:** 73 F  
**Soil Moisture:** GOOD  
**% Cloud Cover:** 10  
**Next Rain Occurred On:** 6-11-2012

### Crop Stage At Each Application

**A**  
**Crop 1 Code, BBCH Scale:** GLXMA BSOY  
**Height, Unit:** 6 IN

### Pest Stage At Each Application

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

# Plant and Soil Science, U of KY Weed Science Research

## Application Equipment

	<b>A</b>
<b>Appl. Equipment:</b>	ATV
<b>Equipment Type:</b>	ALTEVE
<b>Operation Pressure, Unit:</b>	30 PSI
<b>Nozzle Type:</b>	FLAT FAN
<b>Nozzle Size:</b>	8004 DG
<b>Nozzle Spacing, Unit:</b>	20 IN
<b>Boom Length, Unit:</b>	8.5 FT
<b>Boom Height, Unit:</b>	30 IN
<b>Ground Speed, Unit:</b>	4 MPH
<b>Carrier:</b>	WATER
<b>Spray Volume, Unit:</b>	24 GPA
<b>Mix Size, Unit:</b>	3 liters
<b>Propellant:</b>	CO2



# Plant and Soil Science, U of KY

## Weed Science Research

### NO TILL SOYBEAN POSTEMERGENCE

Trial ID: S12030                      Protocol ID: SYN-ZSC001A4  
 Location: LEXINGTON, KY          Study Director: CHARLES SLACK & SARA CARTER  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: SCOTT CULLY

Crop Code	GLXMA
BBCH Scale	BSOY
Crop Scientific Name	Glycine max
Crop Name	Soybean
Rating Date	10-11-2012
Rating Type	YIELD
Rating Unit	BU
Number of Subsamples	1
Days After First/Last Applic.	161 78
Trt-Eval Interval	78 DA-D
Plant-Eval Interval	161 DP-1
Days After Emergence	156 DE-1
ARM Action Codes	TY1
Number of Decimals	1

Trt No.	Treatment Name	Rate	Unit	Growth Stage	
					3
1	S46-A1 UNTREATED				38.7
	TOUCHDOWN TOTAL	24 oz/a		4-6"	
	AMS	2.5 % v/v		4-6"	
	TOUCHDOWN TOTAL	24 oz/a		+21D	
	AMS	2.5 % v/v		+21D	
	QUADRIS TOP	8 oz/a		R3	
	ENDIGO	3.5 oz/a		R3	
	COC	1 gal/100 gal		R3	
2	S46-A1 CRUISER MAXX				35.9
	FLEXSTAR GT	3.5 pt/a		4-6"	
	AMS	2.5 % v/v		4-6"	
	TOUCHDOWN TOTAL	24 oz/a		+21D	
	AMS	2.5 % v/v		+21D	
	QUADRIS TOP	8 oz/a		R3	
	ENDIGO	3.5 oz/a		R3	
	COC	1 gal/100 gal		R3	
3	S46-A1 CRUISER MAXX				36.6
	PREFIX	2 pt/a		PRE	
	TOUCHDOWN TOTAL	24 oz/a		4-6"	
	AMS	2.5 % v/v		4-6"	
	QUADRIS TOP	8 oz/a		R3	
	ENDIGO	3.5 oz/a		R3	
	COC	1 gal/100 gal		R3	
4	S46-A1 UNTREATED				27.8
	TOUCHDOWN TOTAL	24 oz/a		4-6"	
	AMS	2.5 % v/v		4-6"	
	TOUCHDOWN TOTAL	24 oz/a		+21D	
	AMS	2.5 % v/v		+21D	
5	S46-A1 CRUISER MAXX				27.7
	FLEXSTAR GT	3.5 pt/a		4-6"	
	AMS	2.5 % v/v		4-6"	
	TOUCHDOWN TOTAL	24 oz/a		+21D	
	AMS	2.5 % v/v		+21D	

# Plant and Soil Science, U of KY

## Weed Science Research

Crop Code	GLXMA
BBCH Scale	BSOY
Crop Scientific Name	Glycine max
Crop Name	Soybean
Rating Date	10-11-2012
Rating Type	YIELD
Rating Unit	BU
Number of Subsamples	1
Days After First/Last Applic.	161 78
Trt-Eval Interval	78 DA-D
Plant-Eval Interval	161 DP-1
Days After Emergence	156 DE-1
ARM Action Codes	TY1
Number of Decimals	1

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	
					3
6	S46-A1 CRUISER MAXX				31.8
	PREFIX	2 pt/a		PRE	
	TOUCHDOWN TOTAL	24 oz/a		4-6"	
	AMS	2.5 % v/v		4-6"	
7	S46-A1 UNTREATED				35.1
	TOUCHDOWN TOTAL	24 oz/a		4-6"	
	AMS	2.5 % v/v		4-6"	
	TOUCHDOWN TOTAL	24 oz/a		+21D	
	AMS	2.5 % v/v		+21D	
	QUILT XCEL	10.5 oz/a		R3	
	WARRIOR II	1.6 oz/a		R3	
	COC	1 gal/100 gal		R3	
8	S46-A1 CRUISER MAXX				35.8
	FLEXSTAR GT	3.5 pt/a		4-6"	
	AMS	2.5 % v/v		4-6"	
	TOUCHDOWN TOTAL	24 oz/a		+21D	
	AMS	2.5 % v/v		+21D	
	QUILT XCEL	10.5 oz/a		R3	
	WARRIOR II	1.6 oz/a		R3	
	COC	1 gal/100 gal		R3	
9	S46-A1 CRUISER MAXX				33.2
	PREFIX	2 pt/a		PRE	
	TOUCHDOWN TOTAL	24 oz/a		4-6"	
	AMS	2.5 % v/v		4-6"	
	QUILT XCEL	10.5 oz/a		R3	
	WARRIOR II	1.6 oz/a		R3	
	COC	1 gal/100 gal		R3	

LSD (P=.05) .  
 Standard Deviation .  
 CV .

Crop Code  
 GLXMA, BSOY, Glycine max, = US  
Rating Type  
 YIELD = yield  
Rating Unit  
 BU = bushel  
Plant-Eval Interval  
 161 DP-1 = 1 GLXMA 5-3-2012  
ARM Action Codes  
 TY1 = 1.861538\*[1]\*(100-[2])/87

# Plant and Soil Science, U of KY Weed Science Research

## NO TILL SOYBEAN POSTEMERGENCE

Trial ID: S12030                      Protocol ID: SYN-ZSC001A4  
Location: LEXINGTON, KY        Study Director: CHARLES SLACK & SARA CARTER  
Project ID:                            Investigator: Charles H Slack  
Sponsor Contact: SCOTT CULLY

### General Trial Information

**Study Director:** CHARLES SLACK & SARA CARTER  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
  
**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-3-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK & SARA CARTER  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Address:** 105 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747                      **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** NK 39-A3  
**BBCH Scale:** BSOY  
**Planting Method:** PLANTD planted  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** GOOD good  
**Harvest Date:** 10-11-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 13.0

**Planting Date:** 5-3-2012  
**Rate, Unit:** 190000 S/A  
**Soil Temperature, Unit:** 66 F  
**Emergence Date:** 5-8-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 78 FT

### Site and Design

**Plot Width, Unit:** 15 FT  
**Plot Length, Unit:** 100 FT  
**Plot Area, Unit:** 1500 FT<sup>2</sup>  
**Replications:** 1

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6  
**% Silt:** 62  
**% Clay:** 32

**% OM:** 2.6  
**pH:** 6.4  
**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:** WEDRDR wet-dry-dry  
**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
<b>Application Date:</b>	5-3-2012	6-5-2012	6-26-2012	7-25-2012
<b>Time of Day:</b>	10 AM	1 PM	2 PM	1 PM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	4-6"WEEDS	+21D	R3
<b>Application Placement:</b>	BROSOL	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK	SARA CARTER
<b>Air Temperature, Unit:</b>	73 F	72 F	79 F	90 F
<b>% Relative Humidity:</b>	60	45	30	30
<b>Wind Velocity, Unit:</b>	3 MPH	4 MPH	3 MPH	6 MPH
<b>Wind Direction:</b>	SW	SE	WSW	SW
<b>Soil Temperature, Unit:</b>	66 F	65 F	73 F	81 F
<b>Soil Moisture:</b>	GOOD	GOOD	SLIDRY	DRY
<b>% Cloud Cover:</b>	10	20	10	10
<b>Next Rain Occurred On:</b>	5-4-2012	6-11-2012	7-1-2012	7-26-2012

### Crop Stage At Each Application

	A	B	C	D
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA	BSOY GLXMA	BSOY GLXMA	BSOY GLXMA
<b>Stage Scale Used:</b>				BBCH
<b>Stage Majority, Percent:</b>				R3 100
<b>Height, Unit:</b>		8 IN	14 IN	28 IN

### Application Equipment

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

Date	By	Notes
10-11-2012	SARA CARTER	PLOTS WERE VIRTUALLY WEED FREE AS A RESULT OF HERBICIDE APPLICATIONS AND DROUGHT.



# Plant and Soil Science, U of KY

## Weed Science Research

Crop Code	GLXMA
BBCH Scale	BSOY
Crop Scientific Name	Glycine max
Crop Name	Soybean
Rating Date	10-12-2012
Rating Type	YIELD
Rating Unit	BU
Number of Subsamples	1
Days After First/Last Applic.	162 79
Plant-Eval Interval	162 DP-1
Days After Emergence	155 DE-1
ARM Action Codes	TY1
Number of Decimals	1

Trt No.	Treatment Name	Rate	Growth Stage	Yield
		Rate Unit		
5	S46-A1 CRUISER MAXX			27.6
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	COC	0.25 % v/v	R3	
6	S46-A1 UTC			27.3
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	COC	0.25 % v/v	R3	
7	S46-A1 AVICTA COMPLETE			30.1
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	COC	0.25 % v/v	R3	
8	S46-A1 CRUISER MAXX			27.6
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	COC	0.25 % v/v	R3	
9	S46-A1 CRUISER MAXX			26.6
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	COC	0.25 % v/v	R3	

# Plant and Soil Science, U of KY

## Weed Science Research

Crop Code	GLXMA
BBCH Scale	BSOY
Crop Scientific Name	Glycine max
Crop Name	Soybean
Rating Date	10-12-2012
Rating Type	YIELD
Rating Unit	BU
Number of Subsamples	1
Days After First/Last Applic.	162 79
Plant-Eval Interval	162 DP-1
Days After Emergence	155 DE-1
ARM Action Codes	TY1
Number of Decimals	1

Trt No.	Treatment Name	Rate	Growth Stage	Yield
No.	Name	Rate Unit	Stage	3
10	S46-A1 UTC			29.4
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	COC	0.25 % v/v	R3	
11	S46-A1 AVICTA COMPLETE			30.1
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	COC	0.25 % v/v	R3	
12	S46-A1 CRUISER MAXX			30.5
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	COC	0.25 % v/v	R3	
13	S46-A1 CRUISER MAXX			25.6
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	VLV	1.7 pt/a	R3	
	COC	0.25 % v/v	R3	
14	S46-A1 UTC			25.0
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	VLV	1.7 pt/a	R3	
	COC	0.25 % v/v	R3	



# Plant and Soil Science, U of KY

## Weed Science Research

Crop Code	GLXMA
BBCH Scale	BSOY
Crop Scientific Name	Glycine max
Crop Name	Soybean
Rating Date	10-12-2012
Rating Type	YIELD
Rating Unit	BU
Number of Subsamples	1
Days After First/Last Applic.	162 79
Plant-Eval Interval	162 DP-1
Days After Emergence	155 DE-1
ARM Action Codes	TY1
Number of Decimals	1

Trt No.	Treatment Name	Rate	Growth Stage	Yield
		Rate Unit		
15	S46-A1 AVICTA COMPLETE			27.7
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	VLV	1.7 pt/a	R3	
	COC	0.25 % v/v	R3	
16	S46-A1 CRUISER MAXX			27.6
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	VLV	1.7 pt/a	R3	
	COC	0.25 % v/v	R3	
17	S46-A1 CRUISER MAXX			29.9
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	VLV	1.7 pt/a	R3	
	COC	0.25 % v/v	R3	
18	S46-A1 UTC			31.0
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	VLV	1.7 pt/a	R3	
	COC	0.25 % v/v	R3	
19	S46-A1 AVICTA COMPLETE			31.7
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	VLV	1.7 pt/a	R3	
	COC	0.25 % v/v	R3	

# Plant and Soil Science, U of KY

## Weed Science Research

Crop Code	GLXMA
BBCH Scale	BSOY
Crop Scientific Name	Glycine max
Crop Name	Soybean
Rating Date	10-12-2012
Rating Type	YIELD
Rating Unit	BU
Number of Subsamples	1
Days After First/Last Applic.	162 79
Plant-Eval Interval	162 DP-1
Days After Emergence	155 DE-1
ARM Action Codes	TY1
Number of Decimals	1

Trt No.	Treatment Name	Rate	Growth Stage	Yield
				3
20	S46-A1 CRUISER MAXX			28.9
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	VLV	1.7 pt/a	R3	
	COC	0.25 % v/v	R3	
21	S46-A1 CRUISER MAXX			27.2
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	VLV	1.7 pt/a	R3	
	COC	0.25 % v/v	R3	
22	S46-A1 UTC			26.0
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	VLV	1.7 pt/a	R3	
	COC	0.25 % v/v	R3	
23	S46-A1 AVICTA COMPLETE			24.6
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	VLV	1.7 pt/a	R3	
	COC	0.25 % v/v	R3	
24	S46-A1 CRUISER MAXX			25.0
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
	QUADRIS TOP	8 oz/a	R3	
	ENDIGO	4 oz/a	R3	
	VLV	1.7 pt/a	R3	
	COC	0.25 % v/v	R3	

# Plant and Soil Science, U of KY

## Weed Science Research

Crop Code	GLXMA
BBCH Scale	BSOY
Crop Scientific Name	Glycine max
Crop Name	Soybean
Rating Date	10-12-2012
Rating Type	YIELD
Rating Unit	BU
Number of Subsamples	1
Days After First/Last Applic.	162 79
Plant-Eval Interval	162 DP-1
Days After Emergence	155 DE-1
ARM Action Codes	TY1
Number of Decimals	1

Trt No.	Treatment Name	Rate	Growth Stage	Yield
		Rate Unit		
25	S46-A1 CRUISER MAXX			25.3
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
26	S46-A1 UTC			27.5
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
27	S46-A1 AVICTA COMPLETE			22.1
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
28	S46-A1 CRUISER MAXX			29.1
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
29	S46-A1 CRUISER MAXX			28.5
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
30	S46-A1 UTC			26.6
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
31	S46-A1 AVICTA COMPLETE			28.3
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
32	S46-A1 CRUISER MAXX			27.5
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
33	S46-A1 CRUISER MAXX			27.6
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	

# Plant and Soil Science, U of KY

## Weed Science Research

Crop Code	GLXMA
BBCH Scale	BSOY
Crop Scientific Name	Glycine max
Crop Name	Soybean
Rating Date	10-12-2012
Rating Type	YIELD
Rating Unit	BU
Number of Subsamples	1
Days After First/Last Applic.	162 79
Plant-Eval Interval	162 DP-1
Days After Emergence	155 DE-1
ARM Action Codes	TY1
Number of Decimals	1

Trt No.	Treatment Name	Rate	Growth Stage	3
34	S46-A1 UTC			23.2
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
35	S46-A1 AVICTA COMPLETE			25.4
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
36	S46-A1 CRUISER MAXX			24.8
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
37	S46-A1 CRUISER MAXX			38.9
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
	QUADRIS TOP	8 oz/a	R3	
	WARRIOR II	1.7 oz/a	R3	
	COC	0.25 % v/v	R3	
38	S46-A1 UTC			33.2
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
	QUADRIS TOP	8 oz/a	R3	
	WARRIOR II	1.7 oz/a	R3	
	COC	0.25 % v/v	R3	
39	S46-A1 AVICTA COMPLETE			39.1
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
	QUADRIS TOP	8 oz/a	R3	
	WARRIOR II	1.7 oz/a	R3	
	COC	0.25 % v/v	R3	
40	S46-A1 CRUISER MAXX			35.8
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
	QUADRIS TOP	8 oz/a	R3	
	WARRIOR II	1.7 oz/a	R3	
	COC	0.25 % v/v	R3	

# Plant and Soil Science, U of KY

## Weed Science Research

Crop Code	GLXMA
BBCH Scale	BSOY
Crop Scientific Name	Glycine max
Crop Name	Soybean
Rating Date	10-12-2012
Rating Type	YIELD
Rating Unit	BU
Number of Subsamples	1
Days After First/Last Applic.	162 79
Plant-Eval Interval	162 DP-1
Days After Emergence	155 DE-1
ARM Action Codes	TY1
Number of Decimals	1

Trt No.	Treatment Name	Rate	Growth Stage	3
41	S46-A1 CRUISER MAXX			32.4
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
	QUADRIS TOP	8 oz/a	R3	
	WARRIOR II	1.7 oz/a	R3	
	COC	0.25 % v/v	R3	
42	S46-A1 UTC			28.1
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
	QUADRIS TOP	8 oz/a	R3	
	WARRIOR II	1.7 oz/a	R3	
	COC	0.25 % v/v	R3	
43	S46-A1 AVICTA COMPLETE			32.1
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
	QUADRIS TOP	8 oz/a	R3	
	WARRIOR II	1.7 oz/a	R3	
	COC	0.25 % v/v	R3	
44	S46-A1 CRUISER MAXX			29.7
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
	QUADRIS TOP	8 oz/a	R3	
	WARRIOR II	1.7 oz/a	R3	
	COC	0.25 % v/v	R3	
45	S46-A1 CRUISER MAXX			27.1
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
	QUADRIS TOP	8 oz/a	R3	
	WARRIOR II	1.7 oz/a	R3	
	COC	0.25 % v/v	R3	

# Plant and Soil Science, U of KY

## Weed Science Research

Crop Code	GLXMA
BBCH Scale	BSOY
Crop Scientific Name	Glycine max
Crop Name	Soybean
Rating Date	10-12-2012
Rating Type	YIELD
Rating Unit	BU
Number of Subsamples	1
Days After First/Last Applic.	162 79
Plant-Eval Interval	162 DP-1
Days After Emergence	155 DE-1
ARM Action Codes	TY1
Number of Decimals	1

Trt No.	Treatment Name	Rate	Growth Stage	Yield
No.	Name	Rate Unit	Stage	3
46	S46-A1 UTC			23.4
	TOUCHDOWN TOTAL	24 oz/a	4-6"	
	AMS	2.5 % v/v	4-6"	
	TOUCHDOWN TOTAL	24 oz/a	4-6" REG	
	AMS	2.5 % v/v	4-6" REG	
	QUADRIS TOP	8 oz/a	R3	
	WARRIOR II	1.7 oz/a	R3	
	COC	0.25 % v/v	R3	
47	S46-A1 AVICTA COMPLETE			29.5
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
	QUADRIS TOP	8 oz/a	R3	
	WARRIOR II	1.7 oz/a	R3	
	COC	0.25 % v/v	R3	
48	S46-A1 CRUISER MAXX			27.4
	BOUNDARY	1.5 pt/a	PRE	
	FLEXSTAR GT	3 pt/a	4-6"	
	NIS	0.25 % v/v	4-6"	
	AMS	2.5 % v/v	4-6"	
	QUADRIS TOP	8 oz/a	R3	
	WARRIOR II	1.7 oz/a	R3	
	COC	0.25 % v/v	R3	
	LSD (P=.05)			.
	Standard Deviation			.
	CV			.

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

YIELD = yield

Rating Unit

BU = bushel

Plant-Eval Interval

162 DP-1 = 1 GLXMA 5-3-2012

ARM Action CodesTY1 =  $3.376744 * [C1] * (100 - [C2]) / 87$

# Plant and Soil Science, U of KY

## Weed Science Research

### SOYBEAN POSTEMERGENCE II

Trial ID: S12031                      Protocol ID: SYN-SOY-CARPENTER  
 Location: LEXINGTON, KY        Study Director: CHARLES SLACK  
 Project ID:                            Investigator: Charles H Slack  
    Sponsor Contact: TODD CARPENTER

### General Trial Information

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

**Discipline:** FIH fungicide-insecticide-herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-3-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

**Crop 1:** GLXMA Glycine max Soybean  
**BCH Scale:** BSOY  
**Planting Method:** DRILLE drilled  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** SMOOTH smooth  
**Soil Moisture:** NORMAL normal, adequate  
**Harvest Date:** 10-12-2012  
**Harvested Width, Unit:** 5 FT  
**% Standard Moisture:** 13.0

**Crop Description**  
**Planting Date:** 5-3-2012  
**Rate, Unit:** 140000 S/A  
**Soil Temperature, Unit:** 66 F  
**Emergence Date:** 5-10-2012  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 43 FT

**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

**Pest Description**

**Plot Width, Unit:** 15 FT **Site Type:** FIELD field  
**Plot Length, Unit:** 50 FT  
**Plot Area, Unit:** 750 FT2 **Tillage Type:** CONTIL conventional-till  
**Replications:** 1 **Study Design:** NONRAN Non-Randomized

**Site and Design**

**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

**Soil Description**

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2.25 MI

**Moisture and Weather Conditions**



# Plant and Soil Science, U of KY

## Weed Science Research

	Application Description			
	A	B	C	D
<b>Application Date:</b>	5-3-2012	5-23-2012	6-28-2012	7-25-2012
<b>Time of Day:</b>	4 PM	10 AM	3 PM	1 PM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	4-6"	4-6" REG	R3
<b>Application Placement:</b>	BROSOI	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK	SARA CARTER
<b>Air Temperature, Unit:</b>	75 F	73 F	95 F	92 F
<b>% Relative Humidity:</b>	50	61	30	85
<b>Wind Velocity, Unit:</b>	6 MPH	4 MPH	3 MPH	6 MPH
<b>Wind Direction:</b>	SW	NE	SE	SW
<b>Soil Temperature, Unit:</b>	66 F	66 F	74 F	80 F
<b>Soil Moisture:</b>	SLIDRY	NORMAL	DRY	DRY
<b>% Cloud Cover:</b>	60	50	20	10
<b>Next Rain Occurred On:</b>	5-4-2012	5-28-2012	7-1-2012	7-26-2012

	Crop Stage At Each Application							
	A		B		C		D	
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY
<b>Stage Scale Used:</b>							BBCH	
<b>Stage Majority, Percent:</b>							R3	100
<b>Height, Unit:</b>	6 IN		15 IN		30 IN			

	Pest Stage At Each Application							
	A		B		C		D	
<b>Pest 1 Code, Type, Scale:</b>	SETFA	W	SETFA	W	SETFA	W	SETFA	W
<b>Height, Unit:</b>	2 IN		6 IN		1 IN			
<b>Pest 2 Code, Type, Scale:</b>	AMBTR	W	AMBTR	W	AMBTR	W	AMBTR	W
<b>Height, Unit:</b>	3 IN		6 IN		2 IN			
<b>Pest 3 Code, Type, Scale:</b>	CHEAL	W	CHEAL	W	CHEAL	W	CHEAL	W
<b>Height, Unit:</b>	2 IN		5 IN		2 IN			
<b>Pest 4 Code, Type, Scale:</b>	IPOSS	W	IPOSS	W	IPOSS	W	IPOSS	W
<b>Height, Unit:</b>	1 IN		4 IN		2 IN			

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

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

Date	By	Notes
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5-23-2012	SARA CARTER	PRE TREATMENTS 60% EFFECTIVE DUE TO LACK OF RAINFALL
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6-28-2012	SARA CARTER	WEED PRESSURE MEDIUM AT 4-6" REGROWTH TIMING (C). NO INSECT OR DISEASE NOTED.
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7-25-2012	SARA CARTER	NO DISEASE OR INSECT PRESSURE PRESENT AT ANY TREATMENT INTERVAL
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# 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	GLXMA			
BBCH Scale	BSOY	BSOY			
Crop Scientific Name	Glycine max	Glycine max			
Crop Name	Soybean	Soybean			
Rating Date	5-24-2012	5-31-2012	5-31-2012	5-31-2012	5-31-2012
Rating Type	INJURY	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
Rating Timing	1 WEEK	2 WEEK	2WEEK	2WEEK	2WEEK
Days After First/Last Applic.	14 14	21 21	21 21	21 21	21 21
Trt-Eval Interval	14 DA-A	21 DA-A			
Plant-Eval Interval	14 DP-1	21 DP-1	21 DP-1	21 DP-1	21 DP-1
Days After Emergence	8 DE-1	15 DE-1	15 DE-1	15 DE-1	15 DE-1
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0

Trt	Treatment	Rate	Growth					
No.	Name	Unit	Stage	1	2	3	4	5
15	METRIBUZIN	10 oz/a	PRE	0	0	95	88	94
	ROUNDUP POWERMAX	22 oz/a	45DAY					
16	VALOR XLT	3 oz/a	PRE	0	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	45DAY					
17	ROUNDUP POWERMAX	22 oz/a	PRE	0	0	0	0	0
	ROUNDUP POWERMAX	22 oz/a	45DAY					
18	ROUNDUP POWERMAX	22 oz/a	45DAY	0	0	0	0	0
19	CHECK UNTREATED			0	0	0	0	0
	LSD (P=.05)			0.0	0.0	3.7	10.3	4.3
	Standard Deviation			0.0	0.0	2.6	7.3	3.0
	CV			0.0	0.0	3.14	9.38	3.79
	Replicate F			0.000	0.000	0.663	0.254	0.650
	Replicate Prob(F)			1.0000	1.0000	0.5782	0.8583	0.5865
	Treatment F			0.000	0.000	804.142	93.469	555.880
	Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001	0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMACH	SETFA	AMBTR	IPOSS
Pest Scientific Name	Amaranthus hyb>	Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name	Smooth pigweed	Giant foxtail	Giant ragweed	Morning glory
Crop Code		GLXMA		
BBCH Scale		BSOY		
Crop Scientific Name		Glycine max		
Crop Name		Soybean		
Rating Date	5-31-2012	6-8-2012	6-8-2012	6-8-2012
Rating Type	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	2WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	21 21	29 29	29 29	29 29
Trt-Eval Interval		29 DA-A	29 DA-A	29 DA-A
Plant-Eval Interval	21 DP-1	29 DP-1	29 DP-1	29 DP-1
Days After Emergence	15 DE-1	23 DE-1	23 DE-1	23 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	6	7	8	9	10
1	VICE	2 pt/a		PRE	99	0	97	90	89
	ROUNDUP POWERMAX	22 oz/a		45DAY					
2	VICE	3 pt/a		PRE	99	0	99	90	90
	ROUNDUP POWERMAX	22 oz/a		45DAY					
3	PREFIX	2 pt/a		PRE	99	0	98	95	91
	ROUNDUP POWERMAX	22 oz/a		45DAY					
4	TAILWIND	20 oz/a		PRE	99	0	99	66	78
	ROUNDUP POWERMAX	22 oz/a		45DAY					
5	TAILWIND	2 pt/a		PRE	99	0	99	66	88
	ROUNDUP POWERMAX	22 oz/a		45DAY					
6	BOUNDARY	20 oz/a		PRE	99	0	99	85	88
	ROUNDUP POWERMAX	22 oz/a		45DAY					
7	VALOR SX	2 oz/a		PRE	99	0	95	95	94
	REFLEX	1 pt/a		PRE					
	ROUNDUP POWERMAX	22 oz/a		45DAY					
8	MANA 25311	1.64 pt/a		PRE	99	0	99	96	97
	ROUNDUP POWERMAX	22 oz/a		45DAY					
9	MANA 25311	2.19 pt/a		PRE	99	0	99	98	97
	ROUNDUP POWERMAX	22 oz/a		45DAY					
10	TORMENT	0.75 pt/a		PRE	99	0	99	96	98
	ROUNDUP POWERMAX	22 oz/a		45DAY					
11	TORMENT	1 pt/a		PRE	99	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a		45DAY					
12	VALOR SX	2 oz/a		PRE	99	0	97	94	99
	PURSUIT	3 oz/a		PRE					
	ROUNDUP POWERMAX	22 oz/a		45DAY					
13	VALOR SX	2 oz/a		PRE	99	0	90	87	93
	ROUNDUP POWERMAX	22 oz/a		45DAY					
14	PURSUIT	4 oz/a		PRE	99	0	95	97	96
	ROUNDUP POWERMAX	22 oz/a		45DAY					

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMACH	SETFA	AMBTR	IPOSS
Pest Scientific Name	Amaranthus hyb>	Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name	Smooth pigweed	Giant foxtail	Giant ragweed	Morning glory
Crop Code		GLXMA		
BBCH Scale		BSOY		
Crop Scientific Name		Glycine max		
Crop Name		Soybean		
Rating Date	5-31-2012	6-8-2012	6-8-2012	6-8-2012
Rating Type	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	2WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	21 21	29 29	29 29	29 29
Trt-Eval Interval		29 DA-A	29 DA-A	29 DA-A
Plant-Eval Interval	21 DP-1	29 DP-1	29 DP-1	29 DP-1
Days After Emergence	15 DE-1	23 DE-1	23 DE-1	23 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate Growth			
No. Name	Rate Unit Stage	6	7	8
				9
				10
15 METRIBUZIN	10 oz/a PRE	99	0	92
ROUNDUP POWERMAX	22 oz/a 45DAY			86
91				
16 VALOR XLT	3 oz/a PRE	99	0	99
ROUNDUP POWERMAX	22 oz/a 45DAY			99
99				
17 ROUNDUP POWERMAX	22 oz/a PRE	0	0	0
ROUNDUP POWERMAX	22 oz/a 45DAY			0
0				
18 ROUNDUP POWERMAX	22 oz/a 45DAY	0	0	0
0				0
19 CHECK UNTREATED		0	0	0
0				0
LSD (P=.05)		0.0	0.0	4.4
Standard Deviation		0.0	0.0	3.1
CV		0.0	0.0	3.8
				10.54
				6.43
Replicate F		0.000	0.000	0.904
Replicate Prob(F)		1.0000	1.0000	0.4451
Treatment F		0.000	0.000	550.050
Treatment Prob(F)		1.0000	1.0000	0.0001
				0.4367
				76.847
				195.758
				0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMACH	SETFA	AMBTR	IPOSS
Pest Scientific Name	Amaranthus hyb>	Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name	Smooth pigweed	Giant foxtail	Giant ragweed	Morning glory
Crop Code		GLXMA		
BBCH Scale		BSOY		
Crop Scientific Name		Glycine max		
Crop Name		Soybean		
Rating Date	6-8-2012	6-18-2012	6-18-2012	6-18-2012
Rating Type	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	4 WEEK	6 WEEK	6 WEEK	6 WEEK
Days After First/Last Applic.	29 29	39 39	39 39	39 39
Trt-Eval Interval	29 DA-A			
Plant-Eval Interval	29 DP-1	39 DP-1	39 DP-1	39 DP-1
Days After Emergence	23 DE-1	33 DE-1	33 DE-1	33 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	11	12	13	14	15
1	VICE	2 pt/a		PRE	99	0	97	90	89
	ROUNDUP POWERMAX	22 oz/a		45DAY					
2	VICE	3 pt/a		PRE	99	0	99	90	90
	ROUNDUP POWERMAX	22 oz/a		45DAY					
3	PREFIX	2 pt/a		PRE	99	0	98	95	91
	ROUNDUP POWERMAX	22 oz/a		45DAY					
4	TAILWIND	20 oz/a		PRE	99	0	99	66	78
	ROUNDUP POWERMAX	22 oz/a		45DAY					
5	TAILWIND	2 pt/a		PRE	99	0	99	66	88
	ROUNDUP POWERMAX	22 oz/a		45DAY					
6	BOUNDARY	20 oz/a		PRE	99	0	99	85	88
	ROUNDUP POWERMAX	22 oz/a		45DAY					
7	VALOR SX	2 oz/a		PRE	99	0	95	95	94
	REFLEX	1 pt/a		PRE					
	ROUNDUP POWERMAX	22 oz/a		45DAY					
8	MANA 25311	1.64 pt/a		PRE	99	0	99	96	97
	ROUNDUP POWERMAX	22 oz/a		45DAY					
9	MANA 25311	2.19 pt/a		PRE	99	0	99	98	97
	ROUNDUP POWERMAX	22 oz/a		45DAY					
10	TORMENT	0.75 pt/a		PRE	99	0	99	96	98
	ROUNDUP POWERMAX	22 oz/a		45DAY					
11	TORMENT	1 pt/a		PRE	99	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a		45DAY					
12	VALOR SX	2 oz/a		PRE	99	0	97	94	99
	PURSUIT	3 oz/a		PRE					
	ROUNDUP POWERMAX	22 oz/a		45DAY					
13	VALOR SX	2 oz/a		PRE	97	0	90	87	93
	ROUNDUP POWERMAX	22 oz/a		45DAY					
14	PURSUIT	4 oz/a		PRE	98	0	95	97	96
	ROUNDUP POWERMAX	22 oz/a		45DAY					

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMACH	SETFA	AMBTR	IPOSS
Pest Scientific Name	Amaranthus hyb>	Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name	Smooth pigweed	Giant foxtail	Giant ragweed	Morning glory
Crop Code		GLXMA		
BBCH Scale		BSOY		
Crop Scientific Name		Glycine max		
Crop Name		Soybean		
Rating Date	6-8-2012	6-18-2012	6-18-2012	6-18-2012
Rating Type	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	4 WEEK	6 WEEK	6 WEEK	6 WEEK
Days After First/Last Applic.	29 29	39 39	39 39	39 39
Trt-Eval Interval	29 DA-A			
Plant-Eval Interval	29 DP-1	39 DP-1	39 DP-1	39 DP-1
Days After Emergence	23 DE-1	33 DE-1	33 DE-1	33 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt	Treatment	Rate	Growth	11	12	13	14	15
No.	Name	Unit	Stage					
15	METRIBUZIN	10 oz/a	PRE	99	0	92	86	91
	ROUNDUP POWERMAX	22 oz/a	45DAY					
16	VALOR XLT	3 oz/a	PRE	99	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	45DAY					
17	ROUNDUP POWERMAX	22 oz/a	PRE	0	0	0	0	0
	ROUNDUP POWERMAX	22 oz/a	45DAY					
18	ROUNDUP POWERMAX	22 oz/a	45DAY	0	0	0	0	0
19	CHECK UNTREATED			0	0	0	0	0
	LSD (P=.05)			1.6	0.0	4.4	11.3	7.1
	Standard Deviation			1.1	0.0	3.1	8.0	5.0
	CV			1.33	0.0	3.8	10.54	6.43
	Replicate F			1.817	0.000	0.904	0.922	1.585
	Replicate Prob(F)			0.1550	1.0000	0.4451	0.4367	0.2036
	Treatment F			4479.065	0.000	550.050	76.847	195.758
	Treatment Prob(F)			0.0001	1.0000	0.0001	0.0001	0.0001



# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMACH	SETFA	AMBTR	IPOSS
Pest Scientific Name	Amaranthus hyb>	Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name	Smooth pigweed	Giant foxtail	Giant ragweed	Morning glory
Crop Code		GLXMA		
BBCH Scale		BSOY		
Crop Scientific Name		Glycine max		
Crop Name		Soybean		
Rating Date	6-18-2012	7-2-2012	7-2-2012	7-2-2012
Rating Type	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	6 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	39 39	53 14	53 14	53 14
Trt-Eval Interval				
Plant-Eval Interval	39 DP-1	53 DP-1	53 DP-1	53 DP-1
Days After Emergence	33 DE-1	47 DE-1	47 DE-1	47 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	16	17	18	19	20
1	VICE	2 pt/a		PRE	99	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a		45DAY					
2	VICE	3 pt/a		PRE	99	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a		45DAY					
3	PREFIX	2 pt/a		PRE	99	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a		45DAY					
4	TAILWIND	20 oz/a		PRE	99	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a		45DAY					
5	TAILWIND	2 pt/a		PRE	99	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a		45DAY					
6	BOUNDARY	20 oz/a		PRE	99	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a		45DAY					
7	VALOR SX	2 oz/a		PRE	99	0	99	99	99
	REFLEX	1 pt/a		PRE					
	ROUNDUP POWERMAX	22 oz/a		45DAY					
8	MANA 25311	1.64 pt/a		PRE	99	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a		45DAY					
9	MANA 25311	2.19 pt/a		PRE	99	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a		45DAY					
10	TORMENT	0.75 pt/a		PRE	99	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a		45DAY					
11	TORMENT	1 pt/a		PRE	99	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a		45DAY					
12	VALOR SX	2 oz/a		PRE	99	0	99	99	99
	PURSUIT	3 oz/a		PRE					
	ROUNDUP POWERMAX	22 oz/a		45DAY					
13	VALOR SX	2 oz/a		PRE	97	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a		45DAY					
14	PURSUIT	4 oz/a		PRE	98	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a		45DAY					

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMACH	SETFA	AMBTR	IPOSS
Pest Scientific Name	Amaranthus hyb>	Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name	Smooth pigweed	Giant foxtail	Giant ragweed	Morning glory
Crop Code		GLXMA		
BBCH Scale		BSOY		
Crop Scientific Name		Glycine max		
Crop Name		Soybean		
Rating Date	6-18-2012	7-2-2012	7-2-2012	7-2-2012
Rating Type	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	6 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	39 39	53 14	53 14	53 14
Trt-Eval Interval				
Plant-Eval Interval	39 DP-1	53 DP-1	53 DP-1	53 DP-1
Days After Emergence	33 DE-1	47 DE-1	47 DE-1	47 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

  

Trt	Treatment	Rate	Growth	16	17	18	19	20
No.	Name	Unit	Stage					
15	METRIBUZIN	10 oz/a	PRE	99	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	45DAY					
16	VALOR XLT	3 oz/a	PRE	99	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	45DAY					
17	ROUNDUP POWERMAX	22 oz/a	PRE	0	0	99	99	99
	ROUNDUP POWERMAX	22 oz/a	45DAY					
18	ROUNDUP POWERMAX	22 oz/a	45DAY	0	0	99	99	99
19	CHECK UNTREATED			0	0	0	0	0
	LSD (P=.05)			1.6	0.0	0.0	0.0	0.0
	Standard Deviation			1.1	0.0	0.0	0.0	0.0
	CV			1.33	0.0	0.0	0.0	0.0
	Replicate F			1.817	0.000	0.000	0.000	0.000
	Replicate Prob(F)			0.1550	1.0000	1.0000	1.0000	1.0000
	Treatment F			4479.065	0.000	0.000	0.000	0.000
	Treatment Prob(F)			0.0001	1.0000	1.0000	1.0000	1.0000

# 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	
Rating Date	7-2-2012
Rating Type	CONTROL
Rating Unit	PERCENT
Number of Subsamples	1
Rating Timing	8 WEEK
Days After First/Last Applic.	53 14
Trt-Eval Interval	
Plant-Eval Interval	53 DP-1
Days After Emergence	47 DE-1
ARM Action Codes	P
Number of Decimals	0

Trt No.	Treatment Name	Rate	Growth Unit	Stage	21
1	VICE	2 pt/a	PRE		99
	ROUNDUP POWERMAX	22 oz/a	45DAY		
2	VICE	3 pt/a	PRE		99
	ROUNDUP POWERMAX	22 oz/a	45DAY		
3	PREFIX	2 pt/a	PRE		99
	ROUNDUP POWERMAX	22 oz/a	45DAY		
4	TAILWIND	20 oz/a	PRE		99
	ROUNDUP POWERMAX	22 oz/a	45DAY		
5	TAILWIND	2 pt/a	PRE		99
	ROUNDUP POWERMAX	22 oz/a	45DAY		
6	BOUNDARY	20 oz/a	PRE		99
	ROUNDUP POWERMAX	22 oz/a	45DAY		
7	VALOR SX	2 oz/a	PRE		99
	REFLEX	1 pt/a	PRE		
	ROUNDUP POWERMAX	22 oz/a	45DAY		
8	MANA 25311	1.64 pt/a	PRE		99
	ROUNDUP POWERMAX	22 oz/a	45DAY		
9	MANA 25311	2.19 pt/a	PRE		99
	ROUNDUP POWERMAX	22 oz/a	45DAY		
10	TORMENT	0.75 pt/a	PRE		99
	ROUNDUP POWERMAX	22 oz/a	45DAY		
11	TORMENT	1 pt/a	PRE		99
	ROUNDUP POWERMAX	22 oz/a	45DAY		
12	VALOR SX	2 oz/a	PRE		99
	PURSUIT	3 oz/a	PRE		
	ROUNDUP POWERMAX	22 oz/a	45DAY		
13	VALOR SX	2 oz/a	PRE		99
	ROUNDUP POWERMAX	22 oz/a	45DAY		
14	PURSUIT	4 oz/a	PRE		99
	ROUNDUP POWERMAX	22 oz/a	45DAY		

# 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	
Rating Date	7-2-2012
Rating Type	CONTROL
Rating Unit	PERCENT
Number of Subsamples	1
Rating Timing	8 WEEK
Days After First/Last Applic.	53 14
Trt-Eval Interval	
Plant-Eval Interval	53 DP-1
Days After Emergence	47 DE-1
ARM Action Codes	P
Number of Decimals	0

Trt No.	Treatment Name	Rate	Growth Unit	Stage	21
15	METRIBUZIN	10 oz/a	PRE		99
	ROUNDUP POWERMAX	22 oz/a	45DAY		
16	VALOR XLT	3 oz/a	PRE		99
	ROUNDUP POWERMAX	22 oz/a	45DAY		
17	ROUNDUP POWERMAX	22 oz/a	PRE		99
	ROUNDUP POWERMAX	22 oz/a	45DAY		
18	ROUNDUP POWERMAX	22 oz/a	45DAY		99
19	CHECK UNTREATED				0
	LSD (P=.05)				0.0
	Standard Deviation				0.0
	CV				0.0

Replicate F	0.000
Replicate Prob(F)	1.0000
Treatment F	0.000
Treatment Prob(F)	1.0000

# Plant and Soil Science, U of KY

## Weed Science Research

### SOYBEAN PREEMERGENCE II

Trial ID: S12032                      Protocol ID: MANA-SB-PRE  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
Project ID:                              Investigator: Charles H Slack  
Sponsor Contact: GERALD WILEY

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  
AMACH, Amaranthus hybridus, = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Unit

PERCENT = percent

Plant-Eval Interval

14 DP-1 = 1 GLXMA 5-10-2012  
21 DP-1 = 1 GLXMA 5-10-2012  
29 DP-1 = 1 GLXMA 5-10-2012  
39 DP-1 = 1 GLXMA 5-10-2012  
53 DP-1 = 1 GLXMA 5-10-2012

ARM Action Codes

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

# Plant and Soil Science, U of KY

## Weed Science Research

### SOYBEAN PREEMERGENCE II

Trial ID: S12032                      Protocol ID: MANA-SB-PRE  
 Location: LEXINGTON, KY        Study Director: CHARLES SLACK  
 Project ID:                            Investigator: Charles H Slack  
    Sponsor Contact: GERALD WILEY

### 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:** 5-10-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG4232  
**BBCH Scale:** BSOY  
**Planting Method:** PLANTD planted  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** SMOOTH smooth  
**Soil Moisture:** GOOD good  
**Planting Date:** 5-10-2012  
**Rate, Unit:** 190000 S/A  
**Soil Temperature, Unit:** 63 F  
**Emergence Date:** 5-16-2012

### 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:** AMACH Amaranthus hybridus  
**Common Name:** Smooth pigweed

### Site and Design

**Plot Width, Unit:** 10 FT  
**Plot Length, Unit:** 33 FT  
**Plot Area, Unit:** 330 FT<sup>2</sup>  
**Replications:** 4  
**Site Type:** FIELD field  
**Tillage Type:** CONTIL conventional-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:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2.25 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

	<b>A</b>	<b>B</b>
<b>Application Date:</b>	5-10-2012	6-18-2012
<b>Time of Day:</b>	3 PM	11 AM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	45DAY
<b>Application Placement:</b>	BROSOI	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	85 F	80 F
<b>% Relative Humidity:</b>	40	51
<b>Wind Velocity, Unit:</b>	4 MPH	8 MPH
<b>Wind Direction:</b>	SW	WSW
<b>Soil Temperature, Unit:</b>	63 F	72 F
<b>Soil Moisture:</b>	GOOD	GOOD
<b>% Cloud Cover:</b>	10	10
<b>Next Rain Occurred On:</b>	5-12-2012	7-1-2012

### Crop Stage At Each Application

	<b>A</b>	<b>B</b>
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA	BSOY
<b>Stage Scale Used:</b>		45 DAY
<b>Height, Unit:</b>		8 IN

### Pest Stage At Each Application

	<b>A</b>	<b>B</b>
<b>Pest 1 Code, Type, Scale:</b>	SETFA W	SETFA W
<b>Height, Unit:</b>		2 IN
<b>Pest 2 Code, Type, Scale:</b>	AMBTR W	AMBTR W
<b>Height, Unit:</b>		4 IN
<b>Pest 3 Code, Type, Scale:</b>	IPOSS W	IPOSS W
<b>Height, Unit:</b>		2 IN
<b>Pest 4 Code, Type, Scale:</b>	AMACH W	AMACH W
<b>Height, Unit:</b>		3 IN



# Plant and Soil Science, U of KY

## Weed Science Research

### Application Equipment

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



# 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 trifida	Ipomoea sp.
Pest Name				Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA	GLXMA				
BBCH Scale	BSOY	BSOY				
Crop Scientific Name	Glycine max	Glycine max				
Crop Name	Soybean	Soybean				
Rating Date	6-12-2012	6-19-2012		6-19-2012	6-19-2012	6-19-2012
Rating Type	INJURY	INJURY		CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT		PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1		1	1	1
Rating Timing	1 WEEK	2 WEEK		2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	7 7	14 14		14 14	14 14	14 14
Trt-Eval Interval	7 DA-A	14 DA-A		14 DA-A	14 DA-A	14 DA-A
Plant-Eval Interval	33 DP-1	40 DP-1		40 DP-1	40 DP-1	40 DP-1
Days After Emergence	27 DE-1	34 DE-1		34 DE-1	34 DE-1	34 DE-1
ARM Action Codes	P			P	P	P
Number of Decimals	0	0		0	0	0
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
15 CHECK UNTREATED			0	0	0	0
LSD (P=.05)			7.7	5.4	5.7	4.4
Standard Deviation			5.4	3.8	4.0	3.1
CV			44.73	57.77	4.81	3.72
Replicate F			0.463	0.259	1.649	0.648
Replicate Prob(F)			0.7098	0.8543	0.1925	0.5888
Treatment F			13.165	12.128	286.076	480.313
Treatment Prob(F)			0.0001	0.0001	0.0001	0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	SETFA	AMBTR
Pest Scientific Name	Chenopodium al>	Setaria faberi	Ambrosia trifi>
Pest Name	Common lambsqu>	Giant foxtail	Giant ragweed
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Rating Date	6-19-2012	7-5-2012	7-5-2012
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	14 14	30 30	30 30
Trt-Eval Interval	14 DA-A	29 DA-A	30 DA-A
Plant-Eval Interval	40 DP-1	56 DP-1	56 DP-1
Days After Emergence	34 DE-1	50 DE-1	50 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Growth Stage	6	7	8	9
1	HASSLE	1 pt/a	V3-MP	99	3	85	97
	NIS	0.25 % v/v	V3-MP				
2	HASSLE	1.6 pt/a	V3-MP	98	10	91	98
	NIS	0.25 % v/v	V3-MP				
3	FLEXSTAR	1 pt/a	V3-MP	99	6	82	95
	NIS	0.25 % v/v	V3-MP				
4	FLEXSTAR	1.6 pt/a	V3-MP	99	4	84	99
	NIS	0.25 % v/v	V3-MP				
5	VICE	2 pt/a	V3-MP	99	5	91	98
	NIS	0.25 % v/v	V3-MP				
6	VICE	2.33 pt/a	V3-MP	99	10	90	97
	NIS	0.25 % v/v	V3-MP				
7	PREFIX	2.33 pt/a	V3-MP	99	8	88	96
	NIS	0.25 % v/v	V3-MP				
8	MANA 25311	1.5 pt/a	V3-MP	98	0	88	93
	NIS	0.25 % v/v	V3-MP				
9	MANA 25311	2 pt/a	V3-MP	90	9	90	98
	NIS	0.25 % v/v	V3-MP				
10	TORMENT	0.75 pt/a	V3-MP	98	6	91	95
	NIS	0.25 % v/v	V3-MP				
11	TORMENT	1 pt/a	V3-MP	98	6	95	99
	NIS	0.25 % v/v	V3-MP				
12	WARRANT	2.25 pt/a	V3-MP	0	0	23	25
	NIS	0.25 % v/v	V3-MP				
13	PURSUIT	4 oz/a	V3-MP	91	6	92	96
	NIS	0.25 % v/v	V3-MP				
14	ROUNDUP POWERMAX	22 oz/a	V3-MP	98	0	99	96

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	SETFA	AMBTR
Pest Scientific Name	Chenopodium al>	Setaria faberi	Ambrosia trifi>
Pest Name	Common lambsqu>	Giant foxtail	Giant ragweed
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Rating Date	6-19-2012	7-5-2012	7-5-2012
Rating Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	2 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	14 14	30 30	30 30
Trt-Eval Interval	14 DA-A	29 DA-A	30 DA-A
Plant-Eval Interval	40 DP-1	56 DP-1	56 DP-1
Days After Emergence	34 DE-1	50 DE-1	50 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

  

Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	6	7
15 CHECK UNTREATED			0	0
LSD (P=.05)			3.6	5.4
Standard Deviation			2.5	3.8
CV			2.95	78.69
Replicate F			2.800	0.115
Replicate Prob(F)			0.0516	0.9507
Treatment F			762.708	3.634
Treatment Prob(F)			0.0001	0.0006

# 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
Rating Date	7-5-2012	7-5-2012	8-3-2012
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	4 WEEK	4 WEEK	8 WEEK
Days After First/Last Applic.	30 30	30 30	59 59
Trt-Eval Interval	30 DA-A	30 DA-A	59 DA-A
Plant-Eval Interval	56 DP-1	56 DP-1	85 DP-1
Days After Emergence	50 DE-1	50 DE-1	79 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	10	11	12	13
1	HASSLE	1 pt/a		V3-MP	97	93	0	85
	NIS	0.25 % v/v		V3-MP				
2	HASSLE	1.6 pt/a		V3-MP	99	95	0	91
	NIS	0.25 % v/v		V3-MP				
3	FLEXSTAR	1 pt/a		V3-MP	95	97	0	82
	NIS	0.25 % v/v		V3-MP				
4	FLEXSTAR	1.6 pt/a		V3-MP	99	97	0	84
	NIS	0.25 % v/v		V3-MP				
5	VICE	2 pt/a		V3-MP	98	93	0	89
	NIS	0.25 % v/v		V3-MP				
6	VICE	2.33 pt/a		V3-MP	97	93	0	90
	NIS	0.25 % v/v		V3-MP				
7	PREFIX	2.33 pt/a		V3-MP	97	88	0	88
	NIS	0.25 % v/v		V3-MP				
8	MANA 25311	1.5 pt/a		V3-MP	93	77	0	88
	NIS	0.25 % v/v		V3-MP				
9	MANA 25311	2 pt/a		V3-MP	97	75	0	90
	NIS	0.25 % v/v		V3-MP				
10	TORMENT	0.75 pt/a		V3-MP	95	86	0	91
	NIS	0.25 % v/v		V3-MP				
11	TORMENT	1 pt/a		V3-MP	99	91	0	95
	NIS	0.25 % v/v		V3-MP				
12	WARRANT	2.25 pt/a		V3-MP	23	23	0	81
	NIS	0.25 % v/v		V3-MP				
13	PURSUIT	4 oz/a		V3-MP	96	78	0	92
	NIS	0.25 % v/v		V3-MP				
14	ROUNDUP POWERMAX	22 oz/a		V3-MP	98	96	0	99

# 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
Rating Date	7-5-2012	7-5-2012	8-3-2012
Rating Type	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	4 WEEK	4 WEEK	8 WEEK
Days After First/Last Applic.	30 30	30 30	59 59
Trt-Eval Interval	30 DA-A	30 DA-A	59 DA-A
Plant-Eval Interval	56 DP-1	56 DP-1	85 DP-1
Days After Emergence	50 DE-1	50 DE-1	79 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0
Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	
			10
			11
			12
			13
15 CHECK UNTREATED			0
LSD (P=.05)			5.6
Standard Deviation			3.9
CV			4.56
Replicate F			0.795
Replicate Prob(F)			0.5038
Treatment F			244.449
Treatment Prob(F)			0.0001
			0
			12.6
			8.8
			11.18
			0.000
			0.0405
			42.370
			0.0001
			0.0
			0.0000
			0.000
			0.0001
			8.1
			5.7
			6.87
			4.640
			0.0068
			67.602
			0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	CHEAL
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	Chenopodium al>
Pest Name	Giant ragweed	Morning glory	Common lambsqu>
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Rating Date	8-3-2012	8-3-2012	8-3-2012
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	59 59	59 59	59 59
Trt-Eval Interval	59 DA-A	59 DA-A	59 DA-A
Plant-Eval Interval	85 DP-1	85 DP-1	85 DP-1
Days After Emergence	79 DE-1	79 DE-1	79 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0

Trt Treatment No. Name	Rate	Growth Stage	14	15	16
1 HASSLE	1 pt/a	V3-MP	97	97	87
NIS	0.25 % v/v	V3-MP			
2 HASSLE	1.6 pt/a	V3-MP	98	99	85
NIS	0.25 % v/v	V3-MP			
3 FLEXSTAR	1 pt/a	V3-MP	95	95	95
NIS	0.25 % v/v	V3-MP			
4 FLEXSTAR	1.6 pt/a	V3-MP	99	99	93
NIS	0.25 % v/v	V3-MP			
5 VICE	2 pt/a	V3-MP	98	98	89
NIS	0.25 % v/v	V3-MP			
6 VICE	2.33 pt/a	V3-MP	97	97	89
NIS	0.25 % v/v	V3-MP			
7 PREFIX	2.33 pt/a	V3-MP	96	97	78
NIS	0.25 % v/v	V3-MP			
8 MANA 25311	1.5 pt/a	V3-MP	93	93	73
NIS	0.25 % v/v	V3-MP			
9 MANA 25311	2 pt/a	V3-MP	98	97	72
NIS	0.25 % v/v	V3-MP			
10 TORMENT	0.75 pt/a	V3-MP	95	95	79
NIS	0.25 % v/v	V3-MP			
11 TORMENT	1 pt/a	V3-MP	99	99	88
NIS	0.25 % v/v	V3-MP			
12 WARRANT	2.25 pt/a	V3-MP	23	23	23
NIS	0.25 % v/v	V3-MP			
13 PURSUIT	4 oz/a	V3-MP	96	96	65
NIS	0.25 % v/v	V3-MP			
14 ROUNDUP POWERMAX	22 oz/a	V3-MP	96	98	96



# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	CHEAL
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.	Chenopodium al>
Pest Name	Giant ragweed	Morning glory	Common lambsqu>
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Rating Date	8-3-2012	8-3-2012	8-3-2012
Rating Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	59 59	59 59	59 59
Trt-Eval Interval	59 DA-A	59 DA-A	59 DA-A
Plant-Eval Interval	85 DP-1	85 DP-1	85 DP-1
Days After Emergence	79 DE-1	79 DE-1	79 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0
Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	
	14	15	16
15 CHECK UNTREATED	0	0	0
LSD (P=.05)	10.9	10.8	16.9
Standard Deviation	7.6	7.6	11.8
CV	8.94	8.86	15.97
Replicate F	0.475	0.397	0.055
Replicate Prob(F)	0.7015	0.7560	0.9826
Treatment F	63.555	64.788	21.359
Treatment Prob(F)	0.0001	0.0001	0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

### SOYBEAN POSTEMERGENCE III

Trial ID: S12033                      Protocol ID: MANA-SB-POST  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
Project ID:                              Investigator: Charles H Slack  
Sponsor Contact: GERALD WILEY

#### 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  
CHEAL, *Chenopodium album*, = US

#### Crop Code

GLXMA, BSOY, *Glycine max*, = US

#### Rating Unit

PERCENT = percent

#### Plant-Eval Interval

33 DP-1 = 1 GLXMA 5-10-2012  
40 DP-1 = 1 GLXMA 5-10-2012  
56 DP-1 = 1 GLXMA 5-10-2012  
85 DP-1 = 1 GLXMA 5-10-2012

#### ARM Action Codes

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

# Plant and Soil Science, U of KY

## Weed Science Research

### SOYBEAN POSTEMERGENCE III

Trial ID: S12033                      Protocol ID: MANA-SB-POST  
 Location: LEXINGTON, KY        Study Director: CHARLES SLACK  
 Project ID:                            Investigator: Charles H Slack  
    Sponsor Contact: GERALD WILEY

#### 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:** 5-10-2012

#### Trial Location

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

#### Personnel

**Study Director:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

#### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG4232  
**BBCH Scale:** BSOY  
**Planting Method:** PLANTD planted  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** SMOOTH smooth  
**Soil Moisture:** GOOD good  
**Planting Date:** 5-10-2012  
**Rate, Unit:** 190000 S/A  
**Soil Temperature, Unit:** 63 F  
**Emergence Date:** 5-16-2012

### 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

**Plot Width, Unit:** 10 FT  
**Plot Length, Unit:** 33 FT  
**Plot Area, Unit:** 330 FT<sup>2</sup>  
**Replications:** 4  
**Site Type:** FIELD field  
**Tillage Type:** CONTIL conventional-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6  
**% 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:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2.25 MI

# Plant and Soil Science, U of KY

## Weed Science Research

### Application Description

**A**  
**Application Date:** 6-5-2012  
**Time of Day:** 2 PM  
**Application Method:** SPRAY  
**Application Timing:** V3-MP  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 75 F  
**% Relative Humidity:** 50  
**Wind Velocity, Unit:** 6 MPH  
**Wind Direction:** SW  
**Soil Temperature, Unit:** 66 F  
**Soil Moisture:** GOOD  
**% Cloud Cover:** 90  
**Next Rain Occurred On:** 6-11-2012

### Crop Stage At Each Application

**A**  
**Crop 1 Code, BBCH Scale:** GLXMA BSOY  
**Stage Scale Used:** BBCH  
**Stage Majority, Percent:** V3 90  
**Height, Unit:** 6 IN

### Pest Stage At Each Application

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

# Plant and Soil Science, U of KY Weed Science Research

## Application Equipment

**Appl. Equipment:**                   A  
  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



# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed			
Pest Code	IPOSS	SETFA	CHEAL			
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Chenopodium al>			
Pest Name	Morning glory	Giant foxtail	Common lambsqu>			
Crop Code		GLXMA				
BBCH Scale		BSOY				
Crop Scientific Name		Glycine max				
Crop Name		Soybean				
Rating Date						
Rating Type	CONTROL	INJURY	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT			
Number of Subsamples	1	1	1			
Rating Timing	2 WEEK	4 WEEK	4 WEEK			
Days After First/Last Applic.						
Plant-Eval Interval						
Days After Emergence						
ARM Action Codes						
Number of Decimals	0	0	0			
Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	5	6	7	8
1 ROUNDUP POWERMAX	1.12 lb ae/a	14D EPP	99	0	99	99
ROUNDUP POWERMAX	1.12 lb ae/a	PRE				
ROUNDUP POWERMAX	1.12 lb ae/a	EP-V2				
ROUNDUP POWERMAX	1.12 lb ae/a	MP-V4				
2 WARRANT	1.125 lb ai/a	14D EPP	53	0	99	57
3 WARRANT	1.125 lb ai/a	PRE	70	0	99	87
4 REFLEX	0.25 lb ai/a	PRE	70	0	99	99
WARRANT	1.125 lb ai/a	PRE				
5 VALOR SX	0.064 lb ai/a	PRE	90	0	99	99
WARRANT	1.125 lb ai/a	PRE				
6 AUTHORITY XL	0.131 lb ai/a	PRE	90	0	99	93
WARRANT	1.125 lb ai/a	PRE				
7 WARRANT	2.25 lb ai/a	PRE	70	0	99	89
8 WARRANT	1.125 lb ai/a	PRE	90	0	99	99
WARRANT	1.125 lb ai/a	EP-V2				
9 WARRANT	1.125 lb ai/a	PRE	60	0	99	95
WARRANT	1.125 lb ai/a	MP-V4				
10 WARRANT	1.125 lb ai/a	PRE	60	0	99	86
WARRANT	1.125 lb ai/a	EP-V2				
WARRANT	1.125 lb ai/a	MP-V4				
11 WARRANT	1.125 lb ai/a	14D EPP	50	0	99	85
WARRANT	1.125 lb ai/a	EP-V2				
WARRANT	1.125 lb ai/a	MP-V4				
12 HARNESS	0.65 lb ai/a	PRE	60	0	99	99
LSD (P=.05)			2.8	0.0	0.0	3.5
Standard Deviation			1.7	0.0	0.0	2.1
CV			2.32	0.0	0.0	2.3
Replicate F			1.000	0.000	0.000	0.275
Replicate Prob(F)			0.3840	1.0000	1.0000	0.7623
Treatment F			292.308	0.000	0.000	100.293
Treatment Prob(F)			0.0001	1.0000	1.0000	0.0001



# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	AMACH	IPOSS	SETFA	
Pest Scientific Name	Amaranthus hyb>	Ipomoea sp.	Setaria faberi	
Pest Name	Smooth pigweed	Morning glory	Giant foxtail	
Crop Code			GLXMA	
BBCH Scale			BSOY	
Crop Scientific Name			Glycine max	
Crop Name			Soybean	
Rating Date				
Rating Type	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.				
Plant-Eval Interval				
Days After Emergence				
ARM Action Codes				
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	9	10
			11	12
1 ROUNDUP POWERMAX	1.12 lb ae/a	14D EPP	99	99
ROUNDUP POWERMAX	1.12 lb ae/a	PRE		
ROUNDUP POWERMAX	1.12 lb ae/a	EP-V2		
ROUNDUP POWERMAX	1.12 lb ae/a	MP-V4		
2 WARRANT	1.125 lb ai/a	14D EPP	99	53
3 WARRANT	1.125 lb ai/a	PRE	93	70
4 REFLEX	0.25 lb ai/a	PRE	99	70
WARRANT	1.125 lb ai/a	PRE		
5 VALOR SX	0.064 lb ai/a	PRE	99	90
WARRANT	1.125 lb ai/a	PRE		
6 AUTHORITY XL	0.131 lb ai/a	PRE	99	90
WARRANT	1.125 lb ai/a	PRE		
7 WARRANT	2.25 lb ai/a	PRE	95	70
8 WARRANT	1.125 lb ai/a	PRE	99	90
WARRANT	1.125 lb ai/a	EP-V2		
9 WARRANT	1.125 lb ai/a	PRE	99	60
WARRANT	1.125 lb ai/a	MP-V4		
10 WARRANT	1.125 lb ai/a	PRE	99	60
WARRANT	1.125 lb ai/a	EP-V2		
WARRANT	1.125 lb ai/a	MP-V4		
11 WARRANT	1.125 lb ai/a	14D EPP	95	50
WARRANT	1.125 lb ai/a	EP-V2		
WARRANT	1.125 lb ai/a	MP-V4		
12 HARNESS	0.65 lb ai/a	PRE	99	60
LSD (P=.05)			1.4	2.8
Standard Deviation			0.8	1.7
CV			0.85	2.32
Replicate F			1.000	1.000
Replicate Prob(F)			0.3840	0.3840
Treatment F			19.065	292.308
Treatment Prob(F)			0.0001	0.0001

# Plant and Soil Science, U of KY

## Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	CHEAL	AMACH	IPOSS	
Pest Scientific Name	Chenopodium al>	Amaranthus hyb>	Ipomoea sp.	
Pest Name	Common lambsqu>	Smooth pigweed	Morning glory	
Crop Code				GLXMA
BBCH Scale				BSOY
Crop Scientific Name				Glycine max
Crop Name				Soybean
Rating Date				10-11-2012
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.				182 133
Plant-Eval Interval				169 DP-1
Days After Emergence				160 DE-1
ARM Action Codes				TY1
Number of Decimals	0	0	0	1

Trt	Treatment	Rate	Unit	Growth Stage	13	14	15	19
1	ROUNDUP POWERMAX	1.12 lb	ae/a	14D EPP	99	99	99	27.5
	ROUNDUP POWERMAX	1.12 lb	ae/a	PRE				
	ROUNDUP POWERMAX	1.12 lb	ae/a	EP-V2				
	ROUNDUP POWERMAX	1.12 lb	ae/a	MP-V4				
2	WARRANT	1.125 lb	ai/a	14D EPP	57	99	53	27.2
3	WARRANT	1.125 lb	ai/a	PRE	87	93	70	25.2
4	REFLEX	0.25 lb	ai/a	PRE	99	99	70	22.9
	WARRANT	1.125 lb	ai/a	PRE				
5	VALOR SX	0.064 lb	ai/a	PRE	99	99	90	27.5
	WARRANT	1.125 lb	ai/a	PRE				
6	AUTHORITY XL	0.131 lb	ai/a	PRE	93	99	90	28.3
	WARRANT	1.125 lb	ai/a	PRE				
7	WARRANT	2.25 lb	ai/a	PRE	89	95	70	29.1
8	WARRANT	1.125 lb	ai/a	PRE	99	99	90	31.6
	WARRANT	1.125 lb	ai/a	EP-V2				
9	WARRANT	1.125 lb	ai/a	PRE	95	99	60	28.6
	WARRANT	1.125 lb	ai/a	MP-V4				
10	WARRANT	1.125 lb	ai/a	PRE	86	99	60	30.2
	WARRANT	1.125 lb	ai/a	EP-V2				
	WARRANT	1.125 lb	ai/a	MP-V4				
11	WARRANT	1.125 lb	ai/a	14D EPP	85	95	50	29.1
	WARRANT	1.125 lb	ai/a	EP-V2				
	WARRANT	1.125 lb	ai/a	MP-V4				
12	HARNES	0.65 lb	ai/a	PRE	99	99	60	27.5
LSD (P=.05)					3.5	1.4	2.8	6.70
Standard Deviation					2.1	0.8	1.7	3.95
CV					2.3	0.85	2.32	14.18
Replicate F					0.275	1.000	1.000	10.942
Replicate Prob(F)					0.7623	0.3840	0.3840	0.0005
Treatment F					100.293	19.065	292.308	0.968
Treatment Prob(F)					0.0001	0.0001	0.0001	0.5014

# Plant and Soil Science, U of KY

## Weed Science Research

### SOYBEAN EARLY PREPLANT II

Trial ID: S12040                      Protocol ID: MON-2012-01-24-07  
Location: LEXINGTON, KY          Study Director: CHARLES SLACK  
Project ID:                              Investigator: Charles H Slack  
Sponsor Contact: JOHN WILLIS

#### Pest Type

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

#### Pest Code

SETFA, Setaria faberi, = US

CHEAL, Chenopodium album, = US

AMACH, Amaranthus hybridus, = US

IPOSS, Ipomoea sp., = US

#### Crop Code

GLXMA, BSOY, Glycine max, = US

#### Rating Type

YIELD = yield

#### Rating Unit

PERCENT = percent

BU = bushel

#### Plant-Eval Interval

169 DP-1 = 1 GLXMA 4-25-2012

#### ARM Action Codes

TY1 =  $3.723077 * [17] * (100 - [18]) / 87$

# Plant and Soil Science, U of KY

## Weed Science Research

### SOYBEAN EARLY PREPLANT II

Trial ID: S12040                      Protocol ID: MON-2012-01-24-07  
 Location: LEXINGTON, KY        Study Director: CHARLES SLACK  
 Project ID:                            Investigator: Charles H Slack  
     Sponsor Contact: JOHN WILLIS

### 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:** 4-12-2012

### Trial Location

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

### Personnel

**Study Director:** CHARLES SLACK        **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312        **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355  
**Investigator:** CHARLES SLACK        **Title:** RESEARCH SPECIALIST  
**Affiliation:** UNIVERISTY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546-0312        **E-mail:** cslack@uky.edu  
**Phone No.:** 859-218-0747    **Mobile No.:** 859-227-3355

### Other Personnel

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

# Plant and Soil Science, U of KY

## Weed Science Research

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** ASGROW 4232  
**BBCH Scale:** BSOY  
**Planting Method:** PLANTD planted  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium  
**Soil Moisture:** SLIWET slightly wet, moist  
**Harvested Width, Unit:** 5 FT

**Crop Description**  
**Description:** RR  
**Planting Date:** 4-25-2012  
**Rate, Unit:** 189000 S/A

**Soil Temperature, Unit:** 61 F  
**Emergence Date:** 5-4-2012  
**Harvested Length, Unit:** 39 FT

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

**Pest 2 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

**Pest 3 Type:** W **Code:** AMACH *Amaranthus hybridus*  
**Common Name:** Smooth pigweed

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

**Pest Description**

**Plot Width, Unit:** 10 FT **Site Type:** FIELD field  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 440 FT<sup>2</sup> **Tillage Type:** CONTIL conventional-till  
**Replications:** 3 **Study Design:** RACOB� Randomized Complete Block (RCB)

**Site and Design**

**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

**Soil Description**

**Analyzed By:**

**Overall Moisture Conditions:** WEDRDR wet-dry-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2.25 MI

**Moisture and Weather Conditions**

# Plant and Soil Science, U of KY

## Weed Science Research

	Application Description			
	A	B	C	D
<b>Application Date:</b>	4-12-2012	4-25-2012	5-21-2012	5-31-2012
<b>Time of Day:</b>	4 PM	5 PM	11 AM	2 PM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	-14D EPP	PRE	V2, EP	MP-V4
<b>Application Placement:</b>	BROSOI	BROSOI	BROFOL	BROFOL
<b>Applied By:</b>	SARA CARTER	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	58 F	72 F	70 F	76 F
<b>% Relative Humidity:</b>	65	50	60	65
<b>Wind Velocity, Unit:</b>	4 MPH	7 MPH	6 MPH	4 MPH
<b>Wind Direction:</b>	SE	W	WNW	NE
<b>Soil Temperature, Unit:</b>	50 F	61 F	78 F	76 F
<b>Soil Moisture:</b>	GOOD	GOOD	GOOD	GOOD
<b>% Cloud Cover:</b>	5	10	10	15
<b>Next Rain Occurred On:</b>	4-14-2012	4-26-2012	5-28-2012	6-1-2012

	Crop Stage At Each Application							
	A		B		C		D	
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY
<b>Stage Scale Used:</b>					BBCH		BBCH	
<b>Stage Majority, Percent:</b>					V2	85	V4	90
<b>Height, Unit:</b>					6	IN	10	IN

	Pest Stage At Each Application							
	A		B		C		D	
<b>Pest 1 Code, Type, Scale:</b>	SETFA	W	SETFA	W	SETFA	W	SETFA	W
<b>Height, Unit:</b>					2	IN	3	IN
<b>Pest 2 Code, Type, Scale:</b>	CHEAL	W	CHEAL	W	CHEAL	W	CHEAL	W
<b>Height, Unit:</b>					3	IN	4	IN
<b>Pest 3 Code, Type, Scale:</b>	AMACH	W	AMACH	W	AMACH	W	AMACH	W
<b>Height, Unit:</b>					3	IN	4	IN
<b>Pest 4 Code, Type, Scale:</b>	IPOSS	W	IPOSS	W	IPOSS	W	IPOSS	W
<b>Height, Unit:</b>					1	IN	2	IN

# Plant and Soil Science, U of KY

## Weed Science Research

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