



2011 Herbicide Evaluation Trials

Charles H. Slack and William W. Witt

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

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NC11001

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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
AUTHORITY	SULFENTRAZONE	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
BICEP LITE II MAGNUM	S-METOLACHLOR + ATRAZINE	SYNGENTA
BOUNDARY	S-METOLACHLOR + METRIBUZIN	SYNGENTA
CADET	FLUTHIACET-METHYL	FMC
CALLISTO	MESOTRIONE	SYNGENTA
CALLISTO EXTRA	MESOTRIONE + ATRAZINE	SYNGENTA
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
CLASS ACT NG	AMMONIUM SULFATE + NON-IONIC SURFACTANT BLEND/WATER CONDITIONING AGENT	WINFIELD
CLASSIC	CHLORIMURON	DUPONT
CORVUS HERBICIDE	ISOXAFLUTOLE + THIENCARBAZONE-METHYL	BAYER
CROP OIL CONCENTRATE (COC)		LOVELAND
DAWN	FOMESAFEN	CHEMINOVA
DEGREE EXTRA	ACETOCHLOR + ATRAZINE	MONSANTO
DESTINY HC	METHYLATED SEED OIL	WINFIELD
DUAL II MAGNUM	S-METOLACHLOR + BENOXACOR	SYNGENTA
DUAL MAGNUM	S-METOLACHLOR	SYNGENTA
DURANGO DMA	GLYPHOSATE	DOW AGROSCIENCE

HERBICIDES IN REPORT CONTINUED

<u>TRADE NAME</u>	<u>COMMON NAME</u>	<u>COMPANY</u>
ENDIGO	LAMBDA-CYHALOTHRIN + THIAMETHOXAM	SYNGENTA
ENVIVE	FLUMIOXAZIN + THIFENSULFURON	DUPONT
EXPRESS	TRIBENURON-METHYL	DUPONT
FIERCE	FLUMIOXAZIN + PYROXASULFONE	VALENT
FIRSTRATE	CLORANSULAM	DOW AGROSCIENCE
FLEXSTAR GT	FOMESAFEN + GLYPHOSATE	SYNGENTA
GANGSTER FR	CLORANSULAM	VALENT
GLYFOS X-TRA	GLYPHOSATE	CHEMINOVA
GRAMOXONE INTEON	PARAQUAT	SYNGENTA
HALEX GT	GLYPHOSATE (PS) + MESOTRIONE + S-METOLACHLOR	SYNGENTA
HARMONY SG	THIFENSULFURON-METHYL	DUPONT
HARNESS XTRA	ACETOCLOR + ATRAZINE	MONSANTO
HEADLINE	PYRACLOSTROBIN	BASF
HEADLINE AMP	PYRACLOSTROBIN + METCONAZOLE	BASF
IGNITE 280	GLUFOSINATE AMMONIUM	BAYER
IMPACT	TOPRAMEZONE	AMVAC
INDUCE	SURFACTANT	HELENA
LAUDIS	TEMBOTRIONE	BAYER
LEADOFF	RIMSULFURON + THIFENSULFURON	DUPONT
LEXAR	S-METOLACHLOR + MESOTRIONE + ATRAZINE	SYNGENTA
LINEX	LINURON	NOVASOURCE
LIQUID N	28% NITROGEN	
LUMAX	S-METOLACHLOR + MESOTRIONE + ATRAZINE	SYNGENTA
MSO	METHYLATED SEED OIL	LOVELAND
NPAK AMS LIQUID	AMMONIUM SULFATE	WINFIELD
OPTILL	SAFLUFENACIL + IMAZETHAPYR	BASF
PARALLEL PLUS	ATRAZINE + METOLACHLOR	CHEMINOVA
PREFIX	S-METOLACHLOR + BENOXACOR	SYNGENTA
PREQUEL	RIMSULFURON + ISOXAFULTOLE	DUPONT
PRINCEP	SIMAZINE	SYNGENTA
PROWL H2O	PENDIMETHALIN	BASF
QUADRIS	AZOXYSRTOBIN	SYNGENTA
QUILT XCEL	AZOXYSTROBIN + PROPOCONAZOLE	SYNGENTA

HERBICIDES IN REPORT CONTINUED

<u>TRADE NAME</u>	<u>COMMON NAME</u>	<u>COMPANY</u>
RAGE D-TECH	CARFENTRAZONE-ETHYL + 2,4-D	FMC
REALM Q	RIMSULFURON + MESOTRIONE + SAFENER	DUPONT
REFLEX	FOMESAFEN	SYNGENTA
RESOLVE	RIMSULFURON	DUPONT
RESOURCE	FLUMICLORAC PENTYL ESTER	VALOR
RHYTHM	FOMESAFEN	CHEMINOVA
ROUNDUP ORIGINAL	GLYPHOSATE (ISOPROPYLAMINE SALT)	MONSANTO
ROUNDUP POWERMAX	GLYPHOSATE (POTASSIUM SALT)	MONSANTO
ROUNDUP WEATHER MAX	GLYPHOSATE (POTASSIUM SALT)	MONSANTO
SCEPTER	IMAZAQUIN	BASF
SELECT	CLETHODIM	VALENT
SENCOR	METRIBUZIN	BAYER
SEQUENCE	GLYPHOSATE + S-METOLACHLOR	SYNGENTA
SHARPEN	SAFLUFENACIL	BASF
SOLIDA	RIMSULFURON	CHEMINOVA
SONIC	SULFENTRAZONE + CLORANSULAM-METHYL	DOW AGROSCIENCE
STALWART	METOLACHLOR	SIPCAM
STATUS	DIFLUFENZOPYR + DICAMBA	BASF
STEADFAST	NICOSULFURON + RIMSULFURON	DUPONT
STEADFAST Q	NICOSULFURON + RIMSULFURON + SAFENER	DUPONT
SURESTART	ACETOCHLOR + FLUMETSULAM + CLOPYRALID	DOW AGROSCIENCE
TACKLE	GLYPHOSATE + IMAZETHAPYR	CHEMINOVA
TOUCHDOWN TOTAL	GLYPHOSATE	SYNGENTA
TRIPLEFLEX	ACETOCHLOR + FLUMETSULAM + CLOPYRALID	MONSANTO
UAN 28%	28% NITROGEN	
VALOR SX	FLUMIOXAZIN (V-53482)	VALENT
VALOR XLT	FLUMIOXAZIN + CHLORIMURON	VALENT
VERDICT	SAFLUFENACIL + DIMETHENAMID-P	BASF
WARRANT	ACETOCHLOR	MONSANTO
WARRIOR II	LAMBDA-CYHALOTHRIN	SYNGENTA
WEEDONE LV4	2,4-D ESTER	NUFARM AMERICAS INC
ZIDUA	PYROXASULFONE	BASF

DEFINITIONS FOR METHODS OF APPLICATION

PREEMERGENCE

30D EPP	30 DAYS BEFORE PLANTING
EPP 2-3	2-3 WEEKS EARLY PRE PLANT
14 D	14 DAYS BEFORE PLANTING
7 DAY, 7D	1 WEEK BEFORE PLANTING
PRE	PREEMERGENCE

POSTEMERGENCE

EP	EARLY POSTEMERGENCE, WEEDS 0-2"
MP	MID-POSTEMERGENCE, WEEDS 2-4"
+MP	2-4" REGROWTH FOLLOWING A MID-POSTEMERGENCE
++MP	MID-POSTEMERGENCE, FOLLOWING A +MP
LP, 4-6"WEEDS	LATE POSTEMERGENCE, WEEDS 4-6"
2-3LFC	2-3 LEAF CORN
V2-V3	2 ND - 3 RD TRIFOLIATE SOYBEAN
V2-V4	8-12 INCH CORN
EP-V2	EARLY POSTEMERGENCE, 8 INCH CORN
EP-V3	EARLY POSTEMERGENCE, 10 INCH CORN
V3	FOUR NODES WITH 3 UNFOLDED LEAFLETS, 7-9 INCH SOYBEAN
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
28 DAP	28 DAYS AFTER PLANTING
6WAP	6 WEEKS AFTER PLANTING
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>
SETFA	Giant Foxtail	<i>Setaria faberi</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		BARE		
03-01-2011	52	29	40		89	45	47	42	49	44	
03-02-2011	59	32	46		89	36	47	41	49	43	
03-03-2011	58	31	44		75	29	45	41	47	43	
03-04-2011	68	50	59		65	42	47	43	50	46	
03-05-2011	57	37	47	1.13	100	65	49	47	51	49	
03-06-2011	39	33	36	0.30	100	73	46	42	49	44	
03-07-2011	46	30	38		85	52	45	40	46	43	
03-08-2011	58	33	46		91	32	45	41	47	43	
03-09-2011	57	42	50	1.34	99	81	47	44	49	46	
03-10-2011	48	32	40	0.51	100	90	47	42	49	44	
03-11-2011 E	46	32	39	0.09	100	49	45	42			
03-12-2011	66	39	52		68	20	47	41	49	43	
03-13-2011	56	37	46		83	40	49	42	50	45	
03-14-2011	42	34	38	0.53	96	72	46	43	48	45	
03-15-2011	56	42	49	0.27	94	73	46	43	48	45	
03-16-2011	55	41	48		97	56	47	44	49	46	
03-17-2011	73	40	56		89	39	51	43	52	46	
03-18-2011	77	47	62	0.08	97	52	55	49	57	51	
03-19-2011	59	41	50	0.15	96	42	54	49	55	51	
03-20-2011	75	41	58		67	34	54	48	56	50	
03-21-2011	77	60	68		82	46	57	53	59	55	
03-22-2011	76	56	66		85	29	58	54	60	56	
03-23-2011	74	53	64	0.11	86	47	58	55	60	58	
03-24-2011	48	35	42	0.03	93	70	55	48	57	51	
03-25-2011	39	35	37		87	68	48	47	51	49	
03-26-2011	42	30	36	0.08	98	56	47	45	49	47	
03-27-2011	45	29	37	0.10	94	36	48	43	49	45	
03-28-2011	49	30	40		60	27	50	43	50	45	
03-29-2011	46	31	38		57	35	46	43	48	45	
03-30-2011	39	34	36	0.04	96	50	45	43	47	45	
03-31-2011	43	30	36		98	63	45	42	47	44	

Summary for Spindletop for the period 3-1-2011 through 3-31-2011:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS		BARE		
	56	38	47	4.76	88	50	49	45	51	47	
(Deviation from normal)	+2	+4	+3	+0.36							

APRIL CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	SOIL TEMP		RH		GRASS BARE		EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
04-01-2011	51	31	41		99	41	45	41	48	43	
04-02-2011	58	37	48	0.06	96	26	47	42	49	45	
04-03-2011	76	38	57		71	22	51	43	53	46	
04-04-2011	71	42	56	0.89	97	46	54	50	56	53	
04-05-2011	52	38	45	0.08	91	31	51	47	53	50	
04-06-2011	69	38	54		62	24	51	45	53	48	
04-07-2011	73	51	62		74	40	55	48	57	50	
04-08-2011	79	56	68	0.09	85	57	58	53	61	55	
04-09-2011	71	53	62	0.60	97	71	58	55	60	57	
04-10-2011	84	58	71		98	43	61	55	64	58	
04-11-2011	75	56	66	0.51	99	60	60	58	63	61	
04-12-2011	57	43	50	3.19	99	60	58	53	61	56	
04-13-2011	64	36	50		98	34	58	50	59	53	
04-14-2011	69	38	54		91	33	59	51	60	54	
04-15-2011	67	48	58	0.39	98	51	56	53	58	56	
04-16-2011	57	41	49	0.87	98	77	55	51	58	54	
04-17-2011	67	39	53	0.03	92	37	54	49	57	52	
04-18-2011	73	54	64		74	32	56	52	59	55	
04-19-2011	79	63	71		72	47	60	55	62	58	
04-20-2011	65	47	56	0.49	97	70	60	56	62	59	
04-21-2011	59	40	50		85	44	58	54	60	56	
04-22-2011	69	48	58	0.31	97	55	58	55	60	57	
04-23-2011	74	58	66	1.71	99	73	60	58	62	60	
04-24-2011	71	58	64	0.70	99	75	61	58	63	61	
04-25-2011	78	60	69	0.51	98	55	63	60	65	62	
04-26-2011	70	60	65	0.31	92	72	62	60	64	62	
04-27-2011	72	58	65	1.52	99	66	62	61	64	63	
04-28-2011	64	45	54		92	48	61	58	63	61	
04-29-2011	61	46	54	0.10	93	54	61	56	62	59	
04-30-2011	74	44	59		93	37	63	56	63	58	

Summary for Spindletop for the period 4-1-2011 through 4-30-2011:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
	68	47	58	12.36	91	49	57	53	59	55	
(Deviation from normal)	+3	+3	+3	+8.48							

MAY CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS	BARE	MX	MN	
05-01-2011	73	60	66	0.14	97	59	63	60	64	61	
05-02-2011	73	50	62	0.25	99	69	63	61	64	63	
05-03-2011	52	45	48	2.32	99	75	60	55	62	58	
05-04-2011	53	38	46		97	63	55	53	58	56	
05-05-2011	62	34	48		100	42	59	51	59	53	
05-06-2011	65	47	56	0.03	88	49	59	54	60	56	
05-07-2011	64	48	56	0.03	91	59	57	55	59	57	
05-08-2011	74	55	64		99	61	63	57	63	58	
05-09-2011	77	52	64		97	51	65	59	65	60	
05-10-2011	84	58	71		89	62	66	61	67	62	
05-11-2011	87	67	77		95	57	69	64	70	65	
05-12-2011	87	67	77		92	46	70	65	71	67	
05-13-2011	81	65	73	0.23	91	63	69	66	70	68	
05-14-2011	70	56	63	0.44	97	73	67	65	69	67	
05-15-2011	55	52	54	0.32	99	94	65	61	66	63	
05-16-2011	54	45	50	0.02	99	76	61	58	63	60	
05-17-2011	50	44	47	0.09	99	83	58	56	60	58	
05-18-2011	55	49	52	0.12	100	88	57	56	59	58	
05-19-2011	69	54	62		99	63	60	57	62	59	
05-20-2011	79	53	66		99	44	66	57	64	60	
05-21-2011	83	58	70	0.40	97	51	69	62	66	62	
05-22-2011	83	64	74	0.17	98	63	71	65	68	65	
05-23-2011	82	62	72	1.26	99	57	72	66	69	66	
05-24-2011	76	59	68	0.01	99	70	69	67	68	67	
05-25-2011	84	63	74	0.05	99	52	72	66	70	66	
05-26-2011	75	60	68	0.76	96	70	70	67	69	68	
05-27-2011	66	54	60		98	72	67	66	68	66	
05-28-2011	79	51	65		100	58	70	64	69	65	
05-29-2011	88	66	77	0.08	84	45	73	67	71	67	
05-30-2011	91	69	80		89	52	76	70	74	69	
05-31-2011	92	71	82		95	49	77	72	74	71	

Summary for Spindletop for the period 5-1-2011 through 5-31-2011:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS	BARE	MX	MN	
	73	55	64	6.72	96	62	66	61	66	63	
(Deviation from normal)	-3	+0	-1	+2.25							

JUNE CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS		BARE		
06-01-2011	87	65	76		89	48	78	73	76	72	
06-02-2011	84	59	72		87	39	74	70	74	70	
06-03-2011	82	61	72		87	43	73	69	75	70	
06-04-2011	91	62	76		91	42	75	68	79	70	
06-05-2011	88	66	77		90	45	74	71	78	73	
06-06-2011	90	63	76		99	34	76	70	80	73	
06-07-2011	92	68	80		90	43	76	71	82	74	
06-08-2011	94	71	82		89	40	77	72	83	75	
06-09-2011	92	72	82		85	42	77	73	82	76	
06-10-2011	91	66	78	0.21	92	44	77	73	82	77	
06-11-2011	88	67	78		94	43	76	72	82	75	
06-12-2011	82	61	72		96	59	74	72	78	75	
06-13-2011	76	58	67		97	49	75	69	75	72	
06-14-2011	81	54	68		97	32	74	68	74	71	
06-15-2011	72	57	64	0.23	97	76	71	67	72	70	
06-16-2011	84	65	74		97	40	74	68	74	70	
06-17-2011	86	67	76		91	46	77	70	75	71	
06-18-2011	80	67	74	0.51	98	65	75	71	74	72	
06-19-2011	79	64	72	0.76	98	67	72	70	73	71	
06-20-2011	79	65	72	0.03	98	73	73	70	73	71	
06-21-2011	88	71	80	0.07	95	58	77	71	76	72	
06-22-2011	79	67	73	0.13	94	74	74	72	74	73	
06-23-2011	83	65	74	0.22	98	50	75	71	75	72	
06-24-2011	75	62	68		93	57	73	70	74	72	
06-25-2011	79	59	69		98	51	75	69	74	71	
06-26-2011	73	63	68	0.13	97	77	73	70	73	72	
06-27-2011	84	61	72	0.32	99	72	74	69	74	70	
06-28-2011	83	66	74		97	56	76	72	76	73	
06-29-2011	82	59	70		92	45	77	70	76	72	
06-30-2011	85	58	72		94	39	78	70	75	71	

Summary for Spindletop for the period 6-1-2011 through 6-30-2011:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS		BARE		
	84	64	74	2.61	94	52	75	70	76	72	
(Deviation from normal)	+1	+2	+1	-1.05							

JULY CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS		BARE		
07-01-2011	88	64	76		90	45	79	72	76	72	
07-02-2011	89	67	78		97	47	79	74	77	73	
07-03-2011	90	70	80	0.05	94	53	80	74	78	74	
07-04-2011	83	67	75	0.01	97	56	78	75	77	75	
07-05-2011	88	67	78		97	50	81	73	78	74	
07-06-2011	87	68	78	0.02	97	58	79	75	78	75	
07-07-2011	91	67	79		99	49	81	74	78	75	
07-08-2011	79	68	74	3.12	99	74	77	73	76	74	
07-09-2011	84	64	74		100	60	78	72	78	74	
07-10-2011	90	64	77		99	51	80	73	79	74	
07-11-2011	94	72	83		93	62	81	76	80	76	
07-12-2011	93	72	82	0.06	92	61	81	78	81	78	
07-13-2011	89	69	79		97	51	80	76	79	77	
07-14-2011	83	65	74		86	46	79	75	78	76	
07-15-2011	89	64	76		94	48	80	74	78	75	
07-16-2011	87	71	79		96	59	79	76	79	76	
07-17-2011	84	72	78	1.34	98	76	78	76	78	76	
07-18-2011	89	71	80	0.17	98	63	79	75	79	76	
07-19-2011	91	74	82	0.07	96	70	80	77	81	77	
07-20-2011	94	72	83		97	56	83	77	85	78	
07-21-2011	94	78	86		94	58	85	79	87	81	
07-22-2011	91	76	84		93	62	83	80	85	82	
07-23-2011	92	75	84		95	53	84	80	86	81	
07-24-2011	92	74	83	0.05	97	53	84	80	86	81	
07-25-2011	88	73	80	0.16	98	59	83	80	85	81	
07-26-2011	90	70	80		98	53	83	78	85	80	
07-27-2011	93	71	82		96	50	84	79	86	80	
07-28-2011	93	73	83		88	42	84	79	86	81	
07-29-2011	92	76	84		86	54	83	79	86	81	
07-30-2011	88	73	80	1.24	98	69	82	80	84	81	
07-31-2011	89	72	80		99	52	83	79	86	80	

Summary for Spindletop for the period 7-1-2011 through 7-31-2011:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
	89	70	80	6.29	95	56	81	76	81	77	
(Deviation from normal)	+3	+6	+4	+1.29							

AUGUST CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
08-01-2011	92	67	80		99	45	83	78	86	80	
08-02-2011	92	70	81		94	50	83	78	85	80	
08-03-2011	88	68	78	1.52	99	64	80	75	82	78	
08-04-2011	89	70	80		98	52	81	77	84	79	
08-05-2011	89	68	78		98	58	81	77	83	79	
08-06-2011	86	75	80		94	68	80	78	82	80	
08-07-2011	88	72	80	0.34	97	67	80	77	82	79	
08-08-2011	91	72	82	0.14	98	58	80	78	83	80	
08-09-2011	84	70	77		95	56	79	77	82	79	
08-10-2011	83	68	76		96	47	79	76	82	78	
08-11-2011	80	60	70		85	37	77	74	81	76	
08-12-2011	84	56	70		93	43	77	72	80	75	
08-13-2011	86	65	76	0.41	99	51	77	74	79	76	
08-14-2011	79	64	72		99	59	75	73	78	75	
08-15-2011	79	63	71		98	56	75	73	78	75	
08-16-2011	84	58	71		99	39	76	71	79	73	
08-17-2011	87	59	73		95	38	77	71	80	73	
08-18-2011	88	67	78	0.11	95	45	77	73	81	75	
08-19-2011	83	64	74	0.01	98	65	76	74	79	76	
08-20-2011	90	64	77		100	51	79	74	81	76	
08-21-2011	87	72	80		94	57	78	75	82	77	
08-22-2011	83	61	72		97	36	78	74	81	76	
08-23-2011	85	58	72		88	37	77	72	80	74	
08-24-2011	92	69	80		67	47	76	73	80	75	
08-25-2011	86	67	76	0.36	97	48	77	74	80	77	
08-26-2011	85	62	74		97	46	77	73	79	75	
08-27-2011	86	60	73		99	44	77	72	77	75	
08-28-2011	84	62	73		90	30	75	72	75	74	
08-29-2011	83	58	70		91	35	75	71	74	72	
08-30-2011	85	52	68		96	40	75	69	74	71	
08-31-2011	92	67	80		85	34	76	72	75	73	

Summary for Spindletop for the period 8-1-2011 through 8-31-2011:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
	86	65	75	2.89	95	48	78	74	80	76	
(Deviation from normal)	+2	+2	+2	-1.04							

SEPTEMBER CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
09-01-2011	96	73	84		69	33	77	73	76	73	
09-02-2011	98	73	86		80	31	79	74	77	75	
09-03-2011	98	68	83		93	30	80	75	78	75	
09-04-2011	87	66	76	1.02	99	49	78	74	77	75	
09-05-2011	67	57	62	0.96	99	85	74	70	75	71	
09-06-2011	62	55	58	0.82	98	82	69	67	71	69	
09-07-2011	61	58	60	0.22	100	97	67	67	68	68	
09-08-2011	62	57	60	0.07	100	86	67	66	68	68	
09-09-2011	71	59	65		97	68	68	67	69	68	
09-10-2011	78	60	69		97	55	70	67	71	68	
09-11-2011	77	63	70		93	53	72	68	71	69	
09-12-2011	82	59	70	0.02	97	43	72	69	72	69	
09-13-2011	86	63	74		86	45	73	69	72	70	
09-14-2011	87	58	72	0.07	94	45	74	70	73	71	
09-15-2011	65	46	56	0.38	98	32	72	67	72	68	
09-16-2011	65	45	55		88	43	67	65	68	66	
09-17-2011	74	47	60		97	49	68	64	68	65	
09-18-2011	73	54	64		97	70	67	65	68	66	
09-19-2011	67	63	65	0.75	99	83	67	67	68	68	
09-20-2011	74	63	68		99	69	69	67	69	68	
09-21-2011	74	63	68	0.28	99	83	70	68	70	69	
09-22-2011	79	59	69		99	52	70	67	71	68	
09-23-2011	65	52	58	0.14	99	70	69	66	70	67	
09-24-2011	68	49	58		100	54	67	63	68	66	
09-25-2011	79	56	68		95	40	69	65	69	67	
09-26-2011	72	52	62	0.79	97	53	68	66	69	67	
09-27-2011	71	51	61		99	48	66	63	67	65	
09-28-2011	70	50	60		99	48	65	61	66	64	
09-29-2011	75	52	64		100	49	67	61	67	64	
09-30-2011	60	44	52		85	54	65	59	66	63	

Summary for Spindletop for the period 9-1-2011 through 9-30-2011:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
	75	57	66	5.52	95	57	70	67	70	68	
(Deviation from normal)	-3	+2	-1	+2.32							

OCTOBER CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
10-01-2011	53	39	46		98	64	59	56	62	60	
10-02-2011	62	35	48		99	33	60	53	62	58	
10-03-2011	68	41	54		84	34	62	54	62	58	
10-04-2011	77	43	60		92	32	65	56	64	59	
10-05-2011	78	47	62		99	44	67	59	66	60	
10-06-2011	81	52	66		94	28	68	61	66	62	
10-07-2011	80	48	64		99	41	69	61	67	62	
10-08-2011	80	52	66		95	40	69	62	67	63	
10-09-2011	73	50	62		94	40	66	62	65	62	
10-10-2011	79	55	67		89	40	68	62	67	63	
10-11-2011	72	55	64		92	55	65	63	65	64	
10-12-2011	66	54	60		100	77	65	63	65	64	
10-13-2011	65	54	60	0.52	100	85	64	62	65	63	
10-14-2011	67	51	59	0.03	95	30	63	59	64	62	
10-15-2011	64	46	55	0.01	79	41	60	57	62	60	
10-16-2011	78	49	64		70	32	61	56	62	59	
10-17-2011	68	51	60		68	29	63	58	63	61	
10-18-2011	67	46	56	0.38	99	54	61	58	62	60	
10-19-2011	50	41	46	1.53	100	93	59	53	61	57	
10-20-2011	44	40	42	0.37	96	82	53	50	57	54	
10-21-2011	57	38	48	0.01	90	49	53	49	56	54	
10-22-2011	61	36	48		99	40	55	49	56	53	
10-23-2011	63	40	52		88	51	54	50	56	53	
10-24-2011	68	44	56	0.01	87	44	56	52	58	55	
10-25-2011	72	39	56		97	31	57	51	58	54	
10-26-2011	63	58	60	0.70	99	52	57	54	58	56	
10-27-2011	60	38	49	0.49	100	83	57	53	59	56	
10-28-2011	41	33	37	0.03	100	84	53	49	56	53	
10-29-2011	54	28	41		100	44	51	47	54	51	
10-30-2011	58	30	44		91	32	51	46	53	50	
10-31-2011	60	38	49	0.02	83	38	52	48	54	51	

Summary for Spindletop for the period 10-1-2011 through 10-31-2011:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
	65	44	55	4.10	93	49	60	55	61	58	
(Deviation from normal)	-2	-1	-2	+1.53							

MARCH-OCTOBER 2011 SUMMARY CLIMATOLOGICAL DATA, SPINDLETOP

----- AIR TEMPERATURE -----											-- SOD --	
YEAR	MONTH	AVERAGE			EXTREME		AVG DEPART FROM NORM	NO. OF DAYS		4" TEMP AVERAGE		
		MAX	MIN	AVG	MAX	MIN		MAX	MIN	MAX	MIN	
2011	Mar	56	38	47	77	29	+3	0	11	49	45	
2011	Apr	68	47	58	84	31	+3	0	1	57	53	
2011	May	73	55	64	92	34	+0	2	0	66	61	
2011	Jun	84	64	74	94	54	+2	6	0	75	70	
2011	Jul	89	70	80	94	64	+4	15	0	81	76	
2011	Aug	86	65	75	92	52	+0	6	0	78	74	
2011	Sep	75	57	66	98	44	-2	3	0	70	67	
2011	Oct	65	44	55	81	28	-2	0	2	60	55	

----- PRECIPITATION -----										
YEAR	MONTH	DEPARTURE		CUMULATIVE		GREATEST	% RAIN DAYS	NO. DAYS >= .01		
		TOTAL	FROM NORMAL	TOTAL	DEPARTURE	24 HOUR TOTAL				
2011	Mar	4.76	+0.36	4.76	+0.36	1.34	45	14		
2011	Apr	12.36	+8.48	17.12	+8.84	3.19	60	18		
2011	May	6.72	+2.25	23.84	+11.09	2.32	55	17		
2011	Jun	2.61	-1.05	26.45	+10.04	0.76	33	10		
2011	Jul	6.29	+1.29	32.74	+11.33	3.12	32	10		
2011	Aug	2.89	-1.04	35.63	+10.29	1.52	19	6		
2011	Sep	5.52	+2.32	41.15	+12.61	1.02	40	12		
2011	Oct	4.10	+1.53	45.25	+14.14	1.53	29	9		

Plant and Soil Science, U of KY Weed Science Research

NO TILL CORN

Trial ID: C11001 Protocol ID: DUPONT-USA-11-109
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: DAN SMITH

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed ERICA		W Weed SETFA	W Weed AMBTR	W Weed ERICA				
Pest Code		Setaria faberi	Ambrosia trifi>	Conyza canad>		Setaria faberi	Ambrosia trifi>	Conyza canad>				
Pest Scientific Name		Giant foxtail	Giant ragweed	Marestail		Giant foxtail	Giant ragweed	Marestail				
Pest Name												
Crop Code	ZEAMX				ZEAMX				ZEAMX			
BBCH Scale	BCOR				BCOR				BCOR			
Crop Scientific Name	Zea mays				Zea mays				Zea mays			
Crop Name	Corn				Corn				Corn			
Description												
Part Rated												
Rating Date												
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
SE Name												
SE Description												
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK			
Days After First/Last Applic.												
Trt-Eval Interval												
Plant-Eval Interval												
Days After Emergence												
ARM Action Codes	P	P	P	P	P	P	P	P	P			
Sort Order for View												
Number of Decimals	0	0	0	0	0	0	0	0	0			
Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4	5	6	7	8	9
1	REALM Q	4 oz/a	V3	0 a	99 a	93 b	88 c	0 a	99 a	93 b	88 c	0 a
	COC	1 pt/a	V3									
	ABUNDIT	32 fl oz/a	LP									
	AMS	17 lb/100 gal	LP									
2	REALM Q	4 oz/a	V3	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
	ABUNDIT	32 fl oz/a	V3									
	AMS	17 lb/100 gal	V3									
3	REALM Q	4 oz/a	V3	0 a	99 a	96 ab	96 ab	0 a	99 a	96 ab	96 ab	0 a
	IGNITE 280	22 fl oz/a	V3									
	AMS	17 lb/100 gal	V3									
4	REALM Q	4 oz/a	V3	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
	AATREX	16 oz ai/a	V3									
	COC	1 pt/a	V3									
	AMS	17 lb/100 gal	V3									

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed	W Weed	W Weed		W Weed	W Weed	W Weed			
Pest Code		SETFA	AMBTR	ERICA		SETFA	AMBTR	ERICA			
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Conyza canad>		Setaria faberi	Ambrosia trifi>	Conyza canad>			
Pest Name		Giant foxtail	Giant ragweed	Marestail		Giant foxtail	Giant ragweed	Marestail			
Crop Code	ZEAMX				ZEAMX				ZEAMX		
BBCH Scale	BCOR				BCOR				BCOR		
Crop Scientific Name	Zea mays				Zea mays				Zea mays		
Crop Name	Corn				Corn				Corn		
Description											
Part Rated											
Rating Date											
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
SE Name											
SE Description											
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK		
Days After First/Last Applic.											
Trt-Eval Interval											
Plant-Eval Interval											
Days After Emergence											
ARM Action Codes	P	P	P	P	P	P	P	P	P		
Sort Order for View											
Number of Decimals	0	0	0	0	0	0	0	0	0		
Trt Treatment	Rate	Growth	1	2	3	4	5	6	7	8	9
No. Name	Rate Unit	Stage									
5 REALM Q	4 oz/a	V3	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
AATREX	16 oz ai/a	V3									
ABUNDIT	32 fl oz/a	V3									
COC	1 pt/a	V3									
AMS	17 lb/100 gal	V3									
6 REALM Q	4 oz/a	V3	0 a	99 a	92 b	92 bc	0 a	99 a	92 b	92 bc	0 a
CLARITY	2 fl oz/a	V3									
COC	1 pt/a	V3									
AMS	17 lb/100 gal	V3									
7 ABUNDIT	32 fl oz/a	V3	0 a	99 a	99 a	92 bc	0 a	99 a	99 a	92 bc	0 a
AMS	17 lb/100 gal	V3									
ABUNDIT	32 fl oz/a	LP									
AMS	17 lb/100 gal	LP									
8 CHECK UNTREATED			0 a	0 b	0 c	0 d	0 a	0 b	0 c	0 d	0 a
LSD (P=.05)			0.0	0.0	5.8	6.1	0.0	0.0	5.8	6.1	0.0
Standard Deviation			0.0	0.0	3.3	3.5	0.0	0.0	3.3	3.5	0.0
CV			0.0	0.0	3.9	4.2	0.0	0.0	3.9	4.2	0.0
Replicate F			0.000	0.000	1.118	1.502	0.000	0.000	1.118	1.502	0.000
Replicate Prob(F)			1.0000	1.0000	0.3544	0.2564	1.0000	1.0000	0.3544	0.2564	1.0000
Treatment F			0.000	0.000	324.823	281.279	0.000	0.000	324.823	281.279	0.000
Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001	1.0000	1.0000	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	ERICA	
Pest Scientific Name	Setaria faberi	Ambrosia trifid	Conyza canadensis	
Pest Name	Giant foxtail	Giant ragweed	Marestail	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Description				
Part Rated				
Rating Date				9-27-2011
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
SE Name				
SE Description				
Rating Timing	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.				125 113
Trt-Eval Interval				
Plant-Eval Interval				141 DP-1
Days After Emergence				135 DE-1
ARM Action Codes	P	P	P	TY1
Sort Order for View				
Number of Decimals	0	0	0	0
Trt No.	Treatment	Rate	Growth	
	Name	Rate Unit	Stage	
				10 11 12 17
1	REALM Q	4 oz/a	V3	99 a
	COC	1 pt/a	V3	92 c
	ABUNDIT	32 fl oz/a	LP	90 c
	AMS	17 lb/100 gal	LP	179 ab
2	REALM Q	4 oz/a	V3	99 a
	ABUNDIT	32 fl oz/a	V3	93 bc
	AMS	17 lb/100 gal	V3	99 a
3	REALM Q	4 oz/a	V3	93 b
	IGNITE 280	22 fl oz/a	V3	92 c
	AMS	17 lb/100 gal	V3	96 ab
4	REALM Q	4 oz/a	V3	99 a
	AATREX	16 oz ai/a	V3	98 ab
	COC	1 pt/a	V3	99 a
	AMS	17 lb/100 gal	V3	178 ab

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	ERICA	
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Conyza canadensis	
Pest Name	Giant foxtail	Giant ragweed	Marestail	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Description				
Part Rated				
Rating Date				9-27-2011
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
SE Name				
SE Description				
Rating Timing	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.				125 113
Trt-Eval Interval				
Plant-Eval Interval				141 DP-1
Days After Emergence				135 DE-1
ARM Action Codes	P	P	P	TY1
Sort Order for View				
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	10	11
5 REALM Q	4 oz/a	V3	99 a	98 ab
AATREX	16 oz ai/a	V3		99 a
ABUNDIT	32 fl oz/a	V3		184 ab
COC	1 pt/a	V3		
AMS	17 lb/100 gal	V3		
6 REALM Q	4 oz/a	V3	96 ab	91 c
CLARITY	2 fl oz/a	V3		92 bc
COC	1 pt/a	V3		176 ab
AMS	17 lb/100 gal	V3		
7 ABUNDIT	32 fl oz/a	V3	99 a	99 a
AMS	17 lb/100 gal	V3		91 bc
ABUNDIT	32 fl oz/a	LP		202 a
AMS	17 lb/100 gal	LP		
8 CHECK UNTREATED			0 c	0 d
LSD (P=.05)	4.4	5.3	5.4	31.3
Standard Deviation	2.5	3.0	3.1	17.9
CV	2.93	3.66	3.68	11.05
Replicate F	1.615	0.345	0.924	2.225
Replicate Prob(F)	0.2338	0.7138	0.4199	0.1449
Treatment F	573.539	368.825	366.644	27.939
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

NO TILL CORN

Trial ID: C11001 Protocol ID: DUPONT-USA-11-109
Location: LEXINGTON, KY Study Director: CHARLES SLACK
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

ERICA, Conyza canadensis, = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent

BU = bushel

Plant-Eval Interval

141 DP-1 = 1 5-9-2011

ARM Action Codes

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

TY1 = $4.321429 * [14] * (100 - [15]) / 84.5$

Plant and Soil Science, U of KY Weed Science Research

NO TILL CORN

Trial ID: C11001 Protocol ID: DUPONT-USA-11-109
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 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: 5-9-2011

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

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: P1184 HR **Description:** LL/RR
BBCH Scale: BCOR **Planting Date:** 5-9-2011
Planting Method: ROWS **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 60 F
Soil Moisture: EXCELL **Emergence Date:** 5-15-2011
Harvest Date: 9-27-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 36 FT
% Standard Moisture: 15.5

Plant and Soil Science, U of KY Weed Science Research

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:** ERICA *Conyza canadensis*
Common Name: Marestalk

Site and Design

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

Soil Description

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

Moisture and Weather Conditions

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

Application Description

	A	B
Application Date:	5-25-2011	6-6-2011
Time of Day:	1 PM	2 PM
Application Method:	SPRAY	SPRAY
Application Timing:	V3	LP
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	83 F	87 F
% Relative Humidity:	50	37
Wind Velocity, Unit:	10 MPH	2 MPH
Wind Direction:	S	SW
Soil Temperature, Unit:	68 F	74 F
Soil Moisture:	EXCELL	FAIR
% Cloud Cover:	20	10
Next Rain Occurred On:	5-26-2011	6-10-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	
Stage Majority, Percent:	V3 80	
Height, Unit:	10 IN	12 IN

Pest Stage At Each Application

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

Application Equipment

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

Plant and Soil Science, U of KY Weed Science Research

NO TILL CORN II

Trial ID: C11002 Protocol ID: MON-2011-01-24-17
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: SARA ALLEN

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed ERICA		W Weed SETFA	W Weed AMBTR	W Weed ERICA			
Pest Code		Setaria faberi	Ambrosia trifi>	Conyza canaden>		Setaria faberi	Ambrosia trifi>	Conyza canaden>			
Pest Scientific Name		Giant foxtail	Giant ragweed	Marestail		Giant foxtail	Giant ragweed	Marestail			
Pest Name											
Crop Code	ZEAMX				ZEAMX				ZEAMX		
BBCH Scale	BCOR				BCOR				BCOR		
Crop Scientific Name	Zea mays				Zea mays				Zea mays		
Crop Name	Corn				Corn				Corn		
Description											
Part Rated											
Rating Date	6-28-2011	6-28-2011	6-28-2011	6-28-2011	7-12-2011	7-12-2011	7-12-2011	7-12-2011	9-20-2011		
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
SE Name											
SE Description					2ND						
Rating Timing									HARVEST		
Days After First/Last Applic.	50 28	50 28	50 28	50 28	64 42	64 42	64 42	64 42	134 112		
Trt-Eval Interval											
Plant-Eval Interval	50 DP-1	50 DP-1	50 DP-1	50 DP-1	64 DP-1	64 DP-1	64 DP-1	64 DP-1	134 DP-1		
Days After Emergence	45 DE-1	45 DE-1	45 DE-1	45 DE-1	59 DE-1	59 DE-1	59 DE-1	59 DE-1	129 DE-1		
ARM Action Codes	P	P	P	P	P	P	P	P	P		
Sort Order for View											
Number of Decimals	0	0	0	0	0	0	0	0	0		
Trt Treatment	Rate	Growth									
No. Name	Rate Unit	Stage	1	2	3	4	5	6	7	8	9
1 DEGREE XTRA	2.53 lb ai/a	PRE	0 a	99 a	96 b	99 a	0 a	99 a	94 b	99 a	0 a
BALANCE FLEXX HERBICIDE	0.078 lb ai/a	PRE									
AATREX	0.5 lb ai/a	PRE									
ROUNDUP POWERMAX	0.773 lb ae/a	PRE									
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE									
2 CORVUS HERBICIDE	0.092 lb ai/a	PRE	0 a	99 a	99 a	99 a	0 a	96 b	99 a	99 a	0 a
AATREX	0.5 lb/a	PRE									
ROUNDUP POWERMAX	0.773 lb ae/a	PRE									
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE									
3 ROUNDUP POWERMAX	0.773 lb ae/a	PRE	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE									
ROUNDUP POWERMAX	0.773 lb ae/a	V3									
TRIPLEFLEX	1.549 lb ai/a	V3									
CLASS ACT NEXT GENERATION	2.5 % v/v	V3									

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed	W Weed	W Weed		W Weed	W Weed	W Weed				
Pest Code		SETFA	AMBTR	ERICA		SETFA	AMBTR	ERICA				
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Conyza canad>		Setaria faberi	Ambrosia trifi>	Conyza canad>				
Pest Name		Giant foxtail	Giant ragweed	Marestail		Giant foxtail	Giant ragweed	Marestail				
Crop Code	ZEAMX				ZEAMX				ZEAMX			
BBCH Scale	BCOR				BCOR				BCOR			
Crop Scientific Name	Zea mays				Zea mays				Zea mays			
Crop Name	Corn				Corn				Corn			
Description												
Part Rated												
Rating Date	6-28-2011	6-28-2011	6-28-2011	6-28-2011	7-12-2011	7-12-2011	7-12-2011	7-12-2011	9-20-2011			
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
SE Name												
SE Description					2ND							
Rating Timing												
Days After First/Last Applic.	50 28	50 28	50 28	50 28	64 42	64 42	64 42	64 42	134 112			
Trt-Eval Interval												
Plant-Eval Interval	50 DP-1	50 DP-1	50 DP-1	50 DP-1	64 DP-1	64 DP-1	64 DP-1	64 DP-1	134 DP-1			
Days After Emergence	45 DE-1	45 DE-1	45 DE-1	45 DE-1	59 DE-1	59 DE-1	59 DE-1	59 DE-1	129 DE-1			
ARM Action Codes												
Sort Order for View	P	P	P	P	P	P	P	P	P			
Number of Decimals	0	0	0	0	0	0	0	0	0			
Trt Treatment	Rate	Growth										
No. Name	Rate	Unit	Stage	1	2	3	4	5	6	7	8	9
4 ROUNDUP POWERMAX	0.773 lb ae/a	PRE		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE										
ROUNDUP POWERMAX	0.773 lb ae/a	V3										
CALLISTO	0.094 lb ai/a	V3										
CLASS ACT NEXT GENERATION	2.5 % v/v	V3										
5 ROUNDUP POWERMAX	0.773 lb ae/a	PRE		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE										
ROUNDUP POWERMAX	0.773 lb ae/a	V3										
AMS	1 % w/v	V3										
LAUDIS	0.082 lb ai/a	V3										
DESTINY HC	0.5 % v/v	V3										
6 ROUNDUP POWERMAX	0.773 lb ae/a	PRE		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE										
ROUNDUP POWERMAX	0.773 lb ae/a	V3										
LUMAX	2.96 lb ai/a	V3										
CLASS ACT NEXT GENERATION	2.5 % v/v	V3										
7 HALEX GT	2.195 lb ai/a	V3		0 a	99 a	98 ab	99 a	0 a	99 a	99 a	98 a	0 a
CLASS ACT NEXT GENERATION	2.5 % v/v	V3										
8 ROUNDUP POWERMAX	0.773 lb ae/a	PRE		0 a	99 a	99 a	98 a	0 a	99 a	98 a	98 a	0 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE										
ROUNDUP POWERMAX	0.773 lb ae/a	V3										
WARRANT	1.125 lb ai/a	V3										
CALLISTO	0.094 lb ai/a	V3										
CLASS ACT NEXT GENERATION	2.5 % v/v	V3										

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed ERICA Conyza canaden> Marestail		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed ERICA Conyza canaden> Marestail				
Pest Code												
Pest Scientific Name												
Pest Name												
Crop Code	ZEAMX				ZEAMX				ZEAMX			
BBCH Scale	BCOR				BCOR				BCOR			
Crop Scientific Name	Zea mays				Zea mays				Zea mays			
Crop Name	Corn				Corn				Corn			
Description												
Part Rated												
Rating Date	6-28-2011	6-28-2011	6-28-2011	6-28-2011	7-12-2011	7-12-2011	7-12-2011	7-12-2011	9-20-2011			
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
SE Name												
SE Description					2ND							
Rating Timing												
Days After First/Last Applic.	50 28	50 28	50 28	50 28	64 42	64 42	64 42	64 42	134 112			
Trt-Eval Interval												
Plant-Eval Interval	50 DP-1	50 DP-1	50 DP-1	50 DP-1	64 DP-1	64 DP-1	64 DP-1	64 DP-1	134 DP-1			
Days After Emergence	45 DE-1	45 DE-1	45 DE-1	45 DE-1	59 DE-1	59 DE-1	59 DE-1	59 DE-1	129 DE-1			
ARM Action Codes	P	P	P	P	P	P	P	P	P			
Sort Order for View												
Number of Decimals	0	0	0	0	0	0	0	0	0			
Trt Treatment	Rate	Growth										
No. Name	Rate	Unit	Stage	1	2	3	4	5	6	7	8	9
9 ROUNDUP POWERMAX	0.773 lb ae/a	PRE		0 a	99 a	99 a	98 a	0 a	99 a	99 a	98 a	0 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE										
ROUNDUP POWERMAX	0.773 lb ae/a	V3										
TRIPLEFLEX	0.930 lb ai/a	V3										
CALLISTO	0.094 lb ai/a	V3										
CLASS ACT NEXT GENERATION	2.5 % v/v	V3										
10 ROUNDUP POWERMAX	0.773 lb ae/a	PRE		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE										
ROUNDUP POWERMAX	0.773 lb ae/a	V3										
TRIPLEFLEX	1.063 lb ai/a	V3										
CALLISTO	0.094 lb ai/a	V3										
CLASS ACT NEXT GENERATION	2.5 % v/v	V3										
11 ROUNDUP POWERMAX	0.773 lb ae/a	PRE		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE										
ROUNDUP POWERMAX	0.773 lb ae/a	V3										
TRIPLEFLEX	1.549 lb ai/a	V3										
CALLISTO	0.094 lb ai/a	V3										
CLASS ACT NEXT GENERATION	2.5 % v/v	V3										
12 ROUNDUP POWERMAX	0.773 lb ae/a	PRE		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE										
ROUNDUP POWERMAX	0.773 lb ae/a	V3										
AMS	1 % w/v	V3										
TRIPLEFLEX	0.930 lb ai/a	V3										
LAUDIS	0.055 lb ai/a	V3										
DESTINY HC	0.5 % v/v	V3										
DESTINY HC	0.5 % v/v	V3										

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed	W Weed	W Weed		W Weed	W Weed	W Weed		
Pest Code		SETFA	AMBTR	ERICA		SETFA	AMBTR	ERICA		
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Conyza canad>		Setaria faberi	Ambrosia trifi>	Conyza canad>		
Pest Name		Giant foxtail	Giant ragweed	Marestail		Giant foxtail	Giant ragweed	Marestail		
Crop Code	ZEAMX				ZEAMX				ZEAMX	
BBCH Scale	BCOR				BCOR				BCOR	
Crop Scientific Name	Zea mays				Zea mays				Zea mays	
Crop Name	Corn				Corn				Corn	
Description										
Part Rated										
Rating Date	6-28-2011	6-28-2011	6-28-2011	6-28-2011	7-12-2011	7-12-2011	7-12-2011	7-12-2011	9-20-2011	
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY	
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	
SE Name										
SE Description					2ND					
Rating Timing										
Days After First/Last Applic.	50 28	50 28	50 28	50 28	64 42	64 42	64 42	64 42	134 112	
Trt-Eval Interval										
Plant-Eval Interval	50 DP-1	50 DP-1	50 DP-1	50 DP-1	64 DP-1	64 DP-1	64 DP-1	64 DP-1	134 DP-1	
Days After Emergence	45 DE-1	45 DE-1	45 DE-1	45 DE-1	59 DE-1	59 DE-1	59 DE-1	59 DE-1	129 DE-1	
ARM Action Codes	P	P	P	P	P	P	P	P	P	
Sort Order for View										
Number of Decimals	0	0	0	0	0	0	0	0	0	
Trt Treatment	Rate	Growth								
No. Name	Rate Unit Stage									
13 ROUNDUP POWERMAX	0.773 lb ae/a PRE	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
CLASS ACT NEXT GENERATION	2.5 % v/v PRE									
ROUNDUP POWERMAX	0.773 lb ae/a V3									
TRIPLEFLEX	1.063 lb ai/a V3									
LAUDIS	0.055 lb ai/a V3									
14 ROUNDUP POWERMAX	0.773 lb ae/a PRE	0 a	99 a	98 ab	98 a	0 a	99 a	98 a	98 a	0 a
CLASS ACT NEXT GENERATION	2.5 % v/v PRE									
ROUNDUP POWERMAX	0.773 lb ae/a V3									
AMS	1 % w/v V3									
TRIPLEFLEX	1.549 lb ai/a V3									
LAUDIS	0.055 lb ai/a V3									
DESTINY HC	0.5 % v/v V3									
AMS	1 % v/v V3									
15 ROUNDUP POWERMAX	0.773 lb ae/a PRE	0 a	99 a	99 a	98 a	0 a	99 a	98 a	98 a	0 a
CLASS ACT NEXT GENERATION	2.5 % v/v PRE									
ROUNDUP POWERMAX	0.773 lb ae/a V3									
TRIPLEFLEX	1.549 lb ai/a V3									
AATREX	0.5 lb ai/a V3									
CLASS ACT NEXT GENERATION	2.5 % v/v V3									

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed ERICA		W Weed SETFA	W Weed AMBTR	W Weed ERICA					
Pest Code													
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Conyza canaden>		Setaria faberi	Ambrosia trifi>	Conyza canaden>					
Pest Name		Giant foxtail	Giant ragweed	Marestail		Giant foxtail	Giant ragweed	Marestail					
Crop Code	ZEAMX				ZEAMX				ZEAMX				
BBCH Scale	BCOR				BCOR				BCOR				
Crop Scientific Name	Zea mays				Zea mays				Zea mays				
Crop Name	Corn				Corn				Corn				
Description													
Part Rated													
Rating Date	6-28-2011	6-28-2011	6-28-2011	6-28-2011	7-12-2011	7-12-2011	7-12-2011	7-12-2011	9-20-2011				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
SE Name													
SE Description					2ND								
Rating Timing													
Days After First/Last Applic.	50 28	50 28	50 28	50 28	64 42	64 42	64 42	64 42	134 112				
Trt-Eval Interval									HARVEST				
Plant-Eval Interval	50 DP-1	50 DP-1	50 DP-1	50 DP-1	64 DP-1	64 DP-1	64 DP-1	64 DP-1	134 DP-1				
Days After Emergence	45 DE-1	45 DE-1	45 DE-1	45 DE-1	59 DE-1	59 DE-1	59 DE-1	59 DE-1	129 DE-1				
ARM Action Codes	P	P	P	P	P	P	P	P	P				
Sort Order for View													
Number of Decimals	0	0	0	0	0	0	0	0	0				
Trt Treatment	Rate	Growth											
No. Name	Rate	Unit	Stage	1	2	3	4	5	6	7	8	9	
16 CHECK UNTREATED	0	a		0	b	0	c	0	b	0	a	0	a
LSD (P=.05)	0.0			0.0		1.7		1.9		2.2		2.1	0.0
Standard Deviation	0.0			0.0		1.0		1.2		1.3		1.3	0.0
CV	0.0			0.0		1.11		1.25		1.4		1.38	0.0
Replicate F	0.000			0.000		0.319		1.000		0.000		1.662	0.000
Replicate Prob(F)	1.0000			1.0000		0.7292		0.3798		1.0000		0.2068	1.0000
Treatment F	0.000			0.000		1748.552		1369.166		1085.600		645.365	0.000
Treatment Prob(F)	1.0000			1.0000		0.0001		0.0001		1.0000		0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	ERICA	
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Conyza canadens>	
Pest Name	Giant foxtail	Giant ragweed	Marestail	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Description				
Part Rated				
Rating Date	9-20-2011	9-20-2011	9-20-2011	9-27-2011
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
SE Name				
SE Description				
Rating Timing				
Days After First/Last Applic.	134 112	134 112	134 112	141 119
Trt-Eval Interval				
Plant-Eval Interval	134 DP-1	134 DP-1	134 DP-1	141 DP-1
Days After Emergence	129 DE-1	129 DE-1	129 DE-1	136 DE-1
ARM Action Codes	P	P	P	TY1
Sort Order for View				
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	10	11
1 DEGREE XTRA	2.53 lb ai/a	PRE	99 a	94 b
BALANCE FLEXX HERBICIDE	0.078 lb ai/a	PRE		
AATREX	0.5 lb ai/a	PRE		
ROUNDUP POWERMAX	0.773 lb ae/a	PRE		
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE		
2 CORVUS HERBICIDE	0.092 lb ai/a	PRE	96 b	99 a
AATREX	0.5 lb/a	PRE		
ROUNDUP POWERMAX	0.773 lb ae/a	PRE		
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE		
3 ROUNDUP POWERMAX	0.773 lb ae/a	PRE	99 a	99 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE		
ROUNDUP POWERMAX	0.773 lb ae/a	V3		
TRIPLEFLEX	1.549 lb ai/a	V3		
CLASS ACT NEXT GENERATION	2.5 % v/v	V3		
				12
				16
				152 f
				173 def
				198 abc

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	ERICA	
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Conyza canadensis	
Pest Name	Giant foxtail	Giant ragweed	Marestail	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Description				
Part Rated				
Rating Date	9-20-2011	9-20-2011	9-20-2011	9-27-2011
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
SE Name				
SE Description				
Rating Timing				
Days After First/Last Applic.	134 112	134 112	134 112	141 119
Trt-Eval Interval				
Plant-Eval Interval	134 DP-1	134 DP-1	134 DP-1	141 DP-1
Days After Emergence	129 DE-1	129 DE-1	129 DE-1	136 DE-1
ARM Action Codes	P	P	P	TY1
Sort Order for View				
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	10	11
4 ROUNDUP POWERMAX	0.773 lb ae/a	PRE	99 a	99 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE		
ROUNDUP POWERMAX	0.773 lb ae/a	V3		
CALLISTO	0.094 lb ai/a	V3		
CLASS ACT NEXT GENERATION	2.5 % v/v	V3		
5 ROUNDUP POWERMAX	0.773 lb ae/a	PRE	99 a	99 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE		
ROUNDUP POWERMAX	0.773 lb ae/a	V3		
AMS	1 % w/v	V3		
LAUDIS	0.082 lb ai/a	V3		
DESTINY HC	0.5 % v/v	V3		
6 ROUNDUP POWERMAX	0.773 lb ae/a	PRE	99 a	99 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE		
ROUNDUP POWERMAX	0.773 lb ae/a	V3		
LUMAX	2.96 lb ai/a	V3		
CLASS ACT NEXT GENERATION	2.5 % v/v	V3		
7 HALEX GT	2.195 lb ai/a	V3	99 a	99 a
CLASS ACT NEXT GENERATION	2.5 % v/v	V3		
8 ROUNDUP POWERMAX	0.773 lb ae/a	PRE	99 a	98 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE		
ROUNDUP POWERMAX	0.773 lb ae/a	V3		
WARRANT	1.125 lb ai/a	V3		
CALLISTO	0.094 lb ai/a	V3		
CLASS ACT NEXT GENERATION	2.5 % v/v	V3		

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	ERICA	
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Conyza canadensis	
Pest Name	Giant foxtail	Giant ragweed	Marestail	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Description				
Part Rated				
Rating Date	9-20-2011	9-20-2011	9-20-2011	9-27-2011
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
SE Name				
SE Description				
Rating Timing				
Days After First/Last Applic.	134 112	134 112	134 112	141 119
Trt-Eval Interval				
Plant-Eval Interval	134 DP-1	134 DP-1	134 DP-1	141 DP-1
Days After Emergence	129 DE-1	129 DE-1	129 DE-1	136 DE-1
ARM Action Codes	P	P	P	TY1
Sort Order for View				
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	10	11
9 ROUNDUP POWERMAX	0.773 lb ae/a	PRE	99 a	99 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE		
ROUNDUP POWERMAX	0.773 lb ae/a	V3		
TRIPLEFLEX	0.930 lb ai/a	V3		
CALLISTO	0.094 lb ai/a	V3		
CLASS ACT NEXT GENERATION	2.5 % v/v	V3		
10 ROUNDUP POWERMAX	0.773 lb ae/a	PRE	99 a	99 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE		
ROUNDUP POWERMAX	0.773 lb ae/a	V3		
TRIPLEFLEX	1.063 lb ai/a	V3		
CALLISTO	0.094 lb ai/a	V3		
CLASS ACT NEXT GENERATION	2.5 % v/v	V3		
11 ROUNDUP POWERMAX	0.773 lb ae/a	PRE	99 a	99 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE		
ROUNDUP POWERMAX	0.773 lb ae/a	V3		
TRIPLEFLEX	1.549 lb ai/a	V3		
CALLISTO	0.094 lb ai/a	V3		
CLASS ACT NEXT GENERATION	2.5 % v/v	V3		
12 ROUNDUP POWERMAX	0.773 lb ae/a	PRE	99 a	99 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE		
ROUNDUP POWERMAX	0.773 lb ae/a	V3		
AMS	1 % w/v	V3		
TRIPLEFLEX	0.930 lb ai/a	V3		
LAUDIS	0.055 lb ai/a	V3		
DESTINY HC	0.5 % v/v	V3		
DESTINY HC	0.5 % v/v	V3		

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	ERICA	
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Conyza canadens>	
Pest Name	Giant foxtail	Giant ragweed	Marestail	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Description				
Part Rated				
Rating Date	9-20-2011	9-20-2011	9-20-2011	9-27-2011
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
SE Name				
SE Description				
Rating Timing				
Days After First/Last Applic.	134 112	134 112	134 112	141 119
Trt-Eval Interval				
Plant-Eval Interval	134 DP-1	134 DP-1	134 DP-1	141 DP-1
Days After Emergence	129 DE-1	129 DE-1	129 DE-1	136 DE-1
ARM Action Codes	P	P	P	TY1
Sort Order for View				
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	10	11
13 ROUNDUP POWERMAX	0.773 lb ae/a	PRE	99 a	99 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE		
ROUNDUP POWERMAX	0.773 lb ae/a	V3		99 a
TRIPLEFLEX	1.063 lb ai/a	V3		
LAUDIS	0.055 lb ai/a	V3		187 cde
14 ROUNDUP POWERMAX	0.773 lb ae/a	PRE	99 a	98 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE		
ROUNDUP POWERMAX	0.773 lb ae/a	V3		98 a
AMS	1 % w/v	V3		
TRIPLEFLEX	1.549 lb ai/a	V3		
LAUDIS	0.055 lb ai/a	V3		
DESTINY HC	0.5 % v/v	V3		
AMS	1 % v/v	V3		193 bcd
15 ROUNDUP POWERMAX	0.773 lb ae/a	PRE	99 a	98 a
CLASS ACT NEXT GENERATION	2.5 % v/v	PRE		
ROUNDUP POWERMAX	0.773 lb ae/a	V3		98 a
TRIPLEFLEX	1.549 lb ai/a	V3		
AATREX	0.5 lb ai/a	V3		
CLASS ACT NEXT GENERATION	2.5 % v/v	V3		195 abc

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	ERICA	
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Conyza canad>	
Pest Name	Giant foxtail	Giant ragweed	Marestail	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Description				
Part Rated				
Rating Date	9-20-2011	9-20-2011	9-20-2011	9-27-2011
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
SE Name				
SE Description				
Rating Timing				
Days After First/Last Applic.	134 112	134 112	134 112	141 119
Trt-Eval Interval				
Plant-Eval Interval	134 DP-1	134 DP-1	134 DP-1	141 DP-1
Days After Emergence	129 DE-1	129 DE-1	129 DE-1	136 DE-1
ARM Action Codes	P	P	P	TY1
Sort Order for View				
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage		
16 CHECK UNTREATED	10	11	12	16
	0 c	0 c	0 b	39 g
LSD (P=.05)	2.2	2.8	2.1	20.9
Standard Deviation	1.3	1.7	1.3	12.5
CV	1.4	1.82	1.38	6.85
Replicate F	1.000	1.662	1.438	0.928
Replicate Prob(F)	0.3798	0.2068	0.2532	0.4064
Treatment F	1085.600	645.365	1123.403	32.964
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

NO TILL CORN II

Trial ID: C11002 Protocol ID: MON-2011-01-24-17
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: SARA ALLEN

Pest Type

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

Pest Code

SETFA, Setaria faberi, = US

AMBTR, Ambrosia trifida, = US

ERICA, Conyza canadensis, = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent

BU = bushel

Plant-Eval Interval

50 DP-1 = 1 5-9-2011

64 DP-1 = 1 5-9-2011

134 DP-1 = 1 5-9-2011

141 DP-1 = 1 5-9-2011

ARM Action Codes

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

TY1 = $4.321429 * [C13] * (100 - [C14]) / 84.5$

Plant and Soil Science, U of KY Weed Science Research

NO TILL CORN II

Trial ID: C11002 Protocol ID: MON-2011-01-24-17
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: SARA ALLEN

General Trial Information

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

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-9-2011

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

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC 62-97
BBCH Scale: BCOR **Planting Date:** 5-9-2011
Planting Method: ROWS **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 64 F
Soil Moisture: EXCELL **Emergence Date:** 5-14-2011
Harvest Date: 9-27-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 36 FT
% Standard Moisture: 15.5

Plant and Soil Science, U of KY Weed Science Research

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:** ERICA *Conyza canadensis*
Common Name: Marestalk

Site and Design

Plot Width, Unit: 10 FT **Site Type:** FIELD field
Plot Length, Unit: 44 FT
Plot Area, Unit: 440 FT² **Tillage Type:** NOTILL no-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:** 2.25 MI

Application Description

	A	B
Application Date:	5-9-2011	5-31-2011
Time of Day:	10 AM	2 PM
Application Method:	SPRAY	SPDINC
Application Timing:	PRE	V3
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	80 F	90 F
% Relative Humidity:	50	44
Wind Velocity, Unit:	8 MPH	5 MPH
Wind Direction:	SSE	W
Soil Temperature, Unit:	62 F	72 F
Soil Moisture:	E	GOOD
% Cloud Cover:	10	0
Next Rain Occurred On:	5-13-2011	6-10-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		V3
Height, Unit:		10 IN

Pest Stage At Each Application

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

Application Equipment

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

Plant and Soil Science, U of KY Weed Science Research

NO TILL CORN III

Trial ID: C11003 Protocol ID: DOW--CORN1
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: JONATHAN HUFF

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	ZEAMX BCOR Zea mays Corn			
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	ERICA Conyza canaden> Marestail		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	ERICA Conyza canaden> Marestail				
INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT		
2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK		
P	P	P	P	P	P	P	P	P	P	P		
0	0	0	0	0	0	0	0	0	0	0		
Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4	5	6	7	8	9
1	SURESTART DURANGO DMA AMS	1.75 pt/a 24 fl oz/a 2 % v/v	PRE LP LP	0 a	99 a	96 a	96 ab	0 a	99 a	96 a	96 a	0 a
2	SURESTART DURANGO DMA AMS	2.5 pt/a 24 fl oz/a 2 % v/v	PRE LP LP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
3	SURESTART AATREX DURANGO DMA AMS	2 pt/a 1.11 lb ai/a 24 fl oz/a 2 % v/v	PRE PRE LP LP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
4	DURANGO DMA AMS SURESTART DURANGO DMA AMS	24 fl oz/a 2 % v/v 1.75 pt/a 24 fl oz/a 2 % v/v	PRE PRE EP EP EP	0 a	99 a	98 a	99 a	0 a	99 a	96 a	99 a	0 a
5	SOLIDA GLYFOS X-TRA	0.0156 lb ai/a 0.75 lb ae/a	V3 V3	0 a	99 a	95 a	95 b	0 a	99 a	96 a	96 a	0 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifida Giant ragweed	W Weed ERICA Conyza canadensis Marestail		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifida Giant ragweed	W Weed ERICA Conyza canadensis Marestail	
Pest Code									
Pest Scientific Name									
Pest Name									
Crop Code	ZEAMX				ZEAMX				ZEAMX
BBCH Scale	BCOR				BCOR				BCOR
Crop Scientific Name	Zea mays				Zea mays				Zea mays
Crop Name	Corn				Corn				Corn
Description									
Part Rated									
Rating Date									
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
SE Name									
SE Description									
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK
Days After First/Last Applic.									
Trt-Eval Interval									
Plant-Eval Interval									
Days After Emergence									
ARM Action Codes	P	P	P	P	P	P	P	P	P
Sort Order for View									
Number of Decimals	0	0	0	0	0	0	0	0	0
Trt No.	1	2	3	4	5	6	7	8	9
Treatment Name									
Rate									
Unit									
Growth Stage									
6 TOUCHDOWN TOTAL	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
N-PAK AMS LIQUID									
HALEX GT									
AATREX									
N-PAK AMS LIQUID									
NIS									
7 TOUCHDOWN TOTAL	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
LEXAR									
N-PAK AMS LIQUID									
LEXAR									
8 VERDICT	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
ROUNDUP POWERMAX									
AMS									
ROUNDUP POWERMAX									
AMS									
LSD (P=.05)	0.0	0.0	4.7	4.3	0.0	0.0	6.0	4.7	0.0
Standard Deviation	0.0	0.0	2.7	2.4	0.0	0.0	3.4	2.7	0.0
CV	0.0	0.0	2.73	2.49	0.0	0.0	3.48	2.74	0.0
Replicate F	0.000	0.000	0.355	0.928	0.000	0.000	0.000	0.467	0.000
Replicate Prob(F)	1.0000	1.0000	0.7073	0.4183	1.0000	1.0000	1.0000	0.6365	1.0000
Treatment F	0.000	0.000	1.207	1.511	0.000	0.000	0.625	0.800	0.000
Treatment Prob(F)	1.0000	1.0000	0.3607	0.2415	1.0000	1.0000	0.7279	0.6004	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	ERICA	
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Conyza canaden>	
Pest Name	Giant foxtail	Giant ragweed	Marestail	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Description				
Part Rated				
Rating Date				9-27-2011
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
SE Name				
SE Description				
Rating Timing	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.				141 113
Trt-Eval Interval				
Plant-Eval Interval				144 DP-1
Days After Emergence				138 DE-1
ARM Action Codes	P	P	P	TY1
Sort Order for View				
Number of Decimals	0	0	0	0
Trt No.	Treatment	Rate	Growth	
	Name	Unit	Stage	
				10 11 12 16
1	SURESTART DURANGO DMA AMS	1.75 pt/a 24 fl oz/a 2 % v/v	PRE LP LP	99 a 96 a 96 a 196 cd
2	SURESTART DURANGO DMA AMS	2.5 pt/a 24 fl oz/a 2 % v/v	PRE LP LP	99 a 99 a 99 a 217 a
3	SURESTART AATREX DURANGO DMA AMS	2 pt/a 1.11 lb ai/a 24 fl oz/a 2 % v/v	PRE PRE LP LP	99 a 99 a 99 a 204 bc
4	DURANGO DMA AMS SURESTART DURANGO DMA AMS	24 fl oz/a 2 % v/v 1.75 pt/a 24 fl oz/a 2 % v/v	PRE PRE EP EP EP	99 a 96 a 99 a 185 d
5	SOLIDA GLYFOS X-TRA	0.0156 lb ai/a 0.75 lb ae/a	V3 V3	99 a 96 a 96 a 204 bc

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	ERICA	
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Conyza canadens>	
Pest Name	Giant foxtail	Giant ragweed	Marestail	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Description				
Part Rated				
Rating Date				9-27-2011
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
SE Name				
SE Description				
Rating Timing	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.				141 113
Trt-Eval Interval				
Plant-Eval Interval				144 DP-1
Days After Emergence				138 DE-1
ARM Action Codes	P	P	P	TY1
Sort Order for View				
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate	Unit	Stage	
				10 11 12 16
6 TOUCHDOWN TOTAL	24 fl oz/a	PRE		99 a 99 a 99 a 196 cd
N-PAK AMS LIQUID	2.5 % v/v	PRE		
HALEX GT	3.6 pt/a	V3		
AATREX	1 pt/a	V3		
N-PAK AMS LIQUID	2.5 % v/v	V3		
NIS	0.25 % v/v	V3		
7 TOUCHDOWN TOTAL	24 fl oz/a	PRE		99 a 99 a 99 a 207 abc
LEXAR	1.5 qt/a	PRE		
N-PAK AMS LIQUID	2.5 % v/v	PRE		
LEXAR	1.25 qt/a	V3		
8 VERDICT	13 fl oz/a	PRE		99 a 99 a 99 a 210 ab
ROUNDUP POWERMAX	22 fl oz/a	PRE		
AMS	3.7 % v/v	PRE		
ROUNDUP POWERMAX	22 fl oz/a	V3		
AMS	3.7 % v/v	V3		
LSD (P=.05)	0.0	6.0	4.7	11.9
Standard Deviation	0.0	3.4	2.7	6.8
CV	0.0	3.48	2.74	3.35
Replicate F	0.000	0.000	0.467	7.057
Replicate Prob(F)	1.0000	1.0000	0.6365	0.0076
Treatment F	0.000	0.625	0.800	6.440
Treatment Prob(F)	1.0000	0.7279	0.6004	0.0016

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

NO TILL CORN III

Trial ID: C11003 Protocol ID: DOW--CORN1
Location: LEXINGTON, KY Study Director: CHARLES SLACK
Project ID: 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

ERICA, Conyza canadensis, = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent

BU = bushel

Plant-Eval Interval

144 DP-1 = 1 5-6-2011

ARM Action Codes

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

TY1 = $4.321429 * [C13] * (100 - [C14]) / 84.5$

Plant and Soil Science, U of KY Weed Science Research

NO TILL CORN III

Trial ID: C11003 Protocol ID: DOW--CORN1
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: 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: 5-6-2011

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

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: P 1184HR
BBCH Scale: BCOR **Planting Date:** 5-6-2011
Planting Method: ROWS **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 57 F
Soil Moisture: EXCELL **Emergence Date:** 5-12-2011
Harvest Date: 9-27-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 36 FT
% Standard Moisture: 15.5

Plant and Soil Science, U of KY Weed Science Research

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:** ERICA *Conyza canadensis*
Common Name: Marestalk

Site and Design

Plot Width, Unit: 10 FT **Site Type:** FIELD field
Plot Length, Unit: 44 FT
Plot Area, Unit: 440 FT² **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RAOBL 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:** 2.25 MI

Application Description

	A	B	C	D
Application Date:	5-9-2011	5-27-2011	6-6-2011	6-6-2011
Time of Day:	3 PM	2 PM	2 PM	2 PM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	EP	LP	V3
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	85 F	64 F	87 F	87 F
% Relative Humidity:	60	58	37	37
Wind Velocity, Unit:	8 MPH	6 MPH	2 MPH	2 MPH
Wind Direction:	SW	W	SW	SW
Soil Temperature, Unit:	62 F	67 F	77 F	77 F
Soil Moisture:	EXCELL	EXCELL	FAIR	FAIR
% Cloud Cover:	20	90	10	10
Next Rain Occurred On:	5-13-2011	5-29-2011	6-10-2011	6-10-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application				
	A	B	C	D
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH		BBCH
Stage Majority, Percent:		V2		V3
Height, Unit:		8 IN	9 IN	10 IN

Pest Stage At Each Application				
	A	B	C	D
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W	SETFA W
Height, Unit:	1 IN	2 IN	3 IN	3 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W	AMBTR W
Height, Unit:	2 IN	3 IN	4 IN	4 IN
Pest 3 Code, Type, Scale:	ERICA W	ERICA W	ERICA W	ERICA W
Height, Unit:	1 IN	2 IN	2.5 IN	2.5 IN

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

Plant and Soil Science, U of KY Weed Science Research

NO TILL CORN IV

Trial ID: C11004 Protocol ID: SYN COMMERCIAL CORN
 Location: LEXINGTON, KY Study Director: CHARLES H. SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: SCOTT CULLY

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA				
Pest Code		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi				
Pest Scientific Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail				
Pest Name														
Crop Code	ZEAMX				ZEAMX				ZEAMX					
BBCH Scale	BCOR				BCOR				BCOR					
Crop Scientific Name	Zea mays				Zea mays				Zea mays					
Crop Name	Corn				Corn				Corn					
Description														
Part Rated														
Rating Date														
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
SE Name														
SE Description														
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK				
Days After First/Last Applic.														
Trt-Eval Interval														
Plant-Eval Interval														
Days After Emergence														
ARM Action Codes	P	P	P	P	P	P	P	P	P	P				
Sort Order for View														
Number of Decimals	0	0	0	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Growth Unit	Stage	1	2	3	4	5	6	7	8	9	10
1	CHECK UNTREATED ROUNDUP POWERMAX AMS	22 fl oz/a 3.7 % v/v	PRE PRE		0 a	0 c	0 b	0 c	0 a	0 c	0 b	0 c	0 a	0 b
2	TOUCHDOWN TOTAL LEXAR PRINCEP	24 fl oz/a 3 qt/a 1 lb ai/a	PRE PRE PRE		0 a	98 ab	99 a	95 ab	0 a	98 ab	99 a	95 ab	0 a	98 a
3	TOUCHDOWN TOTAL LEXAR LEXAR	24 fl oz/a 1.5 qt/a 1.5 qt/a	PRE PRE EP-V3		0 a	95 ab	99 a	99 a	0 a	95 ab	99 a	99 a	0 a	93 a
4	TOUCHDOWN TOTAL LEXAR HALEX GT N-PAK AMS LIQUID NIS	24 fl oz/a 1.5 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v	PRE PRE LP-V6 LP-V6 LP-V6		0 a	99 a	99 a	96 ab	0 a	99 a	99 a	96 ab	0 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	ZEAMX BCOR Zea mays Corn	W Weed		
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory				
INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT			
2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK			
P	P	P	P	P	P	P	P	P	P			
0	0	0	0	0	0	0	0	0	0			
Trt Treatment No. Name	Rate	Growth Unit Stage	1	2	3	4	5	6	7	8	9	10
5 TOUCHDOWN TOTAL HALEX GT N-PAK AMS LIQUID NIS	24 fl oz/a 3.6 pt/a 2.5 % v/v 0.25 % v/v	PRE EP-V3 EP-V3 EP-V3	0 a	99 a	98 a	96 ab	0 a	99 a	98 a	96 ab	0 a	99 a
6 ROUNDUP POWERMAX AMS VERDICT ROUNDUP POWERMAX AMS	22 fl oz/a 3.7 % v/v 15 oz/a 22 fl oz/a 3.7 % v/v	PRE PRE PRE LP-V6 LP-V6	0 a	99 a	99 a	95 ab	0 a	99 a	99 a	95 ab	0 a	99 a
7 ROUNDUP POWERMAX AMS VERDICT STATUS ROUNDUP POWERMAX AMS	22 fl oz/a 3.7 % v/v 13 fl oz/a 2.5 oz/a 22 fl oz/a 3.7 % v/v	PRE PRE PRE LP-V6 LP-V6 LP-V6	0 a	99 a	99 a	93 b	0 a	99 a	99 a	93 b	0 a	99 a
8 DURANGO SURESTART DURANGO AMS	24 fl oz/a 2.5 pt/a 24 fl oz/a 2 % v/v	PRE PRE LP-V6 LP-V6	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
9 DURANGO SURESTART AATREX DURANGO AMS	24 fl oz/a 2.5 pt/a 1 lb ai/a 24 fl oz/a 2 % v/v	PRE PRE PRE LP-V6 LP-V6	0 a	99 a	99 a	96 ab	0 a	99 a	99 a	96 ab	0 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	ZEAMX BCOR Zea mays Corn	W Weed			
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory					
Trt Treatment No. Name	Rate	Growth Unit	Stage	1	2	3	4	5	6	7	8	9	10
10 ROUNDUP POWERMAX AMS PREQUEL AATREX REALM Q COC AMS	22 fl oz/a 3.7 % v/v 1.66 oz/a 1 lb ai/a 4 oz/a 1 pt/a 2 lb ai/a	PRE PRE PRE EP-V3 EP-V3 EP-V3		0 a	96 ab	99 a	95 ab	0 a	96 ab	99 a	95 ab	0 a	93 a
11 ROUNDUP POWERMAX AMS RIMSULFURON MESOTRIONE AATREX ABUNDIT AMS	22 fl oz/a 3.7 % v/v 0.375 oz/a 2.25 oz/a 1 lb ai/a 32 fl oz/a 2 lb ai/a	PRE PRE PRE PRE EP-V3 EP-V3		0 a	95 b	98 a	96 ab	0 a	95 b	98 a	96 ab	0 a	95 a
12 ROUNDUP POWERMAX AMS CORVUS HERBICIDE AATREX LAUDIS MSO AMS	22 fl oz/a 3.7 % v/v 3 oz/a 1 qt/a 3 oz/a 1 % v/v 3.7 % v/v	PRE PRE PRE PRE EP-V3 EP-V3 EP-V3		0 a	98 ab	98 a	93 b	0 a	98 ab	98 a	93 b	0 a	98 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	ZEAMX BCOR Zea mays Corn	W Weed			
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifida Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifida Giant ragweed	IPOSS Ipomoea sp. Morning glory					
Trt Treatment No. Name	Rate	Growth Unit	Stage	1	2	3	4	5	6	7	8	9	10
13 ROUNDUP POWERMAX AMS CORVUS HERBICIDE AATREX LAUDIS MSO ROUNDUP POWERMAX AMS	22 fl oz/a 3.7 % v/v 3 oz/a 1 qt/a 3 oz/a 1 % v/v 22 fl oz/a 3.7 % v/v	PRE PRE PRE EP-V3 EP-V3 EP-V3		0 a	98 ab	99 a	99 a	0 a	98 ab	99 a	99 a	0 a	98 a
14 ROUNDUP POWERMAX AMS BALANCE FLEXX HERBICIDE AATREX CAPRENO HERBICIDE COC AMS	22 fl oz/a 3.7 % v/v 3 oz/a 1 qt/a 3 oz/a 1 % v/v 3.7 % v/v	PRE PRE PRE EP-V3 EP-V3 EP-V3		0 a	99 a	99 a	98 ab	0 a	99 a	99 a	98 ab	0 a	99 a
LSD (P=.05)				0.0	4.3	1.8	5.5	0.0	4.3	1.8	5.5	0.0	7.0
Standard Deviation				0.0	2.6	1.1	3.3	0.0	2.6	1.1	3.3	0.0	4.2
CV				0.0	2.82	1.17	3.65	0.0	2.82	1.17	3.65	0.0	4.64
Replicate F				0.000	2.824	1.000	9.197	0.000	2.824	1.000	9.197	0.000	2.730
Replicate Prob(F)				1.0000	0.0777	0.3816	0.0010	1.0000	0.0777	0.3816	0.0010	1.0000	0.0839
Treatment F				0.000	314.182	1827.111	187.481	0.000	314.182	1827.111	187.481	0.000	116.326
Treatment Prob(F)				1.0000	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001	0.0001	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-28-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			131 104
Trt-Eval Interval			
Plant-Eval Interval			131 DP-1
Days After Emergence			124 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt No.	Treatment	Rate	Growth
	Name	Rate Unit	Stage
			11
			12
			16
1	CHECK UNTREATED		0 c
	ROUNDUP POWERMAX	22 fl oz/a PRE	0 c
	AMS	3.7 % v/v PRE	87 c
2	TOUCHDOWN TOTAL	24 fl oz/a PRE	98 ab
	LEXAR	3 qt/a PRE	94 ab
	PRINCEP	1 lb ai/a PRE	201 b
3	TOUCHDOWN TOTAL	24 fl oz/a PRE	99 a
	LEXAR	1.5 qt/a PRE	99 a
	LEXAR	1.5 qt/a EP-V3	200 b
4	TOUCHDOWN TOTAL	24 fl oz/a PRE	99 a
	LEXAR	1.5 qt/a PRE	96 ab
	HALEX GT	3.6 pt/a LP-V6	202 ab
	N-PAK AMS LIQUID	2.5 % v/v LP-V6	
	NIS	0.25 % v/v LP-V6	

Means followed by same letter do not significantly differ (P=.05, LSD)

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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-28-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			131 104
Trt-Eval Interval			
Plant-Eval Interval			131 DP-1
Days After Emergence			124 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt Treatment	Rate	Growth	
No. Name	Rate Unit Stage		
		11	12 16
5 TOUCHDOWN TOTAL	24 fl oz/a PRE	98 ab	95 ab 195 b
HALEX GT	3.6 pt/a EP-V3		
N-PAK AMS LIQUID	2.5 % v/v EP-V3		
NIS	0.25 % v/v EP-V3		
6 ROUNDUP POWERMAX	22 fl oz/a PRE	99 a	95 ab 197 b
AMS	3.7 % v/v PRE		
VERDICT	15 oz/a PRE		
ROUNDUP POWERMAX	22 fl oz/a LP-V6		
AMS	3.7 % v/v LP-V6		
7 ROUNDUP POWERMAX	22 fl oz/a PRE	99 a	93 b 212 a
AMS	3.7 % v/v PRE		
VERDICT	13 fl oz/a PRE		
STATUS	2.5 oz/a LP-V6		
ROUNDUP POWERMAX	22 fl oz/a LP-V6		
AMS	3.7 % v/v LP-V6		
8 DURANGO	24 fl oz/a PRE	98 ab	96 ab 204 ab
SURESTART	2.5 pt/a PRE		
DURANGO	24 fl oz/a LP-V6		
AMS	2 % v/v LP-V6		
9 DURANGO	24 fl oz/a PRE	98 ab	96 ab 204 ab
SURESTART	2.5 pt/a PRE		
AATREX	1 lb ai/a PRE		
DURANGO	24 fl oz/a LP-V6		
AMS	2 % v/v LP-V6		

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Trt	Treatment	Rate	Growth	11	12	16
No.	Name	Rate Unit	Stage			
10	ROUNDUP POWERMAX	22 fl oz/a	PRE	99 a	95 ab	197 b
	AMS	3.7 % v/v	PRE			
	PREQUEL	1.66 oz/a	PRE			
	AATREX	1 lb ai/a	PRE			
	REALM Q	4 oz/a	EP-V3			
	COC	1 pt/a	EP-V3			
	AMS	2 lb ai/a	EP-V3			
11	ROUNDUP POWERMAX	22 fl oz/a	PRE	96 b	93 ab	204 ab
	AMS	3.7 % v/v	PRE			
	RIMSULFURON	0.375 oz/a	PRE			
	MESOTRIONE	2.25 oz/a	PRE			
	AATREX	1 lb ai/a	PRE			
	ABUNDIT	32 fl oz/a	EP-V3			
	AMS	2 lb ai/a	EP-V3			
12	ROUNDUP POWERMAX	22 fl oz/a	PRE	98 ab	93 b	195 b
	AMS	3.7 % v/v	PRE			
	CORVUS HERBICIDE	3 oz/a	PRE			
	AATREX	1 qt/a	PRE			
	LAUDIS	3 oz/a	EP-V3			
	MISO	1 % v/v	EP-V3			
	AMS	3.7 % v/v	EP-V3			

Means followed by same letter do not significantly differ (P=.05, LSD)

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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-28-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			131 104
Trt-Eval Interval			
Plant-Eval Interval			131 DP-1
Days After Emergence			124 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt Treatment	Rate	Growth	
No. Name	Rate Unit Stage		
		11	12
			16
13 ROUNDUP POWERMAX	22 fl oz/a PRE	99 a	98 ab
AMS	3.7 % v/v PRE		199 b
CORVUS HERBICIDE	3 oz/a PRE		
AATREX	1 qt/a PRE		
LAUDIS	3 oz/a EP-V3		
MSO	1 % v/v EP-V3		
ROUNDUP POWERMAX	22 fl oz/a EP-V3		
AMS	3.7 % v/v EP-V3		
14 ROUNDUP POWERMAX	22 fl oz/a PRE	99 a	98 ab
AMS	3.7 % v/v PRE		206 ab
BALANCE FLEXX HERBICIDE	3 oz/a PRE		
AATREX	1 qt/a PRE		
CAPRENO HERBICIDE	3 oz/a EP-V3		
COC	1 % v/v EP-V3		
AMS	3.7 % v/v EP-V3		
LSD (P=.05)		2.4	5.8
Standard Deviation		1.4	3.4
CV		1.58	3.87
Replicate F		2.380	5.016
Replicate Prob(F)		0.1124	0.0144
Treatment F		995.878	166.757
Treatment Prob(F)		0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

NO TILL CORN IV

Trial ID: C11004 Protocol ID: SYN COMMERCIAL CORN
Location: LEXINGTON, KY Study Director: CHARLES H. 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

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent

BU = bushel

Plant-Eval Interval

131 DP-1 = 1 5-20-2011

ARM Action Codes

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

TY1 = $4.444898 * [13] * (100 - [14]) / 84.5$

Plant and Soil Science, U of KY Weed Science Research

NO TILL CORN IV

Trial ID: C11004 Protocol ID: SYN COMMERCIAL CORN
 Location: LEXINGTON, KY Study Director: CHARLES H. 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: 5-20-2011

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

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC 62-97
BBCH Scale: BCOR **Planting Date:** 5-20-2011
Planting Method: ROWS **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 62 F
Soil Moisture: EXCELL **Emergence Date:** 5-27-2011
Harvest Date: 9-28-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 35 FT
% Standard Moisture: 15.5

Plant and Soil Science, U of KY Weed Science Research

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: 44 FT
Plot Area, Unit: 440 FT² **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RAOBL 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

Application Description

	A	B	C
Application Date:	5-20-2011	6-6-2011	6-16-2011
Time of Day:	2 PM	4 PM	10 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	EP-V3	LP-V6
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	87 F	87 F	71 F
% Relative Humidity:	37	37	78
Wind Velocity, Unit:	2 MPH	2 MPH	6 MPH
Wind Direction:	SW	SW	SW
Soil Temperature, Unit:	64 F	73 F	70 F
Soil Moisture:	FAIR	FAIR	NORMAL
% Cloud Cover:	10	10	10
Next Rain Occurred On:	5-21-2011	6-10-2011	6-18-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH	BBCH
Stage Majority, Percent:		V3	V6

Pest Stage At Each Application			
	A	B	C
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Height, Unit:	1.5 IN	2.5 IN	3 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Height, Unit:	2.5 IN	4 IN	6 IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W	IPOSS W
Height, Unit:	1 IN	2 IN	2.5 IN

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

Plant and Soil Science, U of KY Weed Science Research

NO TILL CORN V

Trial ID: C11005 Protocol ID: FMC-ANTHEM CORN
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: RUSTY MITCHELL

Pest Type Pest Code Pest Scientific Name Pest Name	Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	W Weed	W Weed	W Weed		W Weed	W Weed	W Weed		W Weed			
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail			
	ZEAMX BCOR Zea mays Corn					ZEAMX BCOR Zea mays Corn				ZEAMX BCOR Zea mays Corn			
		CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT		
	BEFORE LP	BEFORE LP	BEFORE LP	BEFORE LP	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK			
		P	P	P	P	P	P	P	P	P			
		0	0	0	0	0	0	0	0	0			
Trt No.	Treatment Name	Rate	Growth	1	2	3	4	5	6	7	8	9	10
		Rate Unit	Stage										
1	ROUNDUP POWERMAX AMS	22 fl oz/a 3.7 % v/v	PRE	0 a	99 a	80 d	68 e	0 a	99 a	99 a	99 a	0 a	99 a
	ANTHEM ROUNDUP POWERMAX AMS	7 oz/a 22 fl oz/a 3.7 % v/v	PRE LP										
2	ROUNDUP POWERMAX AMS	22 fl oz/a 3.7 % v/v	PRE	0 a	99 a	72 e	70 e	0 a	99 a	99 a	99 a	0 a	99 a
	ANTHEM ROUNDUP POWERMAX AMS	9 oz/a 22 fl oz/a 3.7 % v/v	PRE LP										
3	ROUNDUP POWERMAX AMS	22 fl oz/a 3.7 % v/v	PRE	0 a	99 a	99 a	89 c	0 a	99 a	99 a	99 a	0 a	99 a
	ANTHEM AATREX ROUNDUP POWERMAX AMS	7 oz/a 0.9 lb ai/a 22 fl oz/a 3.7 % v/v	PRE PRE LP										

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name	Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	W Weed	W Weed	W Weed		W Weed	W Weed	W Weed		W Weed			
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail			
		ZEAMX BCOR Zea mays Corn				ZEAMX BCOR Zea mays Corn				ZEAMX BCOR Zea mays Corn			
		INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT		
		BEFORE LP	BEFORE LP	BEFORE LP	BEFORE LP	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK		
		P	P	P	P	P	P	P	P	P	P		
		0	0	0	0	0	0	0	0	0	0		
Trt No.	Treatment Name	Rate	Growth	1	2	3	4	5	6	7	8	9	10
		Rate Unit	Stage										
4	ROUNDUP POWERMAX AMS ANTHEM AATREX ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE 9 oz/a PRE 1.16 lb ai/a PRE 22 fl oz/a LP 3.7 % v/v LP	PRE	0 a	99 a	80 d	78 d	0 a	99 a	99 a	99 a	0 a	99 a
5	ROUNDUP POWERMAX AMS DUAL II MAGNUM ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE 22 oz/a PRE 22 fl oz/a LP 3.7 % v/v LP	PRE	0 a	99 a	70 e	70 e	0 a	99 a	99 a	99 a	0 a	99 a
6	ROUNDUP POWERMAX AMS BICEP II MAGNUM ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE 75 oz/a PRE 22 fl oz/a LP 3.7 % v/v LP	PRE	0 a	99 a	99 a	90 c	0 a	99 a	99 a	99 a	0 a	99 a
7	ROUNDUP POWERMAX AMS LUMAX ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE 81 oz/a PRE 22 fl oz/a LP 3.7 % v/v LP	PRE	0 a	99 a	99 a	95 b	0 a	99 a	99 a	99 a	0 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail		
											ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals												
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10
8 ROUNDUP POWERMAX AMS BALANCE FLEXX HERBICIDE ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE 5 oz/a PRE 22 fl oz/a LP 3.7 % v/v LP	PRE PRE PRE LP LP	0 a	99 a	89 c	89 c	0 a	99 a	93 b	95 b	0 a	99 a
9 ROUNDUP POWERMAX AMS ANTHEM ROUNDUP POWERMAX AMS ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE 6 oz/a EP-V2 22 fl oz/a EP-V2 3.7 % v/v EP-V2 22 fl oz/a LP 3.7 % v/v LP	PRE PRE EP-V2 EP-V2 EP-V2 LP LP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
10 ROUNDUP POWERMAX AMS ANTHEM ROUNDUP POWERMAX AMS ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE 8 oz/a EP-V2 22 fl oz/a EP-V2 3.7 % v/v EP-V2 22 fl oz/a LP 3.7 % v/v LP	PRE PRE EP-V2 EP-V2 EP-V2 LP LP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail		
											ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals												
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10
11 ROUNDUP POWERMAX AMS ANTHEM AATREX ROUNDUP POWERMAX AMS ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE 6 oz/a EP-V2 0.8 lb ai/a EP-V2 22 fl oz/a EP-V2 3.7 % v/v EP-V2 22 fl oz/a LP 3.7 % v/v LP	PRE PRE EP-V2 EP-V2 EP-V2 EP-V2 LP LP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
12 ROUNDUP POWERMAX AMS HALEX GT ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE 58 oz/a EP-V2 22 fl oz/a LP 3.7 % v/v LP	PRE PRE EP-V2 LP LP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
13 ROUNDUP POWERMAX AMS LEXAR ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE 96 oz/a EP-V2 22 fl oz/a LP 3.7 % v/v LP	PRE PRE EP-V2 LP LP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail		
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	ZEAMX BCOR Zea mays Corn				ZEAMX BCOR Zea mays Corn				ZEAMX BCOR Zea mays Corn			
	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT		
	BEFORE LP	BEFORE LP	BEFORE LP	BEFORE LP	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK		
		P	P	P	P	P	P	P	P	P		
	0	0	0	0	0	0	0	0	0	0		
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10
14 ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE	PRE	0 a	99 a	93 b	93 b	0 a	99 a	99 a	99 a	0 a	99 a
ROUNDUP POWERMAX AMS	22 fl oz/a EP-V2 3.7 % v/v EP-V2	EP-V2										
ROUNDUP POWERMAX AMS	22 fl oz/a LP 3.7 % v/v LP	LP										
LSD (P=.05)			0.0	0.0	2.0	2.2	0.0	0.0	1.3	0.0	0.0	0.0
Standard Deviation			0.0	0.0	1.2	1.3	0.0	0.0	0.8	0.0	0.0	0.0
CV			0.0	0.0	1.29	1.45	0.0	0.0	0.78	0.0	0.0	0.0
Replicate F			0.000	0.000	0.069	3.729	0.000	0.000	1.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	0.9334	0.0377	1.0000	1.0000	0.3816	1.0000	1.0000	1.0000
Treatment F			0.000	0.000	264.166	253.262	0.000	0.000	11.560	0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001	1.0000	1.0000	0.0001	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name			W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals					ZEAMX BCOR Zea mays Corn 9-28-2011 YIELD BU 131 104 131 DP-1 124 DE-1 TY1 0
CONTROL PERCENT			CONTROL PERCENT		
8 WEEK			8 WEEK		
Trt No.	Treatment Name	Rate Rate Unit	Growth Stage		
				11	12
				15	
1	ROUNDUP POWERMAX AMS ANTHEM ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE 7 oz/a PRE 22 fl oz/a LP 3.7 % v/v LP		99 a	93 abc
					198 ab
2	ROUNDUP POWERMAX AMS ANTHEM ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE 9 oz/a PRE 22 fl oz/a LP 3.7 % v/v LP		99 a	89 c
					194 ab
3	ROUNDUP POWERMAX AMS ANTHEM AATREX ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE 7 oz/a PRE 0.9 lb ai/a PRE 22 fl oz/a LP 3.7 % v/v LP		98 ab	89 bc
					193 ab

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.	
Pest Name	Giant ragweed	Morning glory	
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-28-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			131 104
Trt-Eval Interval			
Plant-Eval Interval			131 DP-1
Days After Emergence			124 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt No.	Treatment Name	Rate	Growth
		Rate Unit	Stage
4	ROUNDUP POWERMAX AMS ANTHEM AATREX ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE 9 oz/a PRE 1.16 lb ai/a PRE 22 fl oz/a LP 3.7 % v/v LP	11 99 a 88 c 15 202 ab
5	ROUNDUP POWERMAX AMS DUAL II MAGNUM ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE 22 oz/a PRE 22 fl oz/a LP 3.7 % v/v LP	11 98 ab 93 abc 15 184 b
6	ROUNDUP POWERMAX AMS BICEP II MAGNUM ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE 75 oz/a PRE 22 fl oz/a LP 3.7 % v/v LP	11 99 a 91 bc 15 199 ab
7	ROUNDUP POWERMAX AMS LUMAX ROUNDUP POWERMAX AMS	22 fl oz/a PRE 3.7 % v/v PRE 81 oz/a PRE 22 fl oz/a LP 3.7 % v/v LP	11 99 a 95 ab 15 192 ab

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.	
Pest Name	Giant ragweed	Morning glory	
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-28-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			131 104
Trt-Eval Interval			
Plant-Eval Interval			131 DP-1
Days After Emergence			124 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt No.	Treatment	Rate	Growth
	Name	Rate Unit	Stage
			11
			12
			15
8	ROUNDUP POWERMAX	22 fl oz/a PRE	96 b
	AMS	3.7 % v/v PRE	
	BALANCE FLEXX HERBICIDE	5 oz/a PRE	
	ROUNDUP POWERMAX	22 fl oz/a LP	
	AMS	3.7 % v/v LP	
9	ROUNDUP POWERMAX	22 fl oz/a PRE	99 a
	AMS	3.7 % v/v PRE	
	ANTHEM	6 oz/a EP-V2	
	ROUNDUP POWERMAX	22 fl oz/a EP-V2	
	AMS	3.7 % v/v EP-V2	
	ROUNDUP POWERMAX	22 fl oz/a LP	
	AMS	3.7 % v/v LP	
10	ROUNDUP POWERMAX	22 fl oz/a PRE	99 a
	AMS	3.7 % v/v PRE	
	ANTHEM	8 oz/a EP-V2	
	ROUNDUP POWERMAX	22 fl oz/a EP-V2	
	AMS	3.7 % v/v EP-V2	
	ROUNDUP POWERMAX	22 fl oz/a LP	
	AMS	3.7 % v/v LP	

Means followed by same letter do not significantly differ (P=.05, LSD)

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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-28-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			131 104
Trt-Eval Interval			
Plant-Eval Interval			131 DP-1
Days After Emergence			124 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt No.	Treatment	Rate	Growth
	Name	Rate Unit	Stage
			11
			12
			15
11	ROUNDUP POWERMAX	22 fl oz/a PRE	98 ab
	AMS	3.7 % v/v PRE	
	ANTHEM	6 oz/a EP-V2	
	AATREX	0.8 lb ai/a EP-V2	
	ROUNDUP POWERMAX	22 fl oz/a EP-V2	
	AMS	3.7 % v/v EP-V2	
	ROUNDUP POWERMAX	22 fl oz/a LP	
	AMS	3.7 % v/v LP	
12	ROUNDUP POWERMAX	22 fl oz/a PRE	99 a
	AMS	3.7 % v/v PRE	
	HALEX GT	58 oz/a EP-V2	
	ROUNDUP POWERMAX	22 fl oz/a LP	
	AMS	3.7 % v/v LP	
13	ROUNDUP POWERMAX	22 fl oz/a PRE	99 a
	AMS	3.7 % v/v PRE	
	LEXAR	96 oz/a EP-V2	
	ROUNDUP POWERMAX	22 fl oz/a LP	
	AMS	3.7 % v/v LP	
			90 bc
			204 ab
			95 ab
			194 ab
			98 a
			187 ab

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.	
Pest Name	Giant ragweed	Morning glory	
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-28-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			131 104
Trt-Eval Interval			
Plant-Eval Interval			131 DP-1
Days After Emergence			124 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt No.			
Treatment Name	Rate	Growth	
	Rate Unit	Stage	
			11 12 15
14 ROUNDUP POWERMAX	22 fl oz/a	PRE	99 a 93 abc 183 b
AMS	3.7 % v/v	PRE	
ROUNDUP POWERMAX	22 fl oz/a	EP-V2	
AMS	3.7 % v/v	EP-V2	
ROUNDUP POWERMAX	22 fl oz/a	LP	
AMS	3.7 % v/v	LP	
LSD (P=.05)	3.0	5.7	22.4
Standard Deviation	1.8	3.4	13.3
CV	1.79	3.66	6.85
Replicate F	0.901	0.648	0.610
Replicate Prob(F)	0.4187	0.5314	0.5507
Treatment F	0.808	2.458	0.857
Treatment Prob(F)	0.6474	0.0247	0.6029

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

NO TILL CORN V

Trial ID: C11005 Protocol ID: FMC-ANTHEM CORN
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

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent

BU = bushel

Plant-Eval Interval

131 DP-1 = 1 5-20-2011

ARM Action Codes

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

TY1 = $4.444898 * [13] * (100 - [14]) / 84.5$

Plant and Soil Science, U of KY Weed Science Research

NO TILL CORN V

Trial ID: C11005 Protocol ID: FMC-ANTHEM CORN
 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: 5-20-2011

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

Crop Description

Crop 1: ZEAMX Zea mays Com
Variety: DKC 62-97
BBCH Scale: BCOR **Planting Date:** 5-20-2011
Planting Method: ROWS **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 63 F
Soil Moisture: EXCELL **Emergence Date:** 5-27-2011
Harvest Date: 9-28-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 35 FT
% Standard Moisture: 15.5

Plant and Soil Science, U of KY Weed Science Research

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: 44 FT
Plot Area, Unit: 440 FT² **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RAOBL 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:** 1.25 MI

Application Description

	A	B	C
Application Date:	5-20-2011	6-6-2011	6-16-2011
Time of Day:	2 PM	4 PM	10 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	EP-V2	LP V6
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	77 F	87 F	71 F
% Relative Humidity:	58	37	78
Wind Velocity, Unit:	4 MPH	2 MPH	6 MPH
Wind Direction:	WSW	SW	SW
Soil Temperature, Unit:	63 F	74 F	70 F
Soil Moisture:	ABONOR	FAIR	NORMAL
% Cloud Cover:	30	10	10
Next Rain Occurred On:	5-21-2011	6-10-2011	6-18-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH	
Stage Majority, Percent:		V2 85	
Height, Unit:		8 IN	9 IN

Pest Stage At Each Application			
	A	B	C
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Height, Unit:		2 IN	3 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Height, Unit:		4 IN	5 IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W	IPOSS W
Height, Unit:		1 IN	1.5 IN

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

Plant and Soil Science, U of KY Weed Science Research

CORN PREEMERGENCE

Trial ID: C11010 Protocol ID: MANA-CORN-2011
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: DAVID FEIST

Pest Type Pest Code Pest Scientific Name Pest Name	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi-> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi-> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi-> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail		
											ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10
1 UNTREATED			0 a	0 d	0 e	0 e	0 a	0 d	0 e	0 f	0 a	0 d
2 PARALLEL PLUS	1.5 qt/a	PRE	0 a	96 a	82 d	85 d	0 a	96 a	70 d	77 e	0 a	96 a
3 BICEP II MAGNUM	1.35 qt/a	PRE	0 a	99 a	83 d	85 d	0 a	99 a	73 d	73 e	0 a	99 a
4 PARALLEL PLUS	2.83 qt/a	PRE	0 a	99 a	80 d	87 d	0 a	99 a	73 d	78 de	0 a	99 a
5 BICEP II MAGNUM	2.5 qt/a	PRE	0 a	99 a	90 bc	91 bcd	0 a	99 a	88 bc	87 cd	0 a	99 a
6 PARALLEL PLUS CALLISTO	1.5 qt/a 4 oz/a	PRE PRE	0 a	99 a	99 a	96 ab	0 a	99 a	98 ab	95 abc	0 a	98 a
7 PARALLEL PLUS CALLISTO	1.35 qt/a 6.25 oz/a	PRE PRE	0 a	99 a	99 a	99 a	0 a	99 a	99 a	98 a	0 a	99 a
8 PARALLEL PLUS	1.5 qt/a	2-3 LFC	0 a	77 c	89 c	89 cd	0 a	70 c	88 c	88 bc	0 a	70 c
9 BICEP II MAGNUM	1.5 qt/a	2-3 LFC	0 a	87 b	88 c	93 abc	0 a	80 b	88 bc	93 abc	0 a	80 b
10 PARALLEL PLUS	2.83 qt/a	2-3 LFC	0 a	99 a	95 ab	96 ab	0 a	99 a	95 abc	96 ab	0 a	99 a
11 BICEP II MAGNUM	2.83 qt/a	2-3 LFC	0 a	98 a	98 a	98 ab	0 a	98 a	98 ab	98 a	0 a	98 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail		
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	ZEAMX BCOR Zea mays Corn					ZEAMX BCOR Zea mays Corn				ZEAMX BCOR Zea mays Corn		
	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT		
	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK		
	P	P	P	P	P	P	P	P	P	P		
	0	0	0	0	0	0	0	0	0	0		
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10
12 PARALLEL PLUS CALLISTO COC	1.4 qt/a 3 oz/a 1 % v/v	2-3 LFC 2-3 LFC 2-3 LFC	0 a	98 a	99 a	99 a	0 a	98 a	99 a	99 a	0 a	96 a
13 PARALLEL PLUS CALLISTO COC	2 qt/a 3 oz/a 1 % v/v	2-3 LFC 2-3 LFC 2-3 LFC	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
14 CHECK UNTREATED			0 a	0 d	0 e	0 e	0 a	0 d	0 e	0 f	0 a	0 d
LSD (P=.05)	0.0	4.0	5.2	6.4	0.0	7.1	9.5	9.0	0.0	7.2		
Standard Deviation	0.0	2.4	3.1	3.8	0.0	4.2	5.6	5.4	0.0	4.3		
CV	0.0	2.91	3.97	4.81	0.0	5.2	7.39	6.93	0.0	5.29		
Replicate F	0.000	0.959	1.350	0.748	0.000	0.388	2.395	4.791	0.000	0.282		
Replicate Prob(F)	1.0000	0.3963	0.2769	0.4833	1.0000	0.6825	0.1110	0.0169	1.0000	0.7562		
Treatment F	0.000	658.144	355.034	237.855	0.000	211.788	108.472	119.745	0.000	204.386		
Treatment Prob(F)	1.0000	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001	0.0001	1.0000	0.0001		

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	
Pest Scientific Name	Ambrosia trifid	Ipomoea sp.	
Pest Name	Giant ragweed	Morning glory	
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-30-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			144 128
Trt-Eval Interval			
Plant-Eval Interval			144 DP-1
Days After Emergence			138 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt No.	Treatment	Rate	Growth
	Name	Rate Unit	Stage
11			
12			
15			
1	UNTREATED		0 e
2	PARALLEL PLUS	1.5 qt/a	PRE
3	BICEP II MAGNUM	1.35 qt/a	PRE
4	PARALLEL PLUS	2.83 qt/a	PRE
5	BICEP II MAGNUM	2.5 qt/a	PRE
6	PARALLEL PLUS	1.5 qt/a	PRE
	CALLISTO	4 oz/a	PRE
7	PARALLEL PLUS	1.35 qt/a	PRE
	CALLISTO	6.25 oz/a	PRE
8	PARALLEL PLUS	1.5 qt/a	2-3 LFC
9	BICEP II MAGNUM	1.5 qt/a	2-3 LFC
10	PARALLEL PLUS	2.83 qt/a	2-3 LFC
11	BICEP II MAGNUM	2.83 qt/a	2-3 LFC
			63 d
			68 e
			68 d
			70 e
			70 d
			77 de
			117 e
			84 c
			83 cd
			122 e
			96 ab
			89 abc
			199 a
			98 a
			90 abc
			186 ab
			83 c
			85 bcd
			137 d
			86 bc
			91 abc
			156 c
			95 abc
			93 ab
			182 b
			96 ab
			95 a
			193 ab

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.	
Pest Name	Giant ragweed	Morning glory	
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-30-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			144 128
Trt-Eval Interval			
Plant-Eval Interval			144 DP-1
Days After Emergence			138 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt No.	11	12	15
Treatment Name			
Rate			
Unit			
Growth Stage			
12 PARALLEL PLUS	1.4 qt/a	2-3 LFC	98 a
CALLISTO	3 oz/a	2-3 LFC	96 a
COC	1 % v/v	2-3 LFC	186 ab
13 PARALLEL PLUS	2 qt/a	2-3 LFC	99 a
CALLISTO	3 oz/a	2-3 LFC	95 a
COC	1 % v/v	2-3 LFC	187 ab
14 CHECK UNTREATED			0 e
			0 f
			7 g
LSD (P=.05)	11.3	9.6	15.2
Standard Deviation	6.8	5.7	9.0
CV	9.12	7.74	6.67
Replicate F	5.243	5.894	1.281
Replicate Prob(F)	0.0122	0.0077	0.2946
Treatment F	73.852	97.235	147.858
Treatment Prob(F)	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

CORN PREEMERGENCE

Trial ID: C11010 Protocol ID: MANA-CORN-2011
Location: LEXINGTON, KY Study Director: CHARLES SLACK
Project ID: Investigator: Charles H Slack
Sponsor Contact: DAVID FEIST

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 Type

YIELD = yield

Rating Unit

PERCENT = percent

BU = bushel

Plant-Eval Interval

144 DP-1 = 1 5-9-2011

ARM Action Codes

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

TY1 = $4.093985 * [13] * (100 - [14]) / 84.5$

Plant and Soil Science, U of KY Weed Science Research

CORN PREEMERGENCE

Trial ID: C11010 Protocol ID: MANA-CORN-2011
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: DAVID FEIST

General Trial Information

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

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-9-2011

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

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC 62-97
BBCH Scale: BCOR **Planting Date:** 5-9-2011
Planting Method: ROWS **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 63 F
Soil Moisture: EXCELL **Emergence Date:** 5-15-2011
Harvest Date: 9-30-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 38 FT
% Standard Moisture: 15.5

Plant and Soil Science, U of KY Weed Science Research

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: 44 FT
Plot Area, Unit: 440 FT² **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:** 1.25 MI

Application Description

	A	B
Application Date:	5-9-2011	5-25-2011
Time of Day:	3 PM	1 PM
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	3 LFC
Application Placement:	BROSOI	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	74 F	83 F
% Relative Humidity:	56	50
Wind Velocity, Unit:	8 MPH	10 MPH
Wind Direction:	ENE	S
Soil Temperature, Unit:	63 F	68 F
Soil Moisture:	EXCELL	EXCELL
% Cloud Cover:	10	20
Next Rain Occurred On:	5-13-2011	5-26-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application

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

Pest Stage At Each Application

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

Application Equipment

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

Plant and Soil Science, U of KY Weed Science Research

CORN PREEMERGENCE II

Trial ID: C11011 Protocol ID: DUPONT-USA-11-006
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: DAN SMITH

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	ZEAMX BCOR Zea mays Corn	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	ZEAMX BCOR Zea mays Corn	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	ZEAMX BCOR Zea mays Corn	W Weed SETFA Setaria faberi Giant foxtail		
		CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT		INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT		CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT
		2 WEEK	2 WEEK	2 WEEK		4 WEEK	4 WEEK	4 WEEK		8 WEEK	8 WEEK	
		P	P	P		P	P	P		P	P	
		0	0	0		0	0	0		0	0	
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10
1 RIMSULFURON MESOTRIONE	0.25 oz ai/a 2.25 oz ai/a	PRE PRE	0 a	98 a	96 ab	98 a	0 a	98 a	95 ab	96 ab	0 a	98 a
2 RIMSULFURON MESOTRIONE	0.375 oz ai/a 2.25 oz ai/a	PRE PRE	0 a	99 a	93 b	98 a	0 a	99 a	92 b	95 ab	0 a	99 a
3 RIMSULFURON THIFENSULFURON MESOTRIONE	0.25 oz ai/a 0.25 oz ai/a 2.25 oz ai/a	PRE PRE PRE	0 a	96 a	95 ab	98 a	0 a	96 a	92 b	93 b	0 a	96 a
4 RIMSULFURON MESOTRIONE AATREX	0.25 oz ai/a 2.25 oz ai/a 1 lb ai/a	PRE PRE PRE	0 a	99 a	99 a	98 a	0 a	98 a	99 a	95 ab	0 a	96 a
5 RIMSULFURON MESOTRIONE AATREX	0.375 oz ai/a 2.25 oz ai/a 1 lb ai/a	PRE PRE PRE	0 a	99 a	96 ab	98 a	0 a	98 a	95 ab	96 ab	0 a	96 a
6 RIMSULFURON THIFENSULFURON MESOTRIONE AATREX	0.25 oz ai/a 0.25 oz ai/a 2.25 oz ai/a 1 lb ai/a	PRE PRE PRE PRE	0 a	96 a	99 a	99 a	0 a	96 a	99 a	98 ab	0 a	95 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail			
	ZEAMX BCOR Zea mays Corn				ZEAMX BCOR Zea mays Corn				ZEAMX BCOR Zea mays Corn				
	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT			
	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK			
		P	P	P	P	P	P	P	P	P			
	0	0	0	0	0	0	0	0	0	0			
Trt Treatment No. Name	Rate	Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10
7 RIMSULFURON MESOTRIONE AATREX ABUNDIT AMS	0.25 oz ai/a 2.25 oz ai/a 1 lb ai/a 32 fl oz/a 17 lb/100 gal	ai/a ai/a ai/a oz/a gal	PRE PRE PRE 28 DAP 28 DAP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
8 RIMSULFURON MESOTRIONE AATREX ABUNDIT AMS	0.375 oz ai/a 2.25 oz ai/a 1 lb ai/a 32 fl oz/a 17 lb/100 gal	ai/a ai/a ai/a oz/a gal	PRE PRE PRE 28 DAP 28 DAP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
9 RIMSULFURON THIFENSULFURON MESOTRIONE AATREX ABUNDIT AMS	0.25 oz ai/a 0.25 oz ai/a 2.25 oz ai/a 1 lb ai/a 32 fl oz/a 17 lb/100 gal	ai/a ai/a ai/a ai/a oz/a gal	PRE PRE PRE PRE 28 DAP 28 DAP	0 a	99 a	95 ab	95 a	0 a	99 a	98 a	98 ab	0 a	99 a
10 LUMAX	3 qt/a	qt/a	PRE	0 a	99 a	99 a	98 a	0 a	99 a	99 a	96 ab	0 a	99 a
11 LUMAX ABUNDIT AMS	3 qt/a 32 fl oz/a 17 lb/100 gal	qt/a oz/a gal	PRE 28 DAP 28 DAP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA
Pest Code		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi
Pest Scientific Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail
Pest Name										
Crop Code	ZEAMX				ZEAMX				ZEAMX	
BBCH Scale	BCOR				BCOR				BCOR	
Crop Scientific Name	Zea mays				Zea mays				Zea mays	
Crop Name	Corn				Corn				Corn	
Description										
Part Rated										
Rating Date										
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
SE Name										
SE Description										
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.										
Trt-Eval Interval										
Plant-Eval Interval										
Days After Emergence										
ARM Action Codes	P	P	P	P	P	P	P	P	P	P
Sort Order for View										
Number of Decimals	0	0	0	0	0	0	0	0	0	0
Trt Treatment	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
No. Name	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit
Growth Stage										
	1	2	3	4	5	6	7	8	9	10
12 CHECK UNTREATED	0 a	0 b	0 c	0 b	0 a	0 b	0 c	0 c	0 a	0 b
LSD (P=.05)	0.0	3.5	5.6	4.1	0.0	3.4	4.7	5.3	0.0	4.5
Standard Deviation	0.0	2.0	3.3	2.4	0.0	2.0	2.7	3.2	0.0	2.7
CV	0.0	2.27	3.7	2.67	0.0	2.25	3.1	3.56	0.0	2.97
Replicate F	0.000	3.223	0.049	1.569	0.000	6.111	0.739	0.683	0.000	6.940
Replicate Prob(F)	1.0000	0.0592	0.9527	0.2307	1.0000	0.0077	0.4890	0.5157	1.0000	0.0046
Treatment F	0.000	580.438	218.758	417.239	0.000	588.950	313.341	236.386	0.000	339.108
Treatment Prob(F)	1.0000	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001	0.0001	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

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						ZEAMX
BBCH Scale						BCOR
Crop Scientific Name						Zea mays
Crop Name						Corn
Description						
Part Rated						
Rating Date						9-30-2011
Rating Type				CONTROL	CONTROL	YIELD
Rating Unit				PERCENT	PERCENT	BU
SE Name						
SE Description						
Rating Timing				8 WEEK	8 WEEK	
Days After First/Last Applic.						144 114
Trt-Eval Interval						
Plant-Eval Interval						144 DP-1
Days After Emergence						138 DE-1
ARM Action Codes				P	P	TY1
Sort Order for View						
Number of Decimals				0	0	0
Trt No.	Treatment Name	Rate	Growth Stage	11	12	16
		Rate Unit				
1	RIMSULFURON	0.25 oz ai/a	PRE	93 bc	93 ab	170 e
	MESOTRIONE	2.25 oz ai/a	PRE			
2	RIMSULFURON	0.375 oz ai/a	PRE	91 c	90 b	190 cd
	MESOTRIONE	2.25 oz ai/a	PRE			
3	RIMSULFURON	0.25 oz ai/a	PRE	92 c	92 ab	187 cd
	THIFENSULFURON	0.25 oz ai/a	PRE			
	MESOTRIONE	2.25 oz ai/a	PRE			
4	RIMSULFURON	0.25 oz ai/a	PRE	99 a	89 b	187 cd
	MESOTRIONE	2.25 oz ai/a	PRE			
	AATREX	1 lb ai/a	PRE			
5	RIMSULFURON	0.375 oz ai/a	PRE	95 abc	91 ab	191 cd
	MESOTRIONE	2.25 oz ai/a	PRE			
	AATREX	1 lb ai/a	PRE			
6	RIMSULFURON	0.25 oz ai/a	PRE	98 ab	93 ab	194 bcd
	THIFENSULFURON	0.25 oz ai/a	PRE			
	MESOTRIONE	2.25 oz ai/a	PRE			
	AATREX	1 lb ai/a	PRE			

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.	
Pest Name	Giant ragweed	Morning glory	
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-30-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			144 114
Trt-Eval Interval			
Plant-Eval Interval			144 DP-1
Days After Emergence			138 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	
			11 12 16
7 RIMSULFURON	0.25 oz ai/a	PRE	99 a 93 ab 203 ab
MESOTRIONE	2.25 oz ai/a	PRE	
AATREX	1 lb ai/a	PRE	
ABUNDIT	32 fl oz/a	28 DAP	
AMS	17 lb/100 gal	28 DAP	
8 RIMSULFURON	0.375 oz ai/a	PRE	99 a 93 ab 185 d
MESOTRIONE	2.25 oz ai/a	PRE	
AATREX	1 lb ai/a	PRE	
ABUNDIT	32 fl oz/a	28 DAP	
AMS	17 lb/100 gal	28 DAP	
9 RIMSULFURON	0.25 oz ai/a	PRE	98 ab 92 ab 183 d
THIFENSULFURON	0.25 oz ai/a	PRE	
MESOTRIONE	2.25 oz ai/a	PRE	
AATREX	1 lb ai/a	PRE	
ABUNDIT	32 fl oz/a	28 DAP	
AMS	17 lb/100 gal	28 DAP	
10 LUMAX	3 qt/a	PRE	99 a 93 ab 212 a
11 LUMAX	3 qt/a	PRE	99 a 96 a 198 bc
ABUNDIT	32 fl oz/a	28 DAP	
AMS	17 lb/100 gal	28 DAP	

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	
Pest Scientific Name	Ambrosia trifid>	Ipomoea sp.	
Pest Name	Giant ragweed	Morning glory	
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-30-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			144 114
Trt-Eval Interval			
Plant-Eval Interval			144 DP-1
Days After Emergence			138 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	
			11 12 16
12 CHECK UNTREATED	0 d	0 c	10 f
LSD (P=.05)	5.2	5.5	11.5
Standard Deviation	3.0	3.2	6.8
CV	3.45	3.81	3.86
Replicate F	0.335	0.691	6.915
Replicate Prob(F)	0.7191	0.5115	0.0047
Treatment F	253.293	206.061	184.354
Treatment Prob(F)	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

CORN PREEMERGENCE II

Trial ID: C11011 Protocol ID: DUPONT-USA-11-006
Location: LEXINGTON, KY Study Director: CHARLES SLACK
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

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent

BU = bushel

Plant-Eval Interval

144 DP-1 = 1 5-9-2011

ARM Action Codes

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

TY1 = $4.321429 * [13] * (100 - [14]) / 84.5$

Plant and Soil Science, U of KY Weed Science Research

CORN PREEMERGENCE II

Trial ID: C11011 Protocol ID: DUPONT-USA-11-006
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 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: 5-9-2011

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

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC 62-97
BBCH Scale: BCOR **Planting Date:** 5-9-2011
Planting Method: ROWS **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 63 F
Soil Moisture: EXCELL **Emergence Date:** 5-15-2011
Harvest Date: 9-30-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 36 FT
% Standard Moisture: 15.5

Plant and Soil Science, U of KY Weed Science Research

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: 44 FT
Plot Area, Unit: 440 FT² **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:** 1.25 MI

Application Description

	A	B
Application Date:	5-9-2011	6-8-2011
Time of Day:	3 PM	10 AM
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	28 DAP
Application Placement:	BROSOI	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	74 F	86 F
% Relative Humidity:	56	70
Wind Velocity, Unit:	8 MPH	4 MPH
Wind Direction:	ENE	WSW
Soil Temperature, Unit:	62 F	76 F
Soil Moisture:	EXCELL	EXCELL
% Cloud Cover:	10	10
Next Rain Occurred On:	5-13-2011	6-10-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application

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

Pest Stage At Each Application

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

Application Equipment

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

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE

Trial ID: C11012 Protocol ID: AMVAC CORN
 Location: LEXINGTON, KY Study Director: CHARLES H. SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: RICH PORTER

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA			
Pest Code		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi			
Pest Scientific Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail			
Pest Name													
Crop Code	ZEAMX				ZEAMX				ZEAMX				
BBCH Scale	BCOR				BCOR				BCOR				
Crop Scientific Name	Zea mays				Zea mays				Zea mays				
Crop Name	Corn				Corn				Corn				
Description													
Part Rated													
Rating Date													
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
SE Name													
SE Description													
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK			
Days After First/Last Applic.													
Trt-Eval Interval													
Plant-Eval Interval													
Days After Emergence													
ARM Action Codes	P	P	P	P	P	P	P	P	P	P			
Sort Order for View													
Number of Decimals	0	0	0	0	0	0	0	0	0	0			
Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4	5	6	7	8	9	10
1	CHECK UNTREATED			0 a	0 b	0 c	0 c	0 a	0 b	0 c	0 c	0 a	0 b
2	DEGREE XTRA	2 qt/a	PRE	0 a	99 a	86 b	86 b	0 a	99 a	76 b	75 b	0 a	99 a
3	DEGREE XTRA	2 qt/a	PRE	0 a	99 a	99 a	99 a	0 a	99 a	99 a	93 a	0 a	99 a
	IMPACT	0.75 fl oz/a	MP										
	AATREX	1 pt/a	MP										
	MSO	1 % v/v	MP										
	LIQUID N	2.5 % v/v	MP										
4	DEGREE XTRA	2 qt/a	PRE	0 a	99 a	99 a	99 a	0 a	99 a	99 a	98 a	0 a	99 a
	IMPACT	1 fl oz/a	MP										
	AATREX	1 pt/a	MP										
	MSO	1 % v/v	MP										
	LIQUID N	2.5 % v/v	MP										

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail		
	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn		
	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	
	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	
	P	P	P	P	P	P	P	P	P	P	P	
	0	0	0	0	0	0	0	0	0	0	0	
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10
5 DEGREE XTRA IMPACT STATUS AATREX MSO LIQUID N	2 qt/a 0.75 fl oz/a 2.5 oz/a 1 pt/a 1 % v/v 2.5 % v/v	PRE MP MP MP MP MP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
6 DEGREE XTRA ROUNDUP POWERMAX N-PAK AMS LIQUID	2 qt/a 22 fl oz/a 3 pt/a	PRE MP MP	0 a	99 a	99 a	98 a	0 a	99 a	99 a	98 a	0 a	99 a
7 DEGREE XTRA IMPACT ROUNDUP POWERMAX AATREX HSOC N-PAK AMS LIQUID	2 qt/a 0.5 fl oz/a 22 fl oz/a 1 pt/a 0.5 % v/v 3 pt/a	PRE MP MP MP MP MP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	98 a	0 a	99 a
8 DUAL II MAGNUM IMPACT AATREX ROUNDUP POWERMAX HSOC N-PAK AMS LIQUID	1.37 pt/a 0.5 fl oz/a 2.6 pt/a 22 fl oz/a 0.5 % v/v 3 pt/a	PRE EP EP EP EP EP	0 a	99 a	99 a	99 a	0 a	99 a	96 a	96 a	0 a	99 a
9 LEXAR ROUNDUP POWERMAX NIS N-PAK AMS LIQUID	3 qt/a 22 fl oz/a 0.25 % v/v 3 pt/a	MP MP MP MP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA
Pest Code										
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi
Pest Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail
Crop Code	ZEAMX				ZEAMX				ZEAMX	
BBCH Scale	BCOR				BCOR				BCOR	
Crop Scientific Name	Zea mays				Zea mays				Zea mays	
Crop Name	Corn				Corn				Corn	
Description										
Part Rated										
Rating Date										
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
SE Name										
SE Description										
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.										
Trt-Eval Interval										
Plant-Eval Interval										
Days After Emergence										
ARM Action Codes	P	P	P	P	P	P	P	P	P	P
Sort Order for View										
Number of Decimals	0	0	0	0	0	0	0	0	0	0
Trt Treatment	Rate									
No. Name	Rate Unit Growth Stage	1	2	3	4	5	6	7	8	9
10 CHECK UNTREATED		0 a	0 b	0 c	0 c	0 a	0 b	0 c	0 c	0 a
LSD (P=.05)		0.0	0.0	6.0	6.2	0.0	0.0	11.3	11.0	0.0
Standard Deviation		0.0	0.0	3.5	3.6	0.0	0.0	6.6	6.4	0.0
CV		0.0	0.0	4.45	4.66	0.0	0.0	8.57	8.53	0.0
Replicate F		0.000	0.000	1.000	0.571	0.000	0.000	1.147	0.073	0.000
Replicate Prob(F)		1.0000	1.0000	0.3874	0.5747	1.0000	1.0000	0.3398	0.9298	1.0000
Treatment F		0.000	0.000	424.499	387.668	0.000	0.000	116.954	118.277	0.000
Treatment Prob(F)		1.0000	1.0000	0.0001	0.0001	1.0000	1.0000	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-30-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			144 120
Trt-Eval Interval			
Plant-Eval Interval			144 DP-1
Days After Emergence			139 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt No.	Treatment	Rate	Growth
	Name	Rate Unit	Stage
			11 12 15
1	CHECK UNTREATED		0 c 0 c 5 d
2	DEGREE XTRA	2 qt/a PRE	72 b 70 b 149 c
3	DEGREE XTRA	2 qt/a PRE	99 a 93 a 209 a
	IMPACT	0.75 fl oz/a MP	
	AATREX	1 pt/a MP	
	MSO	1 % v/v MP	
	LIQUID N	2.5 % v/v MP	
4	DEGREE XTRA	2 qt/a PRE	99 a 93 a 191 b
	IMPACT	1 fl oz/a MP	
	AATREX	1 pt/a MP	
	MSO	1 % v/v MP	
	LIQUID N	2.5 % v/v MP	

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed				
Pest Code	AMBTR	IPOSS				
Pest Scientific Name	Ambrosia trifidi>	Ipomoea sp.				
Pest Name	Giant ragweed	Morning glory				
Crop Code			ZEAMX			
BBCH Scale			BCOR			
Crop Scientific Name			Zea mays			
Crop Name			Corn			
Description						
Part Rated						
Rating Date			9-30-2011			
Rating Type	CONTROL	CONTROL	YIELD			
Rating Unit	PERCENT	PERCENT	BU			
SE Name						
SE Description						
Rating Timing	8 WEEK	8 WEEK				
Days After First/Last Applic.			144 120			
Trt-Eval Interval						
Plant-Eval Interval			144 DP-1			
Days After Emergence			139 DE-1			
ARM Action Codes	P	P	TY1			
Sort Order for View						
Number of Decimals	0	0	0			
Trt No.	Treatment Name	Rate	Growth Stage	11	12	15
5	DEGREE XTRA	2 qt/a	PRE	99 a	93 a	197 ab
	IMPACT	0.75 fl oz/a	MP			
	STATUS	2.5 oz/a	MP			
	AATREX	1 pt/a	MP			
	MSO	1 % v/v	MP			
	LIQUID N	2.5 % v/v	MP			
6	DEGREE XTRA	2 qt/a	PRE	99 a	92 a	186 b
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	N-PAK AMS LIQUID	3 pt/a	MP			
7	DEGREE XTRA	2 qt/a	PRE	99 a	93 a	192 b
	IMPACT	0.5 fl oz/a	MP			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	AATREX	1 pt/a	MP			
	HSOC	0.5 % v/v	MP			
	N-PAK AMS LIQUID	3 pt/a	MP			
8	DUAL II MAGNUM	1.37 pt/a	PRE	96 a	95 a	197 ab
	IMPACT	0.5 fl oz/a	EP			
	AATREX	2.6 pt/a	EP			
	ROUNDUP POWERMAX	22 fl oz/a	EP			
	HSOC	0.5 % v/v	EP			
	N-PAK AMS LIQUID	3 pt/a	EP			
9	LEXAR	3 qt/a	MP	99 a	99 a	193 b
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	NIS	0.25 % v/v	MP			
	N-PAK AMS LIQUID	3 pt/a	MP			

Means followed by same letter do not significantly differ (P=.05, LSD)

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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-30-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			144 120
Trt-Eval Interval			
Plant-Eval Interval			144 DP-1
Days After Emergence			139 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	
	11	12	15
10 CHECK UNTREATED	0 c	0 c	9 d
LSD (P=.05)	11.2	10.8	11.6
Standard Deviation	6.5	6.3	6.8
CV	8.55	8.68	4.43
Replicate F	1.275	0.051	1.170
Replicate Prob(F)	0.3034	0.9506	0.3328
Treatment F	119.154	115.131	404.053
Treatment Prob(F)	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE

Trial ID: C11012 Protocol ID: AMVAC CORN
Location: LEXINGTON, KY Study Director: CHARLES H. SLACK
Project ID: Investigator: Charles H Slack
Sponsor Contact: RICH PORTER

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 Type

YIELD = yield

Rating Unit

PERCENT = percent

BU = bushel

Plant-Eval Interval

144 DP-1 = 1 5-9-2011

ARM Action Codes

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

TY1 = $4.093985 * [13] * (100 - [14]) / 84.5$

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE

Trial ID: C11012 Protocol ID: AMVAC CORN
 Location: LEXINGTON, KY Study Director: CHARLES H. SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: RICH PORTER

General Trial Information

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

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-9-2011

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

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC 62-97
BBCH Scale: BCOR **Planting Date:** 5-9-2011
Planting Method: ROWS **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 64 F
Soil Moisture: EXCELL **Emergence Date:** 5-14-2011
Harvest Date: 9-30-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 38 FT
% Standard Moisture: 15.5

Plant and Soil Science, U of KY Weed Science Research

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: 44 FT
Plot Area, Unit: 440 FT² **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:** 1.25 MI

Application Description

	A	B	C
Application Date:	5-9-2011	5-25-2011	6-2-2011
Time of Day:	3 PM	1 PM	1 PM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	EP	MP
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	74 F	83 F	82 F
% Relative Humidity:	56	50	38
Wind Velocity, Unit:	8 MPH	10 MPH	5 MPH
Wind Direction:	ENE	S	SW
Soil Temperature, Unit:	62 F	68 F	72 F
Soil Moisture:	EXCELL	EXCELL	GOOD
% Cloud Cover:	10	20	60
Next Rain Occurred On:	5-13-2011	5-26-2011	6-10-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Height, Unit:		4 IN	6 IN

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

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

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE II

Trial ID: C11014 Protocol ID: DUPONT-USA-11-111
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: DAN SMITH

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	ZEAMX BCOR Zea mays Corn	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	ZEAMX BCOR Zea mays Corn	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	ZEAMX BCOR Zea mays Corn	W Weed SETFA Setaria faberi Giant foxtail		
		INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT		CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT		CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT
		2 WEEK	2 WEEK	2 WEEK		4 WEEK	4 WEEK	4 WEEK		8 WEEK	8 WEEK	
		P	P	P		P	P	P		P	P	
		0	0	0		0	0	0		0	0	
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10
1 REALM Q COC AMS ABUNDIT AMS	4 oz/a 1 % v/v 2 lb/a 32 fl oz/a 2 lb/a	V3 V3 V3 LP LP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
2 REALM Q ABUNDIT AMS	4 oz/a 32 fl oz/a 2 lb/a	V3 V3 V3	0 a	99 a	99 a	99 a	0 a	99 a	98 a	96 a	0 a	99 a
3 REALM Q ABUNDIT AATREX AMS	4 oz/a 32 fl oz/a 1 lb ai/a 2 lb/a	V3 V3 V3 V3	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
4 REALM Q AATREX COC AMS ABUNDIT AMS	4 oz/a 1 lb ai/a 1 pt/a 2 lb/a 32 fl oz/a 2 lb/a	V3 V3 V3 V3 LP LP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail		
	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn		
	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	
	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	
	P	P	P	P	P	P	P	P	P	P	P	
	0	0	0	0	0	0	0	0	0	0	0	
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10
5 CINCH ATZ REALM Q COC AMS	1 qt/a 4 oz/a 1 pt/a 2 lb/a	PRE V3 V3 V3	0 a	99 a	99 a	99 a	0 a	99 a	99 a	98 a	0 a	99 a
6 CINCH ATZ REALM Q ABUNDIT AMS	1 qt/a 4 oz/a 32 fl oz/a 2 lb/a	PRE V3 V3 V3	0 a	99 a	99 a	99 a	0 a	99 a	98 a	99 a	0 a	99 a
7 PREQUEL AATREX REALM Q COC AMS	1.66 oz/a 1 lb ai/a 4 oz/a 1 pt/a 2 lb/a	PRE PRE V3 V3 V3	0 a	99 a	99 a	99 a	0 a	99 a	99 a	98 a	0 a	99 a
8 PREQUEL AATREX REALM Q AATREX COC AMS	1.66 oz/a 1 lb ai/a 4 oz/a 1 lb ai/a 1 pt/a 2 lb/a	PRE PRE V3 V3 V3 V3	0 a	99 a	99 a	99 a	0 a	99 a	99 a	98 a	0 a	99 a
9 PREQUEL AATREX REALM Q ABUNDIT AMS	1.66 oz/a 1 lb ai/a 4 oz/a 32 fl oz/a 2 lb/a	PRE PRE V3 V3 V3	0 a	99 a	99 a	99 a	0 a	99 a	99 a	96 a	0 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	Z EAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	Z EAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	Z EAMX BCOR Zea mays Corn	W Weed		
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifidi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifidi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail		
		INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	
		2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	
		P	P	P	P	P	P	P	P	P	P	
		0	0	0	0	0	0	0	0	0	0	
Trt Treatment	Rate	Growth										
No. Name	Rate Unit	Stage	1	2	3	4	5	6	7	8	9	10
10 PREQUEL AATREX ABUNDIT AMS	1.66 oz/a 1 lb ai/a 32 fl oz/a 2 lb/a	PRE PRE V3 V3	0 a	99 a	99 a	99 a	0 a	99 a	99 a	98 a	0 a	99 a
11 CINCH ATZ REALM Q ABUNDIT	1 qt/a 4 oz/a 32 fl oz/a	V3 V3 V3	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
12 HALEX GT NIS	3.6 pt/a 0.25 % v/v	V3 V3	0 a	99 a	99 a	99 a	0 a	99 a	98 a	98 a	0 a	99 a
13 CAPRENO HERBICIDE ROUNDUP POWERMAX N-PAK AMS LIQUID	3 oz/a 22 fl oz/a 2.5 % v/v	V3 V3 V3	0 a	99 a	99 a	99 a	0 a	99 a	98 a	98 a	0 a	99 a
14 CHECK UNTREATED			0 a	0 b	0 b	0 b	0 a	0 b	0 b	0 b	0 a	0 b
LSD (P=.05)			0.0	0.0	0.0	0.0	0.0	0.0	2.1	3.6	0.0	0.0
Standard Deviation			0.0	0.0	0.0	0.0	0.0	0.0	1.3	2.2	0.0	0.0
CV			0.0	0.0	0.0	0.0	0.0	0.0	1.39	2.38	0.0	0.0
Replicate F			0.000	0.000	0.000	0.000	0.000	0.000	0.236	0.673	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.7912	0.5188	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000	0.000	0.000	1293.015	437.546	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0001	0.0001	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	
Pest Scientific Name	Ambrosia trifid	Ipomoea sp.	
Pest Name	Giant ragweed	Morning glory	
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-28-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			142 113
Trt-Eval Interval			
Plant-Eval Interval			142 DP-1
Days After Emergence			136 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt No.	Treatment	Rate	Growth
	Name	Rate Unit	Stage
			11 12 16
1	REALM Q	4 oz/a V3	99 a
	COC	1 % v/v V3	98 a
	AMS	2 lb/a V3	206 a
	ABUNDIT	32 fl oz/a LP	
	AMS	2 lb/a LP	
2	REALM Q	4 oz/a V3	98 ab
	ABUNDIT	32 fl oz/a V3	96 a
	AMS	2 lb/a V3	205 a
3	REALM Q	4 oz/a V3	99 a
	ABUNDIT	32 fl oz/a V3	85 b
	AATREX	1 lb ai/a V3	197 ab
	AMS	2 lb/a V3	
4	REALM Q	4 oz/a V3	99 a
	AATREX	1 lb ai/a V3	99 a
	COC	1 pt/a V3	
	AMS	2 lb/a V3	
	ABUNDIT	32 fl oz/a LP	
	AMS	2 lb/a LP	

Means followed by same letter do not significantly differ (P=.05, LSD)

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			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-28-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			142 113
Trt-Eval Interval			
Plant-Eval Interval			142 DP-1
Days After Emergence			136 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	
			11 12 16
5 CINCH ATZ	1 qt/a	PRE	99 a 96 a 198 ab
REALM Q	4 oz/a	V3	
COC	1 pt/a	V3	
AMS	2 lb/a	V3	
6 CINCH ATZ	1 qt/a	PRE	96 b 98 a 201 a
REALM Q	4 oz/a	V3	
ABUNDIT	32 fl oz/a	V3	
AMS	2 lb/a	V3	
7 PREQUEL	1.66 oz/a	PRE	98 ab 96 a 208 a
AATREX	1 lb ai/a	PRE	
REALM Q	4 oz/a	V3	
COC	1 pt/a	V3	
AMS	2 lb/a	V3	
8 PREQUEL	1.66 oz/a	PRE	99 a 98 a 206 a
AATREX	1 lb ai/a	PRE	
REALM Q	4 oz/a	V3	
AATREX	1 lb ai/a	V3	
COC	1 pt/a	V3	
AMS	2 lb/a	V3	
9 PREQUEL	1.66 oz/a	PRE	99 a 95 a 208 a
AATREX	1 lb ai/a	PRE	
REALM Q	4 oz/a	V3	
ABUNDIT	32 fl oz/a	V3	
AMS	2 lb/a	V3	

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	
Pest Scientific Name	Ambrosia trifidi>	Ipomoea sp.	
Pest Name	Giant ragweed	Morning glory	
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-28-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			142 113
Trt-Eval Interval			
Plant-Eval Interval			142 DP-1
Days After Emergence			136 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	
			11 12 16
10 PREQUEL	1.66 oz/a PRE		99 a 95 a 205 a
AATREX	1 lb ai/a PRE		
ABUNDIT	32 fl oz/a V3		
AMS	2 lb/a V3		
11 CINCH ATZ	1 qt/a V3		99 a 99 a 197 ab
REALM Q	4 oz/a V3		
ABUNDIT	32 fl oz/a V3		
12 HALEX GT	3.6 pt/a V3		96 b 95 a 189 b
NIS	0.25 % v/v V3		
13 CAPRENO HERBICIDE	3 oz/a V3		98 ab 95 a 201 a
ROUNDUP POWERMAX	22 fl oz/a V3		
N-PAK AMS LIQUID	2.5 % v/v V3		
14 CHECK UNTREATED			0 c 0 c 10 c
LSD (P=.05)	2.1	9.8	11.2
Standard Deviation	1.3	5.8	6.7
CV	1.38	6.57	3.53
Replicate F	3.852	2.659	2.048
Replicate Prob(F)	0.0343	0.0890	0.1493
Treatment F	1309.913	58.728	180.743
Treatment Prob(F)	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE II

Trial ID: C11014 Protocol ID: DUPONT-USA-11-111
Location: LEXINGTON, KY Study Director: CHARLES SLACK
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

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent

BU = bushel

Plant-Eval Interval

142 DP-1 = 1 5-9-2011

ARM Action Codes

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

TY1 = $4.321429 * [13] * (100 - [14]) / 84.5$

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE II

Trial ID: C11014 Protocol ID: DUPONT-USA-11-111
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 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: 5-9-2011

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

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC 62-97
BBCH Scale: BCOR **Planting Date:** 5-9-2011
Planting Method: ROWS **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 63 f
Soil Moisture: EXCELL **Emergence Date:** 5-15-2011
Harvest Date: 9-28-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 36 FT
% Standard Moisture: 15.5

Plant and Soil Science, U of KY Weed Science Research

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: 44 FT
Plot Area, Unit: 440 FT² **Tillage Type:** CONTIL conventional-till
Replications: 3 **Study Design:** RAOBL 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:** 1.25 MI

Application Description

	A	B	C
Application Date:	5-9-2011	5-31-2011	6-7-2011
Time of Day:	3 PM	4 PM	2 PM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	V3	LP
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	74 F	91 F	88 F
% Relative Humidity:	56	44	60
Wind Velocity, Unit:	8 MPH	6 MPH	4 MPH
Wind Direction:	ENE	W	WSW
Soil Temperature, Unit:	63 F	74 F	74 F
Soil Moisture:	EXCELL	GOOD	EXCELL
% Cloud Cover:	10	0	15
Next Rain Occurred On:	5-13-2011	6-10-2011	6-10-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH	
Stage Majority, Percent:		V3 85	
Height, Unit:		10 IN	11 IN

Pest Stage At Each Application			
	A	B	C
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Height, Unit:		2 IN	3 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Height, Unit:		4 IN	5 IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W	IPOSS W
Height, Unit:		1 IN	1.5 IN

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

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE III

Trial ID: C11015 Protocol ID: SYN COMMERCIAL CORN
 Location: LEXINGTON, KY Study Director: CHARLES H. SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: SCOTT CULLY

Pest Type		W Weed	W Weed	W Weed		W Weed	W Weed	W Weed			
Pest Code		SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS			
Pest Scientific Name		Setaria faberi	Ambrosia trif>	Ipomoea sp.		Setaria faberi	Ambrosia trif>	Ipomoea sp.			
Pest Name		Giant foxtail	Giant ragweed	Morning glory		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											
Part Rated											
Rating Date											
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
SE Name											
SE Description	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST		
Rating Timing											
Days After First/Last Applic.											
Trt-Eval Interval											
Plant-Eval Interval											
Days After Emergence											
ARM Action Codes	P	P	P	P	P	P	P	P	P		
Sort Order for View											
Number of Decimals	0	0	0	0	0	0	0	0	0		
Trt No.	Treatment	Rate	Growth Stage	1	2	3	4	5	6	7	8
	Name	Unit									
1	CHECK UNTREATED		PRE	0 a	0 b	0 d	0 d	0 a	0 b	0 b	0 b
2	LEXAR PRINCEP	3 qt/a 1 lb ai/a	PRE	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
3	LEXAR LEXAR	1.5 qt/a 1.5 qt/a	PRE EP-V3	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
4	LEXAR HALEX GT N-PAK AMS LIQUID NIS	1.5 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v	PRE LP-V6 LP-V6 LP-V6	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
5	HALEX GT N-PAK AMS LIQUID NIS	3.6 pt/a 2.5 % v/v 0.25 % v/v	EP-V3 EP-V3 EP-V3	0 a	99 a	96 a	96 b	0 a	99 a	99 a	99 a
6	VERDICT ROUNDUP POWERMAX AMS	15 oz/a 22 fl oz/a 8.5 lb ai/100 gal	PRE LP-V6 LP-V6	0 a	99 a	89 b	90 c	0 a	99 a	99 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	ZEAMX BCOR Zea mays Corn	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	ZEAMX BCOR Zea mays Corn	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		
		INJURY PERCENT BEFORE POST	CONTROL PERCENT BEFORE POST	CONTROL PERCENT BEFORE POST		CONTROL PERCENT BEFORE POST	INJURY PERCENT AFTER POST	CONTROL PERCENT AFTER POST	CONTROL PERCENT AFTER POST	CONTROL PERCENT AFTER POST
Trt Treatment No. Name	Rate Unit	Growth Stage	1	2	3	4	5	6	7	8
7 VERDICT STATUS ROUNDUP POWERMAX AMS	13 fl oz/a 2.5 oz/a 22 fl oz/a 8.5 lb ai/100 gal	PRE LP-V6 LP-V6 LP-V6	0 a	99 a	90 b	90 c	0 a	99 a	99 a	99 a
8 SURESTART DURANGO AMS	2.5 pt/a 24 fl oz/a 2 % v/v	PRE LP-V6 LP-V6	0 a	99 a	85 c	92 c	0 a	99 a	99 a	99 a
9 SURESTART AATREX DURANGO AMS	2.5 pt/a 1 lb ai/a 24 fl oz/a 2 % v/v	PRE PRE LP-V6 LP-V6	0 a	99 a	92 b	92 c	0 a	99 a	99 a	99 a
10 PREQUEL AATREX REALM Q COC AMS	1.66 oz/a 1 lb ai/a 4 oz/a 1 pt/a 2 lb ai/a	PRE PRE EP-V3 EP-V3 EP-V3	0 a	99 a	98 a	98 ab	0 a	99 a	99 a	99 a
11 RIMSULFURON MESOTRIONE AATREX ABUNDIT AMS	0.375 oz/a 2.25 oz/a 1 lb ai/a 32 fl oz/a 2 lb ai/a	PRE PRE PRE EP-V3 EP-V3	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	ZEAMX BCOR Zea mays Corn		ZEAMX BCOR Zea mays Corn		
							INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT
	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST	
	P	P	P	P	P	P	P	P	P	P	
	0	0	0	0	0	0	0	0	0	0	
Trt Treatment No. Name	Rate	Rate Unit	Growth Stage	1	2	3	4	5	6	7	8
12 CORVUS HERBICIDE	3 oz/a	PRE		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
AATREX	1 qt/a	PRE									
LAUDIS	3 oz/a	EP-V3									
MSO	1 % v/v	EP-V3									
AMS	8.5 lb ai/100 gal	EP-V3									
13 CORVUS HERBICIDE	3 oz/a	PRE		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
AATREX	1 qt/a	PRE									
LAUDIS	3 oz/a	EP-V3									
MSO	1 % v/v	EP-V3									
ROUNDUP POWERMAX	22 fl oz/a	EP-V3									
AMS	8.5 lb ai/100 gal	EP-V3									
14 BALANCE FLEXX HERBICIDE	3 oz/a	PRE		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
AATREX	1 qt/a	PRE									
CAPRENO HERBICIDE	3 oz/a	EP-V3									
COC	1 % v/v	EP-V3									
AMS	8.5 lb ai/100 gal	EP-V3									
15 DEGREE XTRA	2 qt/a	PRE		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
IMPACT	0.75 fl oz/a	EP-V3									
AATREX	1 pt/a	EP-V3									
MSO	1 % v/v	EP-V3									
LIQUID N	2.5 % v/v	EP-V3									

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	ZEAMX BCOR Zea mays Corn		ZEAMX BCOR Zea mays Corn							
							INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT		
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description							BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals							P	P	P	P	P	P	P	P	P	P
Trt Treatment No. Name	Rate	Unit	Growth Stage	1	2	3	4	5	6	7	8					
16 DEGREE XTRA	2 qt/a		PRE	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a					
IMPACT	1 fl oz/a		EP-V3													
AATREX	1 pt/a		EP-V3													
MSO	1 % v/v		EP-V3													
LIQUID N	2.5 % v/v		EP-V3													
LSD (P=.05)				0.0	0.0	3.3	3.0	0.0	0.0	0.0	0.0					
Standard Deviation				0.0	0.0	2.0	1.8	0.0	0.0	0.0	0.0					
CV				0.0	0.0	2.22	1.99	0.0	0.0	0.0	0.0					
Replicate F				0.000	0.000	0.811	0.135	0.000	0.000	0.000	0.000					
Replicate Prob(F)				1.0000	1.0000	0.4538	0.8741	1.0000	1.0000	1.0000	1.0000					
Treatment F				0.000	0.000	446.815	551.372	0.000	0.000	0.000	0.000					
Treatment Prob(F)				1.0000	1.0000	0.0001	0.0001	1.0000	1.0000	1.0000	1.0000					

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	ZEAMX BCOR Zea mays Corn				
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory					
INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	9-28-2011 YIELD BU				
4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	142 120				
P	P	P	P	P	P	P	P	P	142 DP-1 137 DE-1 TY1				
0	0	0	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	9	10	11	12	13	14	15	16	20
1	CHECK UNTREATED				0 a	0 c	0 e	0 e	0 a	0 c	0 e	0 e	7 f
2	LEXAR PRINCEP	3 qt/a 1 lb ai/a		PRE PRE	0 a	99 a	98 ab	98 ab	0 a	99 a	96 ab	95 abc	194 bcd
3	LEXAR LEXAR	1.5 qt/a 1.5 qt/a		PRE EP-V3	0 a	99 a	99 a	98 ab	0 a	99 a	99 a	96 ab	209 a
4	LEXAR HALEX GT N-PAK AMS LIQUID NIS	1.5 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v		PRE LP-V6 LP-V6 LP-V6	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	207 ab
5	HALEX GT N-PAK AMS LIQUID NIS	3.6 pt/a 2.5 % v/v 0.25 % v/v		EP-V3 EP-V3 EP-V3	0 a	99 a	96 ab	94 bcd	0 a	99 a	96 ab	94 bcd	212 a
6	VERDICT ROUNDUP POWERMAX AMS	15 oz/a 22 fl oz/a 8.5 lb ai/100 gal		PRE LP-V6 LP-V6	0 a	99 a	89 cd	90 d	0 a	99 a	89 cd	90 d	200 a-d

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	9-28-2011 YIELD BU	142 120	142 DP-1 137 DE-1 TY1	0
Trt Treatment No. Name	Rate	Unit	Growth Stage	9	10	11	12	13	14	15	16	20									
7 VERDICT STATUS ROUNDUP POWERMAX AMS	13 fl oz/a 2.5 oz/a 22 fl oz/a 8.5 lb ai/100 gal	PRE LP-V6 LP-V6 LP-V6		0 a	99 a	96 ab	96 abc	0 a	99 a	96 ab	93 bcd	201 abc									
8 SURESTART DURANGO AMS	2.5 pt/a 24 fl oz/a 2 % v/v	PRE LP-V6 LP-V6		0 a	99 a	85 d	92 cd	0 a	99 a	85 d	91 cd	210 a									
9 SURESTART AATREX DURANGO AMS	2.5 pt/a 1 lb ai/a 24 fl oz/a 2 % v/v	PRE PRE LP-V6 LP-V6		0 a	99 a	93 bc	93 bcd	0 a	99 a	93 bc	92 cd	192 cde									
10 PREQUEL AATREX REALM Q COC AMS	1.66 oz/a 1 lb ai/a 4 oz/a 1 pt/a 2 lb ai/a	PRE PRE EP-V3 EP-V3 EP-V3		0 a	99 a	98 ab	96 abc	0 a	99 a	98 ab	95 abc	181 e									
11 RIMSULFURON MESOTRIONE AATREX ABUNDIT AMS	0.375 oz/a 2.25 oz/a 1 lb ai/a 32 fl oz/a 2 lb ai/a	PRE PRE PRE EP-V3 EP-V3		0 a	99 a	99 a	96 abc	0 a	99 a	99 a	93 bcd	188 de									

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory				
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	ZEAMX BCOR Zea mays Corn					ZEAMX BCOR Zea mays Corn			ZEAMX BCOR Zea mays Corn			
	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	9-28-2011 YIELD BU			
	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	142 120			
	P	P	P	P	P	P	P	P	142 DP-1 137 DE-1 TY1			
	0	0	0	0	0	0	0	0	0			
Trt Treatment No. Name	Rate	Unit	Growth Stage	9	10	11	12	13	14	15	16	20
12 CORVUS HERBICIDE AATREX LAUDIS MSO AMS	3 oz/a 1 qt/a 3 oz/a 1 % v/v 8.5 lb ai/100 gal	PRE PRE EP-V3 EP-V3 EP-V3		0 a	99 a	99 a	99 a	0 a	99 a	99 a	95 abc	190 cde
13 CORVUS HERBICIDE AATREX LAUDIS MSO ROUNDUP POWERMAX AMS	3 oz/a 1 qt/a 3 oz/a 1 % v/v 22 fl oz/a 8.5 lb ai/100 gal	PRE PRE EP-V3 EP-V3 EP-V3 EP-V3		0 a	99 a	98 ab	99 a	0 a	99 a	98 ab	95 abc	196 bcd
14 BALANCE FLEXX HERBICIDE AATREX CAPRENO HERBICIDE COC AMS	3 oz/a 1 qt/a 3 oz/a 1 % v/v 8.5 lb ai/100 gal	PRE PRE EP-V3 EP-V3 EP-V3		0 a	99 a	96 ab	98 ab	0 a	99 a	96 ab	96 ab	191 cde
15 DEGREE XTRA IMPACT AATREX MSO LIQUID N	2 qt/a 0.75 fl oz/a 1 pt/a 1 % v/v 2.5 % v/v	PRE EP-V3 EP-V3 EP-V3 EP-V3		0 a	99 a	98 ab	99 a	0 a	99 a	98 ab	95 abc	195 bcd

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory				
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	ZEAMX BCOR Zea mays Corn					ZEAMX BCOR Zea mays Corn			ZEAMX BCOR Zea mays Corn			
	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	9-28-2011 YIELD BU			
	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	142 120			
									142 DP-1 137 DE-1 TY1			
	P	P	P	P	P	P	P	P				
	0	0	0	0	0	0	0	0	0			
Trt Treatment No. Name	Rate	Unit	Growth Stage	9	10	11	12	13	14	15	16	20
16 DEGREE XTRA IMPACT AATREX MSO LIQUID N	2 qt/a 1 fl oz/a 1 pt/a 1 % v/v 2.5 % v/v	PRE EP-V3 EP-V3 EP-V3 EP-V3		0 a	98 b	98 ab	99 a	0 a	98 b	98 ab	95 bc	195 bcd
LSD (P=.05)	0.0	1.0	5.1	4.7	0.0	1.0	5.1	4.3	12.8			
Standard Deviation	0.0	0.6	3.0	2.8	0.0	0.6	3.0	2.6	7.7			
CV	0.0	0.62	3.38	3.11	0.0	0.62	3.39	2.89	4.15			
Replicate F	0.000	1.000	1.968	0.161	0.000	1.000	1.948	0.309	1.363			
Replicate Prob(F)	1.0000	0.3798	0.1573	0.8524	1.0000	0.3798	0.1602	0.7362	0.2712			
Treatment F	0.000	5504.163	191.046	222.950	0.000	5504.163	190.413	257.500	118.137			
Treatment Prob(F)	1.0000	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001	0.0001	0.0001			

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE III

Trial ID: C11015 Protocol ID: SYN COMMERCIAL CORN
Location: LEXINGTON, KY Study Director: CHARLES H. 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

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent

BU = bushel

Plant-Eval Interval

142 DP-1 = 1 5-9-2011

ARM Action Codes

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

TY1 = $4.444898 * [17] * (100 - [18]) / 84.5$

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE III

Trial ID: C11015 Protocol ID: SYN COMMERCIAL CORN
 Location: LEXINGTON, KY Study Director: CHARLES H. 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: 5-9-2011

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

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC 62-97
BBCH Scale: BCOR **Planting Date:** 5-9-2011
Planting Method: ROWS **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 63 F
Soil Moisture: EXCELL excellent **Emergence Date:** 5-14-2011
Harvest Date: 9-28-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 35 FT
% Standard Moisture: 15.5

Plant and Soil Science, U of KY Weed Science Research

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: 44 FT
Plot Area, Unit: 440 FT² **Tillage Type:** CONTIL conventional-till
Replications: 3 **Study Design:** RAOBL 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:** 1.25 MI

Application Description

	A	B	C
Application Date:	5-9-2011	5-25-2011	5-31-2011
Time of Day:	3 PM	1 PM	4 PM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	EP	V3-EP
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	74 F	83 F	91 F
% Relative Humidity:	56	50	44
Wind Velocity, Unit:	8 MPH	10 MPH	6 MPH
Wind Direction:	ENE	S	W
Soil Temperature, Unit:	63 F	68 F	73 F
Soil Moisture:	EXCELL	EXCELL	GOOD
% Cloud Cover:	10	20	0
Next Rain Occurred On:	5-13-2011	5-26-2011	6-10-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH	BBCH
Stage Majority, Percent:		V3	V6

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

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

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMGERGENCE IV	
Trial ID: C11016 Location: LEXINGTON, KY Project ID:	Protocol ID: FMC-ANTHEM CORN Study Director: CHARLES SLACK Investigator: Charles H Slack Sponsor Contact: RUSTY MITCHELL

Pest Type Pest Code Pest Scientific Name Pest Name		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifida Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifida Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description								
	ZEAMX BCOR Zea mays Corn					ZEAMX BCOR Zea mays Corn		
	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT
	BEFORE V2 APP	BEFORE V2 APP	BEFORE V2 APP	BEFORE V2 APP	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK
	P	P	P	P	P	P	P	P
	0	0	0	0	0	0	0	0
Trt Treatment No. Name	1	2	3	4	5	6	7	8
Rate Unit Growth Stage								
1 ANTHEM ROUNDUP POWERMAX AMS	0 a	99 a	53 d	53 d	0 a	99 a	95 c	95 b
2 ANTHEM ROUNDUP POWERMAX AMS	0 a	99 a	70 c	63 c	0 a	99 a	95 bc	95 b
3 ANTHEM AATREX ROUNDUP POWERMAX AMS	0 a	99 a	99 a	99 a	0 a	99 a	98 ab	98 ab
4 ANTHEM AATREX ROUNDUP POWERMAX AMS	0 a	99 a	99 a	99 a	0 a	99 a	98 ab	98 ab

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name	Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description	W Weed	W Weed	W Weed		W Weed	W Weed	W Weed				
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory				
		INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT			
		BEFORE V2 APP	BEFORE V2 APP	BEFORE V2 APP	BEFORE V2 APP							
		2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK			
		P	P	P	P	P	P	P	P			
		0	0	0	0	0	0	0	0			
Trt No.	Treatment Name	Rate	Growth Unit	Stage	1	2	3	4	5	6	7	8
5	DUAL II MAGNUM ROUNDUP POWERMAX AMS	22 oz/a 22 fl oz/a 3.7 % v/v	PRE LP LP		0 a	99 a	53 d	53 d	0 a	99 a	96 abc	95 b
6	BICEP II MAGNUM ROUNDUP POWERMAX AMS	75 oz/a 22 fl oz/a 3.7 % v/v	PRE LP LP		0 a	99 a	93 b	93 b	0 a	99 a	99 a	98 ab
7	LUMAX ROUNDUP POWERMAX AMS	81 oz/a 22 fl oz/a 3.7 % v/v	PRE LP LP		0 a	99 a	99 a	99 a	0 a	99 a	98 ab	99 a
8	BALANCE FLEXX HERBICIDE ROUNDUP POWERMAX AMS	5 oz/a 22 fl oz/a 3.7 % v/v	PRE LP LP		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
9	ANTHEM ROUNDUP POWERMAX AMS ROUNDUP POWERMAX AMS	6 oz/a 22 fl oz/a 3.7 % v/v 22 fl oz/a 3.7 % v/v	EP-V2 EP-V2 EP-V2 LP LP		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
10	ANTHEM ROUNDUP POWERMAX AMS ROUNDUP POWERMAX AMS	8 oz/a 22 fl oz/a 3.7 % v/v 22 fl oz/a 3.7 % v/v	EP-V2 EP-V2 EP-V2 LP LP		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description		ZEAMX BCOR Zea mays Corn				ZEAMX BCOR Zea mays Corn				
Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals		INJURY PERCENT BEFORE V2 APP 2 WEEK	CONTROL PERCENT BEFORE V2 APP 2 WEEK	CONTROL PERCENT BEFORE V2 APP 2 WEEK	CONTROL PERCENT BEFORE V2 APP 2 WEEK	INJURY PERCENT 4 WEEK	CONTROL PERCENT 4 WEEK	CONTROL PERCENT 4 WEEK		
Trt Treatment No. Name	Rate Unit	Growth Stage	1	2	3	4	5	6	7	8
11 ANTHEM AATREX ROUNDUP POWERMAX AMS ROUNDUP POWERMAX AMS	6 oz/a 0.8 lb ai/a 22 fl oz/a 3.7 % v/v 22 fl oz/a 3.7 % v/v	EP-V2 EP-V2 EP-V2 LP LP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
12 HALEX GT ROUNDUP POWERMAX AMS	58 oz/a 22 fl oz/a 3.7 % v/v	EP-V2 LP LP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	98 ab
13 LEXAR ROUNDUP POWERMAX AMS	96 oz/a 22 fl oz/a 3.7 % v/v	EP-V2 LP LP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
14 ROUNDUP POWERMAX AMS ROUNDUP POWERMAX AMS	22 fl oz/a 3.7 % v/v 22 fl oz/a 3.7 % v/v	EP-V2 EP-V2 LP LP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
LSD (P=.05)			0.0	0.0	3.9	4.8	0.0	0.0	2.8	3.6
Standard Deviation			0.0	0.0	2.3	2.9	0.0	0.0	1.6	2.1
CV			0.0	0.0	2.57	3.22	0.0	0.0	1.68	2.17
Replicate F			0.000	0.000	1.000	0.072	0.000	0.000	2.403	0.828
Replicate Prob(F)			1.0000	1.0000	0.3816	0.9309	1.0000	1.0000	0.1103	0.4479
Treatment F			0.000	0.000	168.431	117.450	0.000	0.000	2.657	1.931
Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001	1.0000	1.0000	0.0164	0.0743

Means followed by same letter do not significantly differ (P=.05, LSD)

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				ZEAMX
BBCH Scale	BCOR				BCOR
Crop Scientific Name	Zea mays				Zea mays
Crop Name	Corn				Corn
Description					
Part Rated					
Rating Date					9-28-2011
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	BU
SE Name					
SE Description					
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.					142 118
Trt-Eval Interval					
Plant-Eval Interval					142 DP-1
Days After Emergence					136 DE-1
ARM Action Codes	P	P	P	P	TY1
Sort Order for View					
Number of Decimals	0	0	0	0	0
Trt No.	Treatment	Rate	Growth		
	Name	Rate Unit	Stage	9	10
				11	12
				15	
1	ANTHEM ROUNDUP POWERMAX AMS	7 oz/a 22 fl oz/a LP 3.7 % v/v LP	PRE	0 a	99 a
					93 c
					87 e
					174 def
2	ANTHEM ROUNDUP POWERMAX AMS	9 oz/a 22 fl oz/a LP 3.7 % v/v LP	PRE	0 a	99 a
					93 bc
					89 cde
					170 ef
3	ANTHEM AATREX ROUNDUP POWERMAX AMS	7 oz/a 0.9 lb ai/a 22 fl oz/a LP 3.7 % v/v LP	PRE PRE	0 a	99 a
					96 ab
					93 a-d
					179 b-e
4	ANTHEM AATREX ROUNDUP POWERMAX AMS	9 oz/a 1.16 lb ai/a 22 fl oz/a LP 3.7 % v/v LP	PRE PRE	0 a	99 a
					98 a
					95 abc
					182 bcd

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory				
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	ZEAMX BCOR Zea mays Corn				ZEAMX BCOR Zea mays Corn		
	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	9-28-2011 YIELD BU		
	8 WEEK	8 WEEK	8 WEEK	8 WEEK	142 118		
	P	P	P	P	142 DP-1 136 DE-1 TY1		
	0	0	0	0	0		
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	9	10	11	12	15
5 DUAL II MAGNUM ROUNDUP POWERMAX AMS	22 oz/a 22 fl oz/a LP 3.7 % v/v LP	PRE	0 a	99 a	96 ab	88 de	165 f
6 BICEP II MAGNUM ROUNDUP POWERMAX AMS	75 oz/a 22 fl oz/a LP 3.7 % v/v LP	PRE	0 a	99 a	98 a	92 b-e	178 cde
7 LUMAX ROUNDUP POWERMAX AMS	81 oz/a 22 fl oz/a LP 3.7 % v/v LP	PRE	0 a	99 a	98 a	95 abc	180 bcd
8 BALANCE FLEXX HERBICIDE ROUNDUP POWERMAX AMS	5 oz/a 22 fl oz/a LP 3.7 % v/v LP	PRE	0 a	99 a	96 ab	95 abc	184 bc
9 ANTHEM ROUNDUP POWERMAX AMS ROUNDUP POWERMAX AMS	6 oz/a 22 fl oz/a LP 3.7 % v/v LP 22 fl oz/a LP 3.7 % v/v LP	EP-V2 EP-V2 EP-V2	0 a	99 a	99 a	96 ab	178 b-e
10 ANTHEM ROUNDUP POWERMAX AMS ROUNDUP POWERMAX AMS	8 oz/a 22 fl oz/a LP 3.7 % v/v LP 22 fl oz/a LP 3.7 % v/v LP	EP-V2 EP-V2 EP-V2	0 a	99 a	99 a	96 ab	181 bcd

Means followed by same letter do not significantly differ (P=.05, LSD)

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								
Part Rated								
Rating Date					9-28-2011			
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	YIELD			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	BU			
SE Name								
SE Description								
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK				
Days After First/Last Applic.					142 118			
Trt-Eval Interval								
Plant-Eval Interval					142 DP-1			
Days After Emergence					136 DE-1			
ARM Action Codes	P	P	P	P	TY1			
Sort Order for View								
Number of Decimals	0	0	0	0	0			
Trt No.	Treatment Name	Rate	Growth					
		Unit	Stage					
				9	10			
				11	12			
				15				
11	ANTHEM	6 oz/a	EP-V2	0 a	99 a	96 ab	93 a-d	188 b
	AATREX	0.8 lb ai/a	EP-V2					
	ROUNDUP POWERMAX	22 fl oz/a	EP-V2					
	AMS	3.7 % v/v	EP-V2					
	ROUNDUP POWERMAX	22 fl oz/a	LP					
	AMS	3.7 % v/v	LP					
12	HALEX GT	58 oz/a	EP-V2	0 a	99 a	99 a	95 abc	178 cde
	ROUNDUP POWERMAX	22 fl oz/a	LP					
	AMS	3.7 % v/v	LP					
13	LEXAR	96 oz/a	EP-V2	0 a	99 a	99 a	99 a	186 bc
	ROUNDUP POWERMAX	22 fl oz/a	LP					
	AMS	3.7 % v/v	LP					
14	ROUNDUP POWERMAX	22 fl oz/a	EP-V2	0 a	99 a	99 a	92 b-e	202 a
	AMS	3.7 % v/v	EP-V2					
	ROUNDUP POWERMAX	22 fl oz/a	LP					
	AMS	3.7 % v/v	LP					
LSD (P=.05)		0.0	0.0	3.2	5.8	9.8		
Standard Deviation		0.0	0.0	1.9	3.5	5.8		
CV		0.0	0.0	1.94	3.72	3.23		
Replicate F		0.000	0.000	7.568	0.103	6.109		
Replicate Prob(F)		1.0000	1.0000	0.0026	0.9024	0.0067		
Treatment F		0.000	0.000	3.420	2.905	6.673		
Treatment Prob(F)		1.0000	1.0000	0.0037	0.0100	0.0001		

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMGERGENCE IV

Trial ID: C11016 Protocol ID: FMC-ANTHEM CORN
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

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent

BU = bushel

Plant-Eval Interval

142 DP-1 = 1 5-9-2011

ARM Action Codes

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

TY1 = $4.093985 * [13] * (100 - [14]) / 84.5$

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMGERGENCE IV

Trial ID: C11016 Protocol ID: FMC-ANTHEM CORN
 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: 5-9-2011

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

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC 62-97
BBCH Scale: BCOR **Planting Date:** 5-9-2011
Planting Method: ROWS **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 63 F
Soil Moisture: EXCELL **Emergence Date:** 5-15-2011
Harvest Date: 9-28-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 38 FT
% Standard Moisture: 15.5

Plant and Soil Science, U of KY Weed Science Research

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: 44 FT
Plot Area, Unit: 440 FT² **Tillage Type:** CONTIL conventional-till
Replications: 3 **Study Design:** RAOBL 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:** 1.25 MI

Application Description

	A	B	C
Application Date:	5-9-2011	5-25-2011	6-2-2011
Time of Day:	3 PM	1 PM	1 PM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	EP-V2	LP
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	74 F	83 F	82 F
% Relative Humidity:	56	50	38
Wind Velocity, Unit:	8 MPH	10 MPH	5 MPH
Wind Direction:	ENE	S	SW
Soil Temperature, Unit:	63 F	69 F	72 F
Soil Moisture:	EXCELL	EXCELL	GOOD
% Cloud Cover:	10	20	60
Next Rain Occurred On:	5-13-2011	5-26-2011	6-10-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH	
Stage Majority, Percent:		V2 85	
Height, Unit:		8 IN	10 IN

Pest Stage At Each Application			
	A	B	C
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Height, Unit:		2 IN	3 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Height, Unit:		4 IN	5 IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W	IPOSS W
Height, Unit:		1 IN	1.5 IN

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

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE V

Trial ID: C11017 Protocol ID: FMC-CADETCORN
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: RUSTY MITCHELL

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA		
Pest Code		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi		
Pest Scientific Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail		
Pest Name												
Crop Code	ZEAMX				ZEAMX				ZEAMX			
BBCH Scale	BCOR				BCOR				BCOR			
Crop Scientific Name	Zea mays				Zea mays				Zea mays			
Crop Name	Corn				Corn				Corn			
Description												
Part Rated												
Rating Date												
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
SE Name												
SE Description	BEFORE EP	BEFORE EP	BEFORE EP	BEFORE EP	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK		
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK								
Days After First/Last Applic.												
Trt-Eval Interval												
Plant-Eval Interval												
Days After Emergence												
ARM Action Codes	P	P	P	P	P	P	P	P	P	P		
Sort Order for View												
Number of Decimals	0	0	0	0	0	0	0	0	0	0		
Trt Treatment	Rate	Growth										
No. Name	Rate Unit	Stage	1	2	3	4	5	6	7	8	9	10
1 DUAL II MAGNUM	0.665 pt/a	PRE	0 a	99 a	80 c	80 c	0 a	99 a	82 cd	82 d	0 a	99 a
CADET	0.6 oz/a	EP										
ROUNDUP POWERMAX	22 fl oz/a	EP										
AMS	3.7 % v/v	EP										
2 DUAL II MAGNUM	0.665 pt/a	PRE	0 a	99 a	89 a	90 a	0 a	99 a	80 d	80 d	0 a	99 a
CADET	0.6 oz/a	EP										
ROUNDUP POWERMAX	22 fl oz/a	EP										
AATREX	0.75 lb ai/a	EP										
AMS	3.7 % v/v	EP										
3 DUAL II MAGNUM	0.665 pt/a	PRE	0 a	99 a	89 a	90 a	0 a	99 a	83 c	88 c	0 a	99 a
ROUNDUP POWERMAX	22 fl oz/a	EP										
AMS	3.7 % v/v	EP										
4 ANTHEM	7 oz/a	PRE	0 a	99 a	88 b	88 b	0 a	99 a	89 b	89 bc	0 a	99 a
AATREX	0.9 lb ai/a	PRE										
CADET	0.6 oz/a	MP										
ROUNDUP POWERMAX	22 fl oz/a	MP										
AMS	3.7 % v/v	MP										

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail			
Crop Code	ZEAMX			ZEAMX			ZEAMX			ZEAMX			
BBCH Scale	BCOR			BCOR			BCOR			BCOR			
Crop Scientific Name	Zea mays			Zea mays			Zea mays			Zea mays			
Crop Name	Corn			Corn			Corn			Corn			
Description													
Part Rated													
Rating Date													
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
SE Name													
SE Description	BEFORE EP	BEFORE EP	BEFORE EP	BEFORE EP	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK			
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK									
Days After First/Last Applic.													
Trt-Eval Interval													
Plant-Eval Interval													
Days After Emergence													
ARM Action Codes	P	P	P	P	P	P	P	P	P	P			
Sort Order for View													
Number of Decimals	0	0	0	0	0	0	0	0	0	0			
Trt Treatment No. Name	Rate	Growth Unit	Stage	1	2	3	4	5	6	7	8	9	10
5 BICEP LITE II MAGNUM CADET ROUNDUP POWERMAX AMS	48 oz/a 0.6 oz/a 22 fl oz/a 3.7 % v/v	PRE MP MP MP		0 a	99 a	90 a	90 a	0 a	99 a	90 b	90 b	0 a	99 a
6 AATREX CADET ROUNDUP POWERMAX AMS	1.5 lb ai/a 0.6 oz/a 22 fl oz/a 3.7 % v/v	PRE MP MP MP		0 a	80 b	90 a	90 a	0 a	82 b	90 b	90 b	0 a	80 b
7 ROUNDUP POWERMAX AMS ROUNDUP POWERMAX AMS	22 fl oz/a 3.7 % v/v 22 fl oz/a 3.7 % v/v	EP EP MP MP		0 a	0 c	0 d	0 d	0 a	99 a	99 a	99 a	0 a	99 a
8 CHECK UNTREATED				0 a	0 c	0 d	0 d	0 a	0 c	0 e	0 e	0 a	0 c
LSD (P=.05)	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.8	2.4	1.8	0.0	0.0
Standard Deviation	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	1.0	1.4	1.0	0.0	0.0
CV	0.0	0.0	0.91	0.0	0.0	0.0	0.0	0.0	1.21	1.81	1.35	0.0	0.0
Replicate F	0.000	0.000	0.467	0.000	0.000	0.000	0.000	0.000	1.000	2.362	1.874	0.000	0.000
Replicate Prob(F)	1.0000	1.0000	0.6365	1.0000	1.0000	1.0000	1.0000	1.0000	0.3927	0.1306	0.1900	1.0000	1.0000
Treatment F	0.000	0.000	13959.202	0.000	0.000	0.000	0.000	0.000	3460.017	1550.700	2769.312	0.000	0.000
Treatment Prob(F)	1.0000	1.0000	0.0001	1.0000	1.0000	1.0000	1.0000	1.0000	0.0001	0.0001	0.0001	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	
Pest Scientific Name	Ambrosia trifid	Ipomoea sp.	
Pest Name	Giant ragweed	Morning glory	
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-28-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			142 118
Trt-Eval Interval			
Plant-Eval Interval			142 DP-1
Days After Emergence			136 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt No.			
Treatment Name			
Rate			
Growth Stage			
	11	12	15
1 DUAL II MAGNUM	0.665 pt/a	PRE	
CADET	0.6 oz/a	EP	
ROUNDUP POWERMAX	22 fl oz/a	EP	
AMS	3.7 % v/v	EP	
	72 c	82 c	147 c
2 DUAL II MAGNUM	0.665 pt/a	PRE	
CADET	0.6 oz/a	EP	
ROUNDUP POWERMAX	22 fl oz/a	EP	
AATREX	0.75 lb ai/a	EP	
AMS	3.7 % v/v	EP	
	80 b	82 c	164 b
3 DUAL II MAGNUM	0.665 pt/a	PRE	
ROUNDUP POWERMAX	22 fl oz/a	EP	
AMS	3.7 % v/v	EP	
	70 c	82 c	137 c
4 ANTHEM	7 oz/a	PRE	
AATREX	0.9 lb ai/a	PRE	
CADET	0.6 oz/a	MP	
ROUNDUP POWERMAX	22 fl oz/a	MP	
AMS	3.7 % v/v	MP	
	87 a	87 a	186 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.	
Pest Name	Giant ragweed	Morning glory	
Crop Code			ZEAMX
BBCH Scale			BCOR
Crop Scientific Name			Zea mays
Crop Name			Corn
Description			
Part Rated			
Rating Date			9-28-2011
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU
SE Name			
SE Description			
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.			142 118
Trt-Eval Interval			
Plant-Eval Interval			142 DP-1
Days After Emergence			136 DE-1
ARM Action Codes	P	P	TY1
Sort Order for View			
Number of Decimals	0	0	0
Trt Treatment	Rate	Growth	
No. Name	Rate Unit Stage		
		11	12 15
5 BICEP LITE II MAGNUM	48 oz/a PRE	89 a	83 bc 184 a
CADET	0.6 oz/a MP		
ROUNDUP POWERMAX	22 fl oz/a MP		
AMS	3.7 % v/v MP		
6 AATREX	1.5 lb ai/a PRE	89 a	86 ab 190 a
CADET	0.6 oz/a MP		
ROUNDUP POWERMAX	22 fl oz/a MP		
AMS	3.7 % v/v MP		
7 ROUNDUP POWERMAX	22 fl oz/a EP	89 a	89 a 179 ab
AMS	3.7 % v/v EP		
ROUNDUP POWERMAX	22 fl oz/a MP		
AMS	3.7 % v/v MP		
8 CHECK UNTREATED		0 d	0 d 12 d
LSD (P=.05)		2.5	3.6 14.6
Standard Deviation		1.4	2.1 8.3
CV		1.98	2.79 5.56
Replicate F		0.554	5.717 0.403
Replicate Prob(F)		0.5866	0.0153 0.6756
Treatment F		1341.983	637.241 150.876
Treatment Prob(F)		0.0001	0.0001 0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE V

Trial ID: C11017 Protocol ID: FMC-CADETCORN
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

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent

BU = bushel

Plant-Eval Interval

142 DP-1 = 1 5-9-2011

ARM Action Codes

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

TY1 = $4.093985 * [13] * (100 - [14]) / 84.5$

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE V

Trial ID: C11017 Protocol ID: FMC-CADETCORN
 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: 5-9-2011

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

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC 62-97
BBCH Scale: BCOR **Planting Date:** 5-9-2011
Planting Method: ROWS planted **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 63 F
Soil Moisture: EXCELL excellent **Emergence Date:** 5-15-2011
Harvest Date: 9-28-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 38 FT
% Standard Moisture: 15.5

Plant and Soil Science, U of KY Weed Science Research

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: 44 FT
Plot Area, Unit: 440 FT² **Tillage Type:** CONTIL conventional-till
Replications: 3 **Study Design:** RAOBL 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:** 1.25 MI

Application Description

	A	B	C
Application Date:	5-9-2011	5-25-2011	6-2-2011
Time of Day:	3 PM	1 PM	1 PM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	EP	MP
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	74 F	83 F	82 F
% Relative Humidity:	56	50	38
Wind Velocity, Unit:	8 MPH	10 MPH	5 MPH
Wind Direction:	ENE	S	SW
Soil Temperature, Unit:	63 F	68 F	72 F
Soil Moisture:	EXCELL	EXCELL	GOOD
% Cloud Cover:	10	20	60
Next Rain Occurred On:	5-13-2011	5-26-2011	6-10-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Height, Unit:		8 IN	10 IN

Pest Stage At Each Application			
	A	B	C
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Height, Unit:		2 IN	3 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Height, Unit:		4 IN	5 IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W	IPOSS W
Height, Unit:		1 IN	1.5 IN

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

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE VI

Trial ID: C11018 Protocol ID: BAYER-JP11NARBLJ
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: MARK WADDINGTON

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed					
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory					
INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT					
BEFORE MP-V4	BEFORE MP-V4	BEFORE MP-V4	BEFORE MP-V4	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK					
2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK					
SE Description	P	P	P	P	P	P	P	P					
Rating Timing	0	0	0	0	0	0	0	0					
Days After First/Last Applic.	Trt Treatment		Rate		Growth								
Trt-Eval Interval	No.	Name	Rate	Unit	Stage	1	2	3	4	5	6	7	8
ARM Action Codes	1	CORVUS HERBICIDE	3 oz/a		PRE	0 a	99 a	86 d	86 d	0 a	99 a	96 ab	95 a
Sort Order for View		AATREX	1 qt/a		PRE								
Number of Decimals		LAUDIS	3 oz/a		MP-V4								
		MSO	1 % v/v		MP-V4								
		AMS	8.5 lb/100 gal		MP-V4								
		2 CORVUS HERBICIDE	3 oz/a		PRE	0 a	99 a	93 b	93 b	0 a	99 a	95 ab	96 a
		AATREX	1 qt/a		PRE								
		LAUDIS	3 oz/a		MP-V4								
		MSO	1 % v/v		MP-V4								
		ROUNDUP POWERMAX	22 fl oz/a		MP-V4								
		AMS	8.5 lb/100 gal		MP-V4								
		3 CORVUS HERBICIDE	3 oz/a		PRE	0 a	99 a	95 b	95 b	0 a	99 a	96 ab	93 a
		AATREX	1 qt/a		PRE								
		IGNITE 280	22 fl oz/a		MP-V4								
		AMS	3 lb/a		MP-V4								

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed	W Weed	W Weed		W Weed	W Weed	W Weed			
Pest Code		SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS			
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.			
Pest Name		Giant foxtail	Giant ragweed	Morning glory		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											
Part Rated											
Rating Date											
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
SE Name											
SE Description	BEFORE MP-V4	BEFORE MP-V4	BEFORE MP-V4	BEFORE MP-V4							
Rating Timing											
Days After First/Last Applic.	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK			
Trt-Eval Interval											
Plant-Eval Interval											
Days After Emergence											
ARM Action Codes	P	P	P	P	P	P	P	P			
Sort Order for View											
Number of Decimals	0	0	0	0	0	0	0	0			
Trt No.	1	2	3	4	5	6	7	8			
Treatment Name											
Rate											
Rate Unit											
Growth Stage											
4	CORVUS HERBICIDE	3 oz/a	PRE	0 a	99 a	93 b	93 b	0 a	99 a	96 ab	93 a
	AATREX	1 qt/a	PRE								
	ROUNDUP POWERMAX	22 fl oz/a	MP-V4								
	AMS	3 lb/a	MP-V4								
5	CORVUS HERBICIDE	3 oz/a	PRE	0 a	99 a	93 b	93 b	0 a	99 a	98 ab	95 a
	AATREX	1 qt/a	PRE								
	CAPRENO HERBICIDE	3 oz/a	MP-V4								
	COC	1 % v/v	MP-V4								
	AMS	8.5 lb/100 gal	MP-V4								
6	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	0 a	99 a	95 b	93 b	0 a	99 a	99 a	98 a
	AATREX	1 qt/a	PRE								
	CAPRENO HERBICIDE	3 oz/a	MP-V4								
	COC	1 % v/v	MP-V4								
	AMS	8.5 lb/100 gal	MP-V4								
7	BALANCE FLEXX HERBICIDE	3 oz/a	PRE	0 a	99 a	90 c	90 c	0 a	99 a	96 ab	96 a
	AATREX	1 qt/a	PRE								
	LAUDIS	3 oz/a	MP-V4								
	MSO	1 % v/v	MP-V4								
	ROUNDUP POWERMAX	22 fl oz/a	MP-V4								
	AMS	8.5 lb/100 gal	MP-V4								
8	LEXAR	3 qt/a	PRE	0 a	99 a	99 a	99 a	0 a	99 a	96 ab	95 a
	TOUCHDOWN TOTAL	29 fl oz/a	MP-V4								
	AMS	8.5 lb/100 gal	MP-V4								

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed	W Weed	W Weed		W Weed	W Weed	W Weed		
Pest Code		SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS		
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		
Pest Name		Giant foxtail	Giant ragweed	Morning glory		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										
Part Rated										
Rating Date										
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
SE Name										
SE Description	BEFORE MP-V4	BEFORE MP-V4	BEFORE MP-V4	BEFORE MP-V4						
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK		
Days After First/Last Applic.										
Trt-Eval Interval										
Plant-Eval Interval										
Days After Emergence										
ARM Action Codes	P	P	P	P	P	P	P	P		
Sort Order for View										
Number of Decimals	0	0	0	0	0	0	0	0		
Trt Treatment	Rate	Growth								
No. Name	Rate Unit	Stage	1	2	3	4	5	6		
9 LEXAR	3 qt/a	PRE	0 a	99 a	99 a	99 a	0 a	99 a	98 ab	96 a
HALEX GT	3.6 pt/a	MP-V4								
NIS	0.25 % v/v	MP-V4								
AMS	8.5 lb/100 gal	MP-V4								
10 HARNESS XTRA	2.4 qt/a	PRE	0 a	99 a	89 c	89 c	0 a	99 a	94 b	98 a
ROUNDUP POWERMAX	22 fl oz/a	MP-V4								
AMS	8.5 lb/100 gal	MP-V4								
11 VERDICT	13 fl oz/a	PRE	0 a	99 a	89 c	89 cd	0 a	99 a	98 ab	98 a
STATUS	2.5 oz/a	MP-V4								
ROUNDUP POWERMAX	22 fl oz/a	MP-V4								
AMS	8.5 lb/100 gal	MP-V4								
12 SURESTART	1.75 pt/a	PRE	0 a	99 a	95 b	95 b	0 a	99 a	95 ab	95 a
DURANGO DMA	0.75 lb ae/a	MP-V4								
AMS	8.5 lb/100 gal	MP-V4								
LSD (P=.05)			0.0	0.0	2.6	3.1	0.0	0.0	4.8	4.8
Standard Deviation			0.0	0.0	1.5	1.8	0.0	0.0	2.8	2.8
CV			0.0	0.0	1.64	1.95	0.0	0.0	2.94	2.97
Replicate F			0.000	0.000	2.186	0.926	0.000	0.000	0.687	0.093
Replicate Prob(F)			1.0000	1.0000	0.1362	0.4111	1.0000	1.0000	0.5134	0.9114
Treatment F			0.000	0.000	20.459	14.230	0.000	0.000	0.756	0.918
Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001	1.0000	1.0000	0.6772	0.5405

Means followed by same letter do not significantly differ (P=.05, LSD)

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				ZEAMX			
BBCH Scale	BCOR				BCOR			
Crop Scientific Name	Zea mays				Zea mays			
Crop Name	Corn				Corn			
Description								
Part Rated								
Rating Date					9-28-2011			
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	YIELD			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	BU			
SE Name								
SE Description								
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK				
Days After First/Last Applic.					142 118			
Trt-Eval Interval								
Plant-Eval Interval					142 DP-1			
Days After Emergence					137 DE-1			
ARM Action Codes	P	P	P	P	TY1			
Sort Order for View								
Number of Decimals	0	0	0	0	0			
Trt No.	Treatment Name	Rate	Growth Stage	9	10	11	12	16
		Rate Unit						
1	CORVUS HERBICIDE	3 oz/a	PRE	0 a	99 a	95 ab	93 ab	165 b-e
	AATREX	1 qt/a	PRE					
	LAUDIS	3 oz/a	MP-V4					
	MSO	1 % v/v	MP-V4					
	AMS	8.5 lb/100 gal	MP-V4					
2	CORVUS HERBICIDE	3 oz/a	PRE	0 a	99 a	93 b	93 ab	168 bcd
	AATREX	1 qt/a	PRE					
	LAUDIS	3 oz/a	MP-V4					
	MSO	1 % v/v	MP-V4					
	ROUNDUP POWERMAX	22 fl oz/a	MP-V4					
	AMS	8.5 lb/100 gal	MP-V4					
3	CORVUS HERBICIDE	3 oz/a	PRE	0 a	99 a	96 ab	95 ab	176 ab
	AATREX	1 qt/a	PRE					
	IGNITE 280	22 fl oz/a	MP-V4					
	AMS	3 lb/a	MP-V4					

Means followed by same letter do not significantly differ (P=.05, LSD)

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							
Part Rated							
Rating Date					9-28-2011		
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	YIELD		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	BU		
SE Name							
SE Description							
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK			
Days After First/Last Applic.					142 118		
Trt-Eval Interval							
Plant-Eval Interval					142 DP-1		
Days After Emergence					137 DE-1		
ARM Action Codes		P	P	P	TY1		
Sort Order for View							
Number of Decimals	0	0	0	0	0		
Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	9	10	11	12	16
4 CORVUS HERBICIDE	3 oz/a	PRE	0 a	99 a	96 ab	89 b	179 ab
AATREX	1 qt/a	PRE					
ROUNDUP POWERMAX	22 fl oz/a	MP-V4					
AMS	3 lb/a	MP-V4					
5 CORVUS HERBICIDE	3 oz/a	PRE	0 a	99 a	98 ab	95 ab	193 a
AATREX	1 qt/a	PRE					
CAPRENO HERBICIDE	3 oz/a	MP-V4					
COC	1 % v/v	MP-V4					
AMS	8.5 lb/100 gal	MP-V4					
6 BALANCE FLEXX HERBICIDE	3 oz/a	PRE	0 a	99 a	99 a	95 ab	174 abc
AATREX	1 qt/a	PRE					
CAPRENO HERBICIDE	3 oz/a	MP-V4					
COC	1 % v/v	MP-V4					
AMS	8.5 lb/100 gal	MP-V4					
7 BALANCE FLEXX HERBICIDE	3 oz/a	PRE	0 a	99 a	96 ab	93 ab	150 de
AATREX	1 qt/a	PRE					
LAUDIS	3 oz/a	MP-V4					
MSO	1 % v/v	MP-V4					
ROUNDUP POWERMAX	22 fl oz/a	MP-V4					
AMS	8.5 lb/100 gal	MP-V4					
8 LEXAR	3 qt/a	PRE	0 a	99 a	95 ab	92 ab	174 abc
TOUCHDOWN TOTAL	29 fl oz/a	MP-V4					
AMS	8.5 lb/100 gal	MP-V4					

Means followed by same letter do not significantly differ (P=.05, LSD)

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				ZEAMX
BBCH Scale	BCOR				BCOR
Crop Scientific Name	Zea mays				Zea mays
Crop Name	Corn				Corn
Description					
Part Rated					
Rating Date					9-28-2011
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	BU
SE Name					
SE Description					
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.					142 118
Trt-Eval Interval					
Plant-Eval Interval					142 DP-1
Days After Emergence					137 DE-1
ARM Action Codes	P	P	P	P	TY1
Sort Order for View					
Number of Decimals	0	0	0	0	0
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	9	10	11
			12	16	
9 LEXAR	3 qt/a	PRE	0 a	99 a	98 ab
HALEX GT	3.6 pt/a	MP-V4			98 a
NIS	0.25 % v/v	MP-V4			165 b-e
AMS	8.5 lb/100 gal	MP-V4			
10 HARNESS XTRA	2.4 qt/a	PRE	0 a	99 a	92 b
ROUNDUP POWERMAX	22 fl oz/a	MP-V4			93 ab
AMS	8.5 lb/100 gal	MP-V4			156 cde
11 VERDICT	13 fl oz/a	PRE	0 a	99 a	98 ab
STATUS	2.5 oz/a	MP-V4			93 ab
ROUNDUP POWERMAX	22 fl oz/a	MP-V4			157 cde
AMS	8.5 lb/100 gal	MP-V4			
12 SURESTART	1.75 pt/a	PRE	0 a	99 a	93 b
DURANGO DMA	0.75 lb ae/a	MP-V4			90 b
AMS	8.5 lb/100 gal	MP-V4			147 e
LSD (P=.05)			0.0	0.0	5.5
Standard Deviation			0.0	0.0	3.2
CV			0.0	0.0	3.37
					3.81
					6.79
Replicate F			0.000	0.000	0.840
Replicate Prob(F)			1.0000	1.0000	0.4449
Treatment F			0.000	0.000	1.261
Treatment Prob(F)			1.0000	1.0000	0.3082
					0.015
					0.9848
					0.0246
					4.047
					0.0026

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE VI

Trial ID: C11018 Protocol ID: BAYER-JP11NARBLJ
Location: LEXINGTON, KY Study Director: CHARLES SLACK
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

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent

BU = bushel

Plant-Eval Interval

142 DP-1 = 1 5-9-2011

ARM Action Codes

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

TY1 = $4.093985 * [13] * (100 - [14]) / 84.5$

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE VI

Trial ID: C11018 Protocol ID: BAYER-JP11NARBLJ
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: MARK WADDINGTON

General Trial Information

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

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-9-2011

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

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: P1184HR
BBCH Scale: BCOR **Planting Date:** 5-9-2011
Planting Method: ROWS **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 63 F
Soil Moisture: EXCELL **Emergence Date:** 5-14-2011
Harvest Date: 9-28-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 38 FT
% Standard Moisture: 15.5

Plant and Soil Science, U of KY Weed Science Research

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: 44 FT
Plot Area, Unit: 440 FT² **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:** 1.25 MI

Application Description

	A	B
Application Date:	5-9-2011	6-2-2011
Time of Day:	3 PM	1 PM
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	MP-V4
Application Placement:	BROSOI	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	74 F	82 F
% Relative Humidity:	56	38
Wind Velocity, Unit:	8 MPH	5 MPH
Wind Direction:	ENE	SW
Soil Temperature, Unit:	63 F	72 F
Soil Moisture:	EXCELL	GOOD
% Cloud Cover:	10	60
Next Rain Occurred On:	5-13-2011	6-10-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application

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

Pest Stage At Each Application

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

Application Equipment

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

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE VARIETIES

Trial ID: C11020 Protocol ID: C11020
 Location: LEXINGTON, KY Study Director: CHARLES H. SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: MITCH BLAIR/MATTHEW LIVESAY

Pest Type				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn
Description				
Part Rated				
Rating Date				9-29-2011
Rating Type	PHYTO	PHYTO	PHYTO	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
SE Name				
SE Description	AFTER POST APP>	AFTER POST APP>	AFTER POST APP>	
Rating Timing	1 WEEK	2 WEEK	4 WEEK	
Days After First/Last Applic.				140 76
Trt-Eval Interval				
Plant-Eval Interval				141 DP-1
Days After Emergence				134 DE-1
ARM Action Codes	P	P	P	TY1
Sort Order for View				
Number of Decimals	0	0	0	0
Trt No.	1	2	3	7
Treatment Name				
Rate				
Growth Stage				
1 SHARPEN	3 oz/a	PRE		
DEGREE XTRA	3.5 qt/a	PRE		
DKC 61-06			0 a	208 d-i
2 SHARPEN	3 oz/a	PRE		
DEGREE XTRA	3.5 qt/a	PRE		
ROUNDUP POWERMAX	22 oz/a	V5		
HEADLINE HC	6 oz/a	V5		
DKC 61-06			0 a	206 d-j
3 SHARPEN	3 oz/a	PRE		
DEGREE XTRA	3.5 qt/a	PRE		
ROUNDUP POWERMAX	22 oz/a	V5		
AMS	3.5 % v/v	V5		
DKC 61-06			0 a	207 d-i
4 SHARPEN	3 oz/a	PRE		
DEGREE XTRA	3.5 qt/a	PRE		
DKC61-49			0 a	205 e-l

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn
Description				
Part Rated				
Rating Date				9-29-2011
Rating Type	PHYTO	PHYTO	PHYTO	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
SE Name				
SE Description	AFTER POST APP>	AFTER POST APP>	AFTER POST APP>	
Rating Timing	1 WEEK	2 WEEK	4 WEEK	
Days After First/Last Applic.				140 76
Trt-Eval Interval				
Plant-Eval Interval				141 DP-1
Days After Emergence				134 DE-1
ARM Action Codes	P	P	P	TY1
Sort Order for View				
Number of Decimals	0	0	0	0
Trt Treatment				
No. Name	1	2	3	7
Rate				
Growth				
Rate Unit				
Stage				
5 SHARPEN	0 a	0 a	0 a	189 m-s
DEGREE XTRA				
ROUNDUP POWERMAX				
HEADLINE HC				
DKC61-49				
6 SHARPEN	0 a	0 a	0 a	199 h-n
DEGREE XTRA				
ROUNDUP POWERMAX				
AMS				
DKC61-49				
7 SHARPEN	0 a	0 a	0 a	205 e-l
DEGREE XTRA				
DKC61-88				
8 SHARPEN	0 a	0 a	0 a	215 b-e
DEGREE XTRA				
ROUNDUP POWERMAX				
HEADLINE HC				
DKC61-88				
9 SHARPEN	0 a	0 a	0 a	196 i-p
DEGREE XTRA				
ROUNDUP POWERMAX				
AMS				
DKC61-88				

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn
Description				
Part Rated				
Rating Date				9-29-2011
Rating Type	PHYTO	PHYTO	PHYTO	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
SE Name				
SE Description	AFTER POST APP>	AFTER POST APP>	AFTER POST APP>	
Rating Timing	1 WEEK	2 WEEK	4 WEEK	
Days After First/Last Applic.				140 76
Trt-Eval Interval				
Plant-Eval Interval				141 DP-1
Days After Emergence				134 DE-1
ARM Action Codes	P	P	P	TY1
Sort Order for View				
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	1	2
			3	7
10 SHARPEN	3 oz/a	PRE	0 a	0 a
DEGREE XTRA	3.5 qt/a	PRE		0 a
P1184HR				180 r-u
11 SHARPEN	3 oz/a	PRE	0 a	0 a
DEGREE XTRA	3.5 qt/a	PRE		0 a
ROUNDUP POWERMAX	22 oz/a	V5		194 j-q
HEADLINE HC	6 oz/a	V5		
P1184HR				
12 SHARPEN	3 oz/a	PRE	0 a	0 a
DEGREE XTRA	3.5 qt/a	PRE		0 a
ROUNDUP POWERMAX	22 oz/a	V5		206 d-k
AMS	3.5 % v/v	V5		
P1184HR				
13 SHARPEN	3 oz/a	PRE	0 a	0 a
DEGREE XTRA	3.5 qt/a	PRE		0 a
DKC62-09				227 ab
14 SHARPEN	3 oz/a	PRE	0 a	0 a
DEGREE XTRA	3.5 qt/a	PRE		0 a
ROUNDUP POWERMAX	22 oz/a	V5		235 a
HEADLINE HC	6 oz/a	V5		
DKC62-09				

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn	ZEAMX BCOR Zea mays Corn		
	PHYTO PERCENT	PHYTO PERCENT	PHYTO PERCENT	9-29-2011 YIELD BU		
	AFTER POST APP> 1 WEEK	AFTER POST APP> 2 WEEK	AFTER POST APP> 4 WEEK	140 76		
	P	P	P	141 DP-1 134 DE-1 TY1		
	0	0	0	0		
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	7
15 SHARPEN DEGREE XTRA ROUNDUP POWERMAX AMS DKC62-09	3 oz/a 3.5 qt/a 22 oz/a 3.5 % v/v	PRE PRE V5 V5	0 a	0 a	0 a	221 bc
16 SHARPEN DEGREE XTRA ROUNDUP POWERMAX HEADLINE HC HEADLINE AMP DKC62-09	3 oz/a 3.5 qt/a 22 oz/a 6 oz/a 10 oz/a	PRE PRE V5 V5 TASSLE	0 a	0 a	0 a	234 a
17 SHARPEN DEGREE XTRA DKC62-13	3 oz/a 3.5 qt/a	PRE PRE	0 a	0 a	0 a	194 j-q
18 SHARPEN DEGREE XTRA ROUNDUP POWERMAX HEADLINE HC DKC62-13	3 oz/a 3.5 qt/a 22 oz/a 6 oz/a	PRE PRE V5 V5	0 a	0 a	0 a	202 f-m
19 SHARPEN DEGREE XTRA ROUNDUP POWERMAX AMS DKC62-13	3 oz/a 3.5 qt/a 22 oz/a 3.5 % v/v	PRE PRE V5 V5	0 a	0 a	0 a	206 d-k

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type							
Pest Code							
Pest Scientific Name							
Pest Name							
Crop Code			ZEAMX				
BBCH Scale			BCOR				
Crop Scientific Name			Zea mays				
Crop Name			Corn				
Description							
Part Rated							
Rating Date			9-29-2011				
Rating Type			YIELD				
Rating Unit			BU				
SE Name							
SE Description			AFTER POST APP>				
Rating Timing			1 WEEK				
Days After First/Last Applic.							
Trt-Eval Interval			140 76				
Plant-Eval Interval			141 DP-1				
Days After Emergence			134 DE-1				
ARM Action Codes			P				
Sort Order for View			TY1				
Number of Decimals			0				
Trt No.	Treatment Name	Rate Rate Unit	Growth Stage	1	2	3	7
20	SHARPEN DEGREE XTRA DKC62-58	3 oz/a 3.5 qt/a	PRE PRE	0 a	0 a	0 a	189 n-s
21	SHARPEN DEGREE XTRA ROUNDUP POWERMAX HEADLINE HC DKC62-58	3 oz/a 3.5 qt/a 22 oz/a 6 oz/a	PRE PRE V5 V5	0 a	0 a	0 a	198 i-o
22	SHARPEN DEGREE XTRA ROUNDUP POWERMAX AMS DKC62-58	3 oz/a 3.5 qt/a 22 oz/a 3.5 % v/v	PRE PRE V5 V5	0 a	0 a	0 a	193 l-r
23	SHARPEN DEGREE XTRA DKC62-97	3 oz/a 3.5 qt/a	PRE PRE	0 a	0 a	0 a	196 i-p
24	SHARPEN DEGREE XTRA ROUNDUP POWERMAX HEADLINE HC DKC62-97	3 oz/a 3.5 qt/a 22 oz/a 6 oz/a	PRE PRE V5 V5	0 a	0 a	0 a	204 e-l

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type				ZEAMX				ZEAMX				ZEAMX				ZEAMX			
Pest Code				BCOR				BCOR				BCOR				BCOR			
Pest Scientific Name				Zea mays				Zea mays				Zea mays				Zea mays			
Pest Name				Corn				Corn				Corn				Corn			
Crop Code				ZEAMX				ZEAMX				ZEAMX				ZEAMX			
BBCH Scale				BCOR				BCOR				BCOR				BCOR			
Crop Scientific Name				Zea mays				Zea mays				Zea mays				Zea mays			
Crop Name				Corn				Corn				Corn				Corn			
Description																			
Part Rated																			
Rating Date																9-29-2011			
Rating Type				PHYTO				PHYTO				PHYTO				YIELD			
Rating Unit				PERCENT				PERCENT				PERCENT				BU			
SE Name																			
SE Description				AFTER POST APP>				AFTER POST APP>				AFTER POST APP>							
Rating Timing				1 WEEK				2 WEEK				4 WEEK							
Days After First/Last Applic.																140 76			
Trt-Eval Interval																			
Plant-Eval Interval																141 DP-1			
Days After Emergence																134 DE-1			
ARM Action Codes				P				P				P				TY1			
Sort Order for View																			
Number of Decimals				0				0				0				0			
Trt Treatment				Rate				Growth											
No.		Name		Rate Unit		Stage		1		2		3		7					
25	SHARPEN	3 oz/a	PRE	0 a		0 a		0 a		0 a		200	h-n						
	DEGREE XTRA	3.5 qt/a	PRE																
	ROUNDUP POWERMAX	22 oz/a	V5																
	AMS	3.5 % v/v	V5																
	DKC62-97																		
26	SHARPEN	3 oz/a	PRE	0 a		0 a		0 a		0 a		211	c-h						
	DEGREE XTRA	3.5 qt/a	PRE																
	DKC63-25																		
27	SHARPEN	3 oz/a	PRE	0 a		0 a		0 a		0 a		214	b-f						
	DEGREE XTRA	3.5 qt/a	PRE																
	ROUNDUP POWERMAX	22 oz/a	V5																
	HEADLINE HC	6 oz/a	V5																
	DKC63-25																		
28	SHARPEN	3 oz/a	PRE	0 a		0 a		0 a		0 a		211	c-h						
	DEGREE XTRA	3.5 qt/a	PRE																
	ROUNDUP POWERMAX	22 oz/a	V5																
	AMS	3.5 % v/v	V5																
	DKC63-25																		
29	SHARPEN	3 oz/a	PRE	0 a		0 a		0 a		0 a		208	d-i						
	DEGREE XTRA	3.5 qt/a	PRE																
	DKC63-87																		

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn
Description				
Part Rated				
Rating Date				9-29-2011
Rating Type	PHYTO	PHYTO	PHYTO	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
SE Name				
SE Description	AFTER POST APP>	AFTER POST APP>	AFTER POST APP>	
Rating Timing	1 WEEK	2 WEEK	4 WEEK	
Days After First/Last Applic.				140 76
Trt-Eval Interval				
Plant-Eval Interval				141 DP-1
Days After Emergence				134 DE-1
ARM Action Codes	P	P	P	TY1
Sort Order for View				
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	1	2
			3	7
30 SHARPEN	3 oz/a	PRE	0 a	0 a
DEGREE XTRA	3.5 qt/a	PRE		
ROUNDUP POWERMAX	22 oz/a	V5		
HEADLINE HC	6 oz/a	V5		
DKC63-87				217 b-e
31 SHARPEN	3 oz/a	PRE	0 a	0 a
DEGREE XTRA	3.5 qt/a	PRE		
ROUNDUP POWERMAX	22 oz/a	V5		
AMS	3.5 % v/v	V5		
DKC63-87				208 d-i
32 SHARPEN	3 oz/a	PRE	0 a	0 a
DEGREE XTRA	3.5 qt/a	PRE		
DKC64-69				205 e-l
33 SHARPEN	3 oz/a	PRE	0 a	0 a
DEGREE XTRA	3.5 qt/a	PRE		
ROUNDUP POWERMAX	22 oz/a	V5		
HEADLINE HC	6 oz/a	V5		
DKC64-69				223 abc
34 SHARPEN	3 oz/a	PRE	0 a	0 a
DEGREE XTRA	3.5 qt/a	PRE		
ROUNDUP POWERMAX	22 oz/a	V5		
AMS	3.5 % v/v	V5		
DKC64-69				213 c-g

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	ZEAMX BCOR Zea mays Corn PHYTO PERCENT AFTER POST APP> 1 WEEK P 0	ZEAMX BCOR Zea mays Corn PHYTO PERCENT AFTER POST APP> 2 WEEK P 0	ZEAMX BCOR Zea mays Corn PHYTO PERCENT AFTER POST APP> 4 WEEK P 0	ZEAMX BCOR Zea mays Corn 9-29-2011 YIELD BU 140 76 141 DP-1 134 DE-1 TY1 0
Trt Treatment No. Name Rate Rate Unit Growth Stage	1	2	3	7
35 SHARPEN DEGREE XTRA ROUNDUP POWERMAX HEADLINE HC HEADLINE AMP DKC64-69 3 oz/a 3.5 qt/a 22 oz/a 6 oz/a 10 oz/a PRE PRE V5 V5 TASSLE	0 a	0 a	0 a	219 bcd
36 SHARPEN DEGREE XTRA DKC65-19 3 oz/a 3.5 qt/a PRE PRE	0 a	0 a	0 a	193 k-q
37 SHARPEN DEGREE XTRA ROUNDUP POWERMAX HEADLINE HC DKC65-19 3 oz/a 3.5 qt/a 22 oz/a 6 oz/a PRE PRE V5 V5	0 a	0 a	0 a	205 e-l
38 SHARPEN DEGREE XTRA ROUNDUP POWERMAX AMS DKC65-19 3 oz/a 3.5 qt/a 22 oz/a 3.5 % v/v PRE PRE V5 V5	0 a	0 a	0 a	200 h-n
39 SHARPEN DEGREE XTRA 33D49 3 oz/a 3.5 qt/a PRE PRE	0 a	0 a	0 a	173 u

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	ZEAMX BCOR Zea mays Corn PHYTO PERCENT AFTER POST APP> 1 WEEK P 0	ZEAMX BCOR Zea mays Corn PHYTO PERCENT AFTER POST APP> 2 WEEK P 0	ZEAMX BCOR Zea mays Corn PHYTO PERCENT AFTER POST APP> 4 WEEK P 0	ZEAMX BCOR Zea mays Corn 9-29-2011 YIELD BU 140 76 141 DP-1 134 DE-1 TY1 0
Trt Treatment No. Name Rate Unit Growth Stage	1	2	3	7
40 SHARPEN DEGREE XTRA ROUNDUP POWERMAX HEADLINE HC 33D49	0 a	0 a	0 a	176 tu
41 SHARPEN DEGREE XTRA ROUNDUP POWERMAX AMS 33D49	0 a	0 a	0 a	172 u
42 SHARPEN DEGREE XTRA ROUNDUP POWERMAX HEADLINE HC HEADLINE AMP 33D49	0 a	0 a	0 a	178 stu
43 SHARPEN DEGREE XTRA DKC65-44	0 a	0 a	0 a	185 o-u
44 SHARPEN DEGREE XTRA ROUNDUP POWERMAX HEADLINE HC DKC65-44	0 a	0 a	0 a	184 p-u

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type							
Pest Code							
Pest Scientific Name							
Pest Name							
Crop Code			ZEAMX	ZEAMX	ZEAMX	ZEAMX	
BBCH Scale			BCOR	BCOR	BCOR	BCOR	
Crop Scientific Name			Zea mays	Zea mays	Zea mays	Zea mays	
Crop Name			Corn	Corn	Corn	Corn	
Description							
Part Rated							
Rating Date						9-29-2011	
Rating Type			PHYTO	PHYTO	PHYTO	YIELD	
Rating Unit			PERCENT	PERCENT	PERCENT	BU	
SE Name							
SE Description			AFTER POST APP>	AFTER POST APP>	AFTER POST APP>		
Rating Timing			1 WEEK	2 WEEK	4 WEEK		
Days After First/Last Applic.						140 76	
Trt-Eval Interval							
Plant-Eval Interval						141 DP-1	
Days After Emergence						134 DE-1	
ARM Action Codes			P	P	P	TY1	
Sort Order for View							
Number of Decimals			0	0	0	0	
Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	7
45	SHARPEN	3 oz/a	PRE	0 a	0 a	0 a	182 q-u
	DEGREE XTRA	3.5 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	V5				
	AMS	3.5 % v/v	V5				
	DKC65-44						
46	SHARPEN	3 oz/a	PRE	0 a	0 a	0 a	189 m-s
	DEGREE XTRA	3.5 qt/a	PRE				
	DKC66-96						
47	SHARPEN	3 oz/a	PRE	0 a	0 a	0 a	198 i-o
	DEGREE XTRA	3.5 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	V5				
	HEADLINE HC	6 oz/a	V5				
	DKC66-96						
48	SHARPEN	3 oz/a	PRE	0 a	0 a	0 a	201 g-n
	DEGREE XTRA	3.5 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	V5				
	AMS	3.5 % v/v	V5				
	DKC66-96						
49	SHARPEN	3 oz/a	PRE	0 a	0 a	0 a	204 e-l
	DEGREE XTRA	3.5 qt/a	PRE				
	ROUNDUP POWERMAX	22 oz/a	V5				
	HEADLINE HC	6 oz/a	V5				
	HEADLINE AMP	10 oz/a	TASSLE				
	DKC66-96						

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn
Description				
Part Rated				
Rating Date				9-29-2011
Rating Type	PHYTO	PHYTO	PHYTO	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
SE Name				
SE Description	AFTER POST APP>	AFTER POST APP>	AFTER POST APP>	
Rating Timing	1 WEEK	2 WEEK	4 WEEK	
Days After First/Last Applic.				140 76
Trt-Eval Interval				
Plant-Eval Interval				141 DP-1
Days After Emergence				134 DE-1
ARM Action Codes	P	P	P	TY1
Sort Order for View				
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	1	2
			3	7
50 SHARPEN	3 oz/a	PRE	0 a	0 a
DEGREE XTRA	3.5 qt/a	PRE		0 a
DKC67-57				180 r-u
51 SHARPEN	3 oz/a	PRE	0 a	0 a
DEGREE XTRA	3.5 qt/a	PRE		0 a
ROUNDUP POWERMAX	22 oz/a	V5		
HEADLINE	6 oz/a	V5		
DKC67-57				180 r-u
52 SHARPEN	3 oz/a	PRE	0 a	0 a
DEGREE XTRA	3.5 qt/a	PRE		0 a
ROUNDUP POWERMAX	22 oz/a	V5		
AMS	3.5 % v/v	V5		
DKC67-57				180 r-u
53 SHARPEN	3 oz/a	PRE	0 a	0 a
DEGREE XTRA	3.5 qt/a	PRE		0 a
DKC69-29				202 f-m
54 SHARPEN	3 oz/a	PRE	0 a	0 a
DEGREE XTRA	3.5 qt/a	PRE		0 a
ROUNDUP POWERMAX	22 oz/a	V5		
HEADLINE HC	6 oz/a	V5		
DKC69-29				188 n-t

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn
Description				
Part Rated				
Rating Date				9-29-2011
Rating Type	PHYTO	PHYTO	PHYTO	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
SE Name				
SE Description	AFTER POST APP>	AFTER POST APP>	AFTER POST APP>	
Rating Timing	1 WEEK	2 WEEK	4 WEEK	
Days After First/Last Applic.				140 76
Trt-Eval Interval				
Plant-Eval Interval				141 DP-1
Days After Emergence				134 DE-1
ARM Action Codes	P	P	P	TY1
Sort Order for View				
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	1	2
			3	7
55 SHARPEN	3 oz/a	PRE	0 a	0 a
DEGREE XTRA	3.5 qt/a	PRE		
ROUNDUP POWERMAX	22 oz/a	V5		
AMS	3.5 % v/v	V5		
DKC69-29				183 p-u
LSD (P=.05)	0.0	0.0	0.0	12.8
Standard Deviation	0.0	0.0	0.0	9.2
CV	0.0	0.0	0.0	4.58
Replicate F	0.000	0.000	0.000	15.926
Replicate Prob(F)	1.0000	1.0000	1.0000	0.0001
Treatment F	0.000	0.000	0.000	10.645
Treatment Prob(F)	1.0000	1.0000	1.0000	0.0001

Crop Code
 ZEAMX, BCOR, Zea mays, = US
Rating Type
 YIELD = yield
Rating Unit
 PERCENT = percent
 BU = bushel
Plant-Eval Interval
 141 DP-1 = 1 5-11-2011
ARM Action Codes
 P = Rating scale of 0 to 100 (e.g. % control or injury)
 TY1 = 6.222857*[C4]*(100-[C5])/84.5

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE VARIETIES

Trial ID: C11020 Protocol ID: C11020
 Location: LEXINGTON, KY Study Director: CHARLES H. SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: MITCH BLAIR/MATTHEW LIVESAY

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: 5-11-2011

Trial Location

City: LEXINGTON USA 49.376656 -24.53833
State/Prov.: KENTUCKY -124.715843 --66.968887
Postal Code: 40511
Country: USA

Personnel

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

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC 61-06
BBCH Scale: BCOR **Planting Date:** 5-11-2011
Planting Method: PLANTD planted **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE fine **Soil Temperature, Unit:** 68 F
Soil Moisture: GOOD good **Emergence Date:** 5-18-2011
Harvest Date: 9-29-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 28 FT
% Standard Moisture: 15.5

Crop 2: ZEAMX Zea mays Corn

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Variety: DKC 61-49
BBCH Scale: BCOR
Planting Method: PLANTD planted
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE fine
Soil Moisture: GOOD good
Harvest Date: 9-29-2011
Harvested Width, Unit: 5 FT
% Standard Moisture: 15.5

Planting Date: 5-11-2011
Rate, Unit: 30000 S/A

Soil Temperature, Unit: 68 F
Emergence Date: 5-18-2011
Harvest Equipment: COMBINE
Harvested Length, Unit: 28 FT

Crop 3: ZEAMX Zea mays Corn

Variety: DKC 61-88
BBCH Scale: BCOR
Planting Method: PLANTD planted
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE fine
Soil Moisture: GOOD good
Harvest Date: 9-29-2011
Harvested Width, Unit: 5 FT
% Standard Moisture: 15.5

Planting Date: 5-11-2011
Rate, Unit: 30000 S/A

Soil Temperature, Unit: 68 F
Emergence Date: 5-18-2011
Harvest Equipment: COMBINE
Harvested Length, Unit: 28 FT

Crop 4: ZEAMX Zea mays Corn

Variety: P1184 HR
BBCH Scale: BCOR
Planting Method: PLANTD planted
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE fine
Soil Moisture: GOOD good
Harvest Date: 9-29-2011
Harvested Width, Unit: 5 FT
% Standard Moisture: 15.5

Planting Date: 5-11-2011
Rate, Unit: 30000 S/A

Soil Temperature, Unit: 68 F
Emergence Date: 5-18-2011
Harvest Equipment: COMBINE
Harvested Length, Unit: 28 FT

Crop 5: ZEAMX Zea mays Corn

Variety: DKC 62-09
BBCH Scale: BCOR
Planting Method: PLANTD planted
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE fine
Soil Moisture: GOOD good
Harvest Date: 9-29-2011
Harvested Width, Unit: 5 FT
% Standard Moisture: 15.5

Planting Date: 5-11-2011
Rate, Unit: 30000 S/A

Soil Temperature, Unit: 68 F
Emergence Date: 5-18-2011
Harvest Equipment: COMBINE
Harvested Length, Unit: 28 FT

Crop 6: ZEAMX Zea mays Corn

Variety: DKC 62-13
BBCH Scale: BCOR
Planting Method: PLANTD planted
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE fine
Soil Moisture: GOOD good
Harvest Date: 9-29-2011
Harvested Width, Unit: 5 FT

Planting Date: 5-11-2011
Rate, Unit: 30000 S/A

Soil Temperature, Unit: 68 F
Emergence Date: 5-18-2011
Harvest Equipment: COMBINE
Harvested Length, Unit: 28 FT

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% Standard Moisture: 15.5

Crop 7: ZEAMX Zea mays Corn
Variety: DKC 62-58
BBCH Scale: BCOR **Planting Date:** 5-11-2011
Planting Method: PLANTD planted **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE fine **Soil Temperature, Unit:** 68 F
Soil Moisture: GOOD good **Emergence Date:** 5-18-2011
Harvest Date: 9-29-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 28 FT
% Standard Moisture: 15.5

Crop 8: ZEAMX Zea mays Corn
Variety: DKC 2-97
BBCH Scale: BCOR **Planting Date:** 5-11-2011
Planting Method: PLANTD planted **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE fine **Soil Temperature, Unit:** 68 F
Soil Moisture: GOOD good **Emergence Date:** 5-18-2011
Harvest Date: 9-29-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 28 FT
% Standard Moisture: 15.5

Crop 9: ZEAMX Zea mays Corn
Variety: DKC 63-25
BBCH Scale: BCOR **Planting Date:** 5-11-2011
Planting Method: PLANTD planted **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE fine **Soil Temperature, Unit:** 68 F
Soil Moisture: GOOD good **Emergence Date:** 5-18-2011
Harvest Date: 9-29-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 28 FT
% Standard Moisture: 15.5

Crop 10: ZEAMX Zea mays Corn
Variety: DKC 63-87
BBCH Scale: BCOR **Planting Date:** 5-11-2011
Planting Method: PLANTD planted **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE fine **Soil Temperature, Unit:** 68 F
Soil Moisture: GOOD good **Emergence Date:** 5-18-2011
Harvest Date: 9-29-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 28 FT
% Standard Moisture: 15.5

Crop 11: ZEAMX Zea mays Corn
Variety: DKC 64-69
BBCH Scale: BCOR **Planting Date:** 5-11-2011
Planting Method: PLANTD planted **Rate, Unit:** 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN

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Seed Bed: FINE fine
Soil Moisture: GOOD good
Harvest Date: 9-29-2011
Harvested Width, Unit: 5 FT
% Standard Moisture: 15.5
Soil Temperature, Unit: 68 F
Emergence Date: 5-18-2011
Harvest Equipment: COMBINE
Harvested Length, Unit: 28 FT

Crop 12: ZEAMX Zea mays Corn
Variety: DKC 65-19
BBCH Scale: BCOR
Planting Method: PLANTD planted
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE fine
Soil Moisture: GOOD good
Harvest Date: 9-29-2011
Harvested Width, Unit: 5 FT
% Standard Moisture: 15.5
Planting Date: 5-11-2011
Rate, Unit: 30000 S/A
Soil Temperature, Unit: 68 F
Emergence Date: 5-18-2011
Harvest Equipment: COMBINE
Harvested Length, Unit: 28 FT

Crop 13: ZEAMX Zea mays Corn
Variety: 33D49
BBCH Scale: BCOR
Planting Method: PLANTD planted
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE fine
Soil Moisture: GOOD good
Harvest Date: 9-29-2011
Harvested Width, Unit: 5 FT
% Standard Moisture: 15.5
Planting Date: 5-11-2011
Rate, Unit: 30000 S/A
Soil Temperature, Unit: 68 F
Emergence Date: 5-18-2011
Harvest Equipment: COMBINE
Harvested Length, Unit: 28 FT

Crop 14: ZEAMX Zea mays Corn
Variety: DKC 65-44
BBCH Scale: BCOR
Planting Method: PLANTD planted
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE fine
Soil Moisture: GOOD good
Harvest Date: 9-29-2011
Harvested Width, Unit: 5 FT
% Standard Moisture: 15.5
Planting Date: 5-11-2011
Rate, Unit: 30000 S/A
Soil Temperature, Unit: 68 F
Emergence Date: 5-18-2011
Harvest Equipment: COMBINE
Harvested Length, Unit: 28 FT

Crop 15: ZEAMX Zea mays Corn
Variety: DKC 66-96
BBCH Scale: BCOR
Planting Method: PLANTD planted
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE fine
Soil Moisture: GOOD good
Harvest Date: 9-29-2011
Harvested Width, Unit: 5 FT
% Standard Moisture: 15.5
Planting Date: 5-11-2011
Rate, Unit: 30000 S/A
Soil Temperature, Unit: 68 F
Emergence Date: 5-18-2011
Harvest Equipment: COMBINE
Harvested Length, Unit: 28 FT

Crop 16: ZEAMX Zea mays Corn
Variety: DKC 67-57

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BBCH Scale: BCOR
Planting Method: PLANTD planted
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE fine
Soil Moisture: GOOD good
Harvest Date: 9-29-2011
Harvested Width, Unit: 5 FT
% Standard Moisture: 15.5

Planting Date: 5-11-2011
Rate, Unit: 30000 S/A

Soil Temperature, Unit: 68 F
Emergence Date: 5-18-2011
Harvest Equipment: COMBINE
Harvested Length, Unit: 28 FT

Crop 17: ZEAMX Zea mays Corn
Variety: DKC 69-29

BBCH Scale: BCOR
Planting Method: PLANTD planted
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE fine
Soil Moisture: GOOD good
Harvest Date: 9-29-2011
Harvested Width, Unit: 5 FT
% Standard Moisture: 15.5

Planting Date: 5-11-2011
Rate, Unit: 30000 S/A

Soil Temperature, Unit: 68 F
Emergence Date: 5-18-2011
Harvest Equipment: COMBINE
Harvested Length, Unit: 25 FT

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 33 FT
Plot Area, Unit: 330 FT²
Replications: 4

Site Type: FIELD field

Tillage Type: CONTIL conventional-till
Study Design: SPLBLO Split-Block

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: WEWEDR wet-wet-dry
Closest Weather Station: SPINDLETOP
Distance, Unit: 1 MI

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Application Description

	A	B	C
Application Date:	5-12-2011	6-7-2011	7-15-2011
Time of Day:	2 PM	2 PM	10 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	V5	TASSLE
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	B PATTON
Air Temperature, Unit:	80 F	85 F	82 F
% Relative Humidity:	50	40	70
Wind Velocity, Unit:	6 MPH	4 MPH	3 MPH
Wind Direction:	SW	SW	WSW
Soil Temperature, Unit:	69 F	78 F	76 F
Soil Moisture:	GOOD	FAIR	FAIR
% Cloud Cover:	10	10	10
Next Rain Occurred On:	5-13-2011	6-10-2011	7-17-2011

Crop Stage At Each Application

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

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

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Application Equipment

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

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE VII

Trial ID: C11030 Protocol ID: SYNGENTA-ZSC001A4
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: SCOTT CULLY

Pest Type		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi-> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi-> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory
Pest Code								
Pest Scientific Name								
Pest Name								
Crop Code	ZEAMX				ZEAMX			
BBCH Scale	BCOR				BCOR			
Crop Scientific Name	Zea mays				Zea mays			
Crop Name	Corn				Corn			
Description								
Part Rated								
Rating Date								
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
SE Name	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.								
Trt-Eval Interval								
Plant-Eval Interval								
Days After Emergence								
ARM Action Codes								
Sort Order for View	P	P	P	P	P	P	P	P
Number of Decimals	0	0	0	0	0	0	0	0
Trt No.	Treatment	Rate	Growth					
	Name	Rate Unit	Stage	1	2	3	4	5
1	AATREX	1 qt/a	PRE	0	99	99	99	0
	TOUCHDOWN TOTAL	24 fl oz/a	4-6"WEEDS					99
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS					
	QUILT XCEL	10.5 fl oz/a	V5					
	QUILT XCEL	10.5 fl oz/a	R1					
	NK 68B AGRISURE 3000 GT							
2	AATREX	1 qt/a	PRE	0	99	99	99	0
	HALEX GT	3.6 pt/a	4-6"WEEDS					99
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS					
	AATREX	1 pt/a	4-6"WEEDS					
	NIS	0.25 % v/v	4-6"WEEDS					
	QUILT XCEL	10.5 fl oz/a	V5					
	QUILT XCEL	10.5 fl oz/a	R1					
	NK 68B AGRISURE 3000 GT							

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed		
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		
Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals										
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8
3 A17622 HALEX GT N-PAK AMS LIQUID AATREX NIS QUILT XCEL QUILT XCEL NK 68B AGRISURE 3000 GT	1.5 qt/a 3.6 pt/a 2.5 % v/v 1 pt/a 0.25 % v/v 10.5 fl oz/a 10.5 fl oz/a	PRE 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS V5 R1	0	99	99	99	0	99	99	99
4 AATREX TOUCHDOWN TOTAL N-PAK AMS LIQUID QUILT XCEL QUILT XCEL NK 68B AGRISURE VIPTERA 3111	1 qt/a 24 fl oz/a 2.5 % v/v 10.5 fl oz/a 10.5 fl oz/a	PRE 4-6"WEEDS 4-6"WEEDS V5 R1	0	99	99	99	0	99	99	99
5 AATREX HALEX GT N-PAK AMS LIQUID NIS AATREX QUILT XCEL QUILT XCEL NK 68B AGRISURE VIPTERA 3111	1 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v 1 pt/a 10.5 fl oz/a 10.5 fl oz/a	PRE 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS V5 R1	0	99	99	99	0	99	99	99

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed		
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		
Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	INJURY PERCENT AFTER POST 2 WEEK	CONTROL PERCENT AFTER POST 2 WEEK	CONTROL PERCENT AFTER POST 2 WEEK	CONTROL PERCENT AFTER POST 2 WEEK	INJURY PERCENT AFTER POST 8 WEEK	CONTROL PERCENT AFTER POST 8 WEEK	CONTROL PERCENT AFTER POST 8 WEEK	CONTROL PERCENT AFTER POST 8 WEEK		
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8
6 A17622 HALEX GT N-PAK AMS LIQUID NIS AATREX QUILT XCEL QUILT XCEL NK 68B AGRISURE VIPTERA 3111	1.5 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v 1 pt/a 10.5 fl oz/a V5 10.5 fl oz/a R1	PRE 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS	0	99	99	99	0	99	99	99
7 AATREX TOUCHDOWN TOTAL N-PAK AMS LIQUID QUILT XCEL NK 68B AGRISURE 3000 GT	1 qt/a 24 fl oz/a 2.5 % v/v 10.5 fl oz/a V5	PRE 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS	0	99	99	99	0	99	99	99
8 AATREX HALEX GT N-PAK AMS LIQUID NIS AATREX QUILT XCEL NK 68B AGRISURE 3000 GT	1 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v 1 pt/a 10.5 fl oz/a V5	PRE 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS	0	99	99	99	0	99	99	99

Means followed by same letter do not significantly differ (P=.05, LSD)

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Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed		
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		
Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	INJURY PERCENT AFTER POST	CONTROL PERCENT AFTER POST	CONTROL PERCENT AFTER POST	CONTROL PERCENT AFTER POST	INJURY PERCENT AFTER POST	CONTROL PERCENT AFTER POST	CONTROL PERCENT AFTER POST	CONTROL PERCENT AFTER POST		
Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	2 WEEK	2 WEEK	2 WEEK	2 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK		
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8
9 LEXAR HALEX GT N-PAK AMS LIQUID NIS AATREX QUILT XCEL NK 68B AGRISURE 3000 GT	1.5 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v 1 pt/a 10.5 fl oz/a	PRE 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS V5	0	99	99	99	0	99	99	99
10 AATREX TOUCHDOWN TOTAL N-PAK AMS LIQUID QUILT XCEL NK 68B AGRISURE VIPTERA 3111	1 qt/a 24 fl oz/a 2.5 % v/v 10.5 fl oz/a	PRE 4-6"WEEDS 4-6"WEEDS V5	0	99	99	99	0	99	99	99
11 AATREX HALEX GT N-PAK AMS LIQUID NIS AATREX QUILT XCEL NK 68B AGRISURE VIPTERA 3111	1 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v 1 pt/a 10.5 fl oz/a	PRE 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS V5	0	99	99	99	0	99	99	99
12 LEXAR HALEX GT N-PAK AMS LIQUID NIS AATREX QUILT XCEL NK 68B AGRISURE VIPTERA 3111	1.5 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v 1 pt/a 10.5 fl oz/a	PRE 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS V5	0	99	99	99	0	99	99	99

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed		
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		
Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	INJURY PERCENT AFTER POST	CONTROL PERCENT AFTER POST	CONTROL PERCENT AFTER POST	CONTROL PERCENT AFTER POST	INJURY PERCENT AFTER POST	CONTROL PERCENT AFTER POST	CONTROL PERCENT AFTER POST	CONTROL PERCENT AFTER POST		
2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK		
P 0	P 0	P 0	P 0	P 0	P 0	P 0	P 0	P 0		
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8
13 AATREX TOUCHDOWN TOTAL N-PAK AMS LIQUID NK 68B AGRISURE 3000 GT	1 qt/a 24 fl oz/a 2.5 % v/v	PRE 4-6"WEEDS 4-6"WEEDS	0	99	99	99	0	99	99	99
14 AATREX HALEX GT N-PAK AMS LIQUID NIS AATREX NK 68B AGRISURE 3000 GT	1 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v 1 pt/a	PRE 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS	0	99	99	99	0	99	99	99
15 A17622 HALEX GT N-PAK AMS LIQUID NIS AATREX NK 68B AGRISURE 3000 GT	1.5 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v 1 pt/a	PRE 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS	0	99	99	99	0	99	99	99
16 AATREX TOUCHDOWN TOTAL N-PAK AMS LIQUID NK 68B AGRISURE VIPTERA 3111	24 fl oz/a 2.5 % v/v	4-6"WEEDS 4-6"WEEDS	0	99	99	99	0	99	99	99
17 AATREX HALEX GT N-PAK AMS LIQUID NIS AATREX NK 68B AGRISURE VIPTERA 3111	1 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v 1 pt/a	PRE 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS	0	99	99	99	0	99	99	99

Means followed by same letter do not significantly differ (P=.05, LSD)

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Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed	ZEAMX BCOR Zea mays Corn	W Weed	W Weed	W Weed		
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Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals		INJURY PERCENT AFTER POST	CONTROL PERCENT AFTER POST	CONTROL PERCENT AFTER POST		INJURY PERCENT AFTER POST	CONTROL PERCENT AFTER POST	CONTROL PERCENT AFTER POST		
		2 WEEK	2 WEEK	2 WEEK		8 WEEK	8 WEEK	8 WEEK		
		P 0	P 0	P 0		P 0	P 0	P 0		
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8
18 LEXAR HALEX GT N-PAK AMS LIQUID NIS AATREX NK 68B AGRISURE VIPTERA 3111	1.5 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v 1 pt/a	PRE 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS	0	99	99	99	0	99	99	99
19 AATREX TOUCHDOWN TOTAL N-PAK AMS LIQUID QUILT XCEL NK 68B AGRISURE 3000 GT	1 qt/a 24 fl oz/a 2.5 % v/v 10.5 fl oz/a	PRE 4-6"WEEDS 4-6"WEEDS R1	0	99	99	99	0	99	99	99
20 AATREX HALEX GT N-PAK AMS LIQUID NIS AATREX QUILT XCEL NK 68B AGRISURE 3000 GT	1 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v 1 pt/a 10.5 fl oz/a	PRE 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS R1	0	99	99	99	0	99	99	99
21 LEXAR HALEX GT N-PAK AMS LIQUID NIS AATREX QUILT XCEL NK 68B AGRISURE 3000 GT	1.5 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v 1 pt/a 10.5 fl oz/a	PRE 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS R1	0	99	99	99	0	99	99	99

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed	W Weed	W Weed		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name		Giant foxtail	Giant ragweed	Morning glory		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								
Part Rated								
Rating Date								
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
SE Name	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.								
Trt-Eval Interval								
Plant-Eval Interval								
Days After Emergence								
ARM Action Codes								
Sort Order for View	P	P	P	P	P	P	P	P
Number of Decimals	0	0	0	0	0	0	0	0
Trt Treatment	Rate	Growth						
No. Name	Rate Unit	Stage	1	2	3	4	5	6
22 AATREX	1 qt/a	PRE	0	99	99	99	0	99
TOUCHDOWN TOTAL	24 fl oz/a	4-6"WEEDS						
N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS						
QUILT XCEL	10.5 fl oz/a	R1						
NK 68B AGRISURE VIPTERA 3111								
23 AATREX	1 qt/a	PRE	0	99	99	99	0	99
HALEX GT	3.6 pt/a	4-6"WEEDS						
N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS						
NIS	0.25 % v/v	4-6"WEEDS						
AATREX	1 pt/a	4-6"WEEDS						
QUILT XCEL	10.5 fl oz/a	R1						
NK 68B AGRISURE VIPTERA 3111								
24 LEXAR	1.5 qt/a	PRE	0	99	99	99	0	99
HALEX GT	3.6 pt/a	4-6"WEEDS						
N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS						
NIS	0.25 % v/v	4-6"WEEDS						
AATREX	1 pt/a	4-6"WEEDS						
QUILT XCEL	10.5 fl oz/a	R1						
NK 68B AGRISURE VIPTERA 3111								
LSD (P=.05)	.	.	.	.	.	.	.	.
Standard Deviation	.	.	.	.	.	.	.	.
CV	.	.	.	.	.	.	.	.

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Description			
Part Rated			
Rating Date		9-29-2011	
Rating Type		YIELD	
Rating Unit		BU	
SE Name			
Rating Timing			
Days After First/Last Applic.		139 76	
Trt-Eval Interval			
Plant-Eval Interval		139 DP-1	
Days After Emergence		132 DE-1	
ARM Action Codes		TY1	
Sort Order for View			
Number of Decimals		0	
Trt No.	Treatment Name	Rate Rate Unit	Growth Stage
			12
1	AATREX	1 qt/a	PRE
	TOUCHDOWN TOTAL	24 fl oz/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	V5
	QUILT XCEL	10.5 fl oz/a	R1
	NK 68B AGRISURE 3000 GT		
2	AATREX	1 qt/a	PRE
	HALEX GT	3.6 pt/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	AATREX	1 pt/a	4-6"WEEDS
	NIS	0.25 % v/v	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	V5
	QUILT XCEL	10.5 fl oz/a	R1
	NK 68B AGRISURE 3000 GT		

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Description			
Part Rated			
Rating Date		9-29-2011	
Rating Type		YIELD	
Rating Unit		BU	
SE Name			
Rating Timing			
Days After First/Last Applic.		139 76	
Trt-Eval Interval			
Plant-Eval Interval		139 DP-1	
Days After Emergence		132 DE-1	
ARM Action Codes		TY1	
Sort Order for View			
Number of Decimals		0	
Trt No.	Treatment Name	Rate Rate Unit	Growth Stage
			12
3	A17622	1.5 qt/a	PRE
	HALEX GT	3.6 pt/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	AATREX	1 pt/a	4-6"WEEDS
	NIS	0.25 % v/v	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	V5
	QUILT XCEL	10.5 fl oz/a	R1
	NK 68B AGRISURE 3000 GT		
			214
4	AATREX	1 qt/a	PRE
	TOUCHDOWN TOTAL	24 fl oz/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	V5
	QUILT XCEL	10.5 fl oz/a	R1
	NK 68B AGRISURE VIPTERA 3111		
			215
5	AATREX	1 qt/a	PRE
	HALEX GT	3.6 pt/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	NIS	0.25 % v/v	4-6"WEEDS
	AATREX	1 pt/a	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	V5
	QUILT XCEL	10.5 fl oz/a	R1
	NK 68B AGRISURE VIPTERA 3111		
			204

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Description			
Part Rated			
Rating Date		9-29-2011	
Rating Type		YIELD	
Rating Unit		BU	
SE Name			
Rating Timing			
Days After First/Last Applic.		139 76	
Trt-Eval Interval			
Plant-Eval Interval		139 DP-1	
Days After Emergence		132 DE-1	
ARM Action Codes		TY1	
Sort Order for View			
Number of Decimals		0	
Trt No.	Treatment Name	Rate Rate Unit	Growth Stage
			12
6	A17622	1.5 qt/a	PRE
	HALEX GT	3.6 pt/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	NIS	0.25 % v/v	4-6"WEEDS
	AATREX	1 pt/a	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	V5
	QUILT XCEL	10.5 fl oz/a	R1
	NK 68B AGRISURE VIPTERA 3111		
7	AATREX	1 qt/a	PRE
	TOUCHDOWN TOTAL	24 fl oz/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	V5
	NK 68B AGRISURE 3000 GT		
8	AATREX	1 qt/a	PRE
	HALEX GT	3.6 pt/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	NIS	0.25 % v/v	4-6"WEEDS
	AATREX	1 pt/a	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	V5
	NK 68B AGRISURE 3000 GT		

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Description			
Part Rated			
Rating Date		9-29-2011	
Rating Type		YIELD	
Rating Unit		BU	
SE Name			
Rating Timing			
Days After First/Last Applic.		139 76	
Trt-Eval Interval			
Plant-Eval Interval		139 DP-1	
Days After Emergence		132 DE-1	
ARM Action Codes		TY1	
Sort Order for View			
Number of Decimals		0	
Trt No.	Treatment Name	Rate Rate Unit	Growth Stage
			12
9	LEXAR	1.5 qt/a	PRE
	HALEX GT	3.6 pt/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	NIS	0.25 % v/v	4-6"WEEDS
	AATREX	1 pt/a	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	V5
	NK 68B AGRISURE 3000 GT		
10	AATREX	1 qt/a	PRE
	TOUCHDOWN TOTAL	24 fl oz/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	V5
	NK 68B AGRISURE VIPTERA 3111		
11	AATREX	1 qt/a	PRE
	HALEX GT	3.6 pt/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	NIS	0.25 % v/v	4-6"WEEDS
	AATREX	1 pt/a	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	V5
	NK 68B AGRISURE VIPTERA 3111		
12	LEXAR	1.5 qt/a	PRE
	HALEX GT	3.6 pt/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	NIS	0.25 % v/v	4-6"WEEDS
	AATREX	1 pt/a	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	V5
	NK 68B AGRISURE VIPTERA 3111		

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Description			
Part Rated			
Rating Date		9-29-2011	
Rating Type		YIELD	
Rating Unit		BU	
SE Name			
Rating Timing			
Days After First/Last Applic.		139 76	
Trt-Eval Interval			
Plant-Eval Interval		139 DP-1	
Days After Emergence		132 DE-1	
ARM Action Codes		TY1	
Sort Order for View			
Number of Decimals		0	
Trt No.	Treatment Name	Rate Rate Unit	Growth Stage
			12
13	AATREX TOUCHDOWN TOTAL N-PAK AMS LIQUID NK 68B AGRISURE 3000 GT	1 qt/a 24 fl oz/a 2.5 % v/v	PRE 4-6"WEEDS 4-6"WEEDS
			182
14	AATREX HALEX GT N-PAK AMS LIQUID NIS AATREX NK 68B AGRISURE 3000 GT	1 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v 1 pt/a	PRE 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS
			220
15	A17622 HALEX GT N-PAK AMS LIQUID NIS AATREX NK 68B AGRISURE 3000 GT	1.5 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v 1 pt/a	PRE 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS
			189
16	AATREX TOUCHDOWN TOTAL N-PAK AMS LIQUID NK 68B AGRISURE VIPTERA 3111	24 fl oz/a 2.5 % v/v	4-6"WEEDS 4-6"WEEDS
			175
17	AATREX HALEX GT N-PAK AMS LIQUID NIS AATREX NK 68B AGRISURE VIPTERA 3111	1 qt/a 3.6 pt/a 2.5 % v/v 0.25 % v/v 1 pt/a	PRE 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS 4-6"WEEDS
			206

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Description			
Part Rated			
Rating Date		9-29-2011	
Rating Type		YIELD	
Rating Unit		BU	
SE Name			
Rating Timing			
Days After First/Last Applic.		139 76	
Trt-Eval Interval			
Plant-Eval Interval		139 DP-1	
Days After Emergence		132 DE-1	
ARM Action Codes		TY1	
Sort Order for View			
Number of Decimals		0	
Trt No.	Treatment Name	Rate Rate Unit	Growth Stage
			12
18	LEXAR	1.5 qt/a	PRE
	HALEX GT	3.6 pt/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	NIS	0.25 % v/v	4-6"WEEDS
	AATREX	1 pt/a	4-6"WEEDS
	NK 68B AGRISURE VIPTERA 3111		
19	AATREX	1 qt/a	PRE
	TOUCHDOWN TOTAL	24 fl oz/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	R1
	NK 68B AGRISURE 3000 GT		
20	AATREX	1 qt/a	PRE
	HALEX GT	3.6 pt/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	NIS	0.25 % v/v	4-6"WEEDS
	AATREX	1 pt/a	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	R1
	NK 68B AGRISURE 3000 GT		
21	LEXAR	1.5 qt/a	PRE
	HALEX GT	3.6 pt/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	NIS	0.25 % v/v	4-6"WEEDS
	AATREX	1 pt/a	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	R1
	NK 68B AGRISURE 3000 GT		

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop Code		ZEAMX	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays	
Crop Name		Corn	
Description			
Part Rated			
Rating Date		9-29-2011	
Rating Type		YIELD	
Rating Unit		BU	
SE Name			
Rating Timing			
Days After First/Last Applic.		139 76	
Trt-Eval Interval			
Plant-Eval Interval		139 DP-1	
Days After Emergence		132 DE-1	
ARM Action Codes		TY1	
Sort Order for View			
Number of Decimals		0	
Trt No.	Treatment Name	Rate Rate Unit	Growth Stage
			12
22	AATREX	1 qt/a	PRE
	TOUCHDOWN TOTAL	24 fl oz/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	R1
	NK 68B AGRISURE VIPTERA 3111		
23	AATREX	1 qt/a	PRE
	HALEX GT	3.6 pt/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	NIS	0.25 % v/v	4-6"WEEDS
	AATREX	1 pt/a	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	R1
	NK 68B AGRISURE VIPTERA 3111		
24	LEXAR	1.5 qt/a	PRE
	HALEX GT	3.6 pt/a	4-6"WEEDS
	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	NIS	0.25 % v/v	4-6"WEEDS
	AATREX	1 pt/a	4-6"WEEDS
	QUILT XCEL	10.5 fl oz/a	R1
	NK 68B AGRISURE VIPTERA 3111		
	LSD (P=.05)		.
	Standard Deviation		.
	CV		.

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE VII

Trial ID: C11030 Protocol ID: SYNGENTA-ZSC001A4
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

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent

BU = bushel

Plant-Eval Interval

139 DP-1 = 1 5-13-2011

ARM Action Codes

TY1 = $1.994506 * [C9] * (100 - [C10]) / 84.5$

Plant and Soil Science, U of KY Weed Science Research

CORN POSTEMERGENCE VII

Trial ID: C11030 Protocol ID: SYNGENTA-ZSC001A4
 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: 5-13-2011

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		Description: AGRISURE 3000 GT	
BBCH Scale: BCOR		Planting Date: 5-13-2011	
Planting Method: PLANTD planted		Rate, Unit: 30000 S/A	
Depth, Unit: 1.5 IN			
Row Spacing, Unit: 30 IN			
Seed Bed: SMOOTH smooth		Soil Temperature, Unit: 69 F	
Soil Moisture: ABONOR above normal		Emergence Date: 5-20-2011	
Harvest Date: 9-27-2011		Harvest Equipment: COMBINE	
Harvested Width, Unit: 5 FT		Harvested Length, Unit: 80 FT	
% Standard Moisture: 15.5			
Crop 2: ZEAMX Zea mays	Corn		
Variety: NK68B		Description: AGRISURE VIPTERA 3111	
BBCH Scale: BCOR		Planting Date: 5-13-2011	
Planting Method: PLANTD planted		Rate, Unit: 30000 s/a	
Depth, Unit: 1.5 IN			
Row Spacing, Unit: 30 IN			
Seed Bed: SMOOTH smooth		Soil Temperature, Unit: 69 F	
Soil Moisture: ABONOR above normal		Emergence Date: 5-20-2011	
Harvest Date: 9-27-2011		Harvest Equipment: COMBINE	
Harvested Width, Unit: 5 FT		Harvested Length, Unit: 78 FT	
% Standard Moisture: 15.5			

Pest Description
Pest 1 Type: W Code: SETFA <i>Setaria faberi</i> Common Name: Giant foxtail
Pest 2 Type: W Code: AMBTR <i>Ambrosia trifida</i> Common Name: Giant ragweed
Pest 3 Type: W Code: IPOSS <i>Ipomoea</i> sp. Common Name: Morning glory

Site and Design	
Plot Width, Unit: 15 FT	Site Type: FIELD field
Plot Length, Unit: 80 FT	
Plot Area, Unit: 1200 FT2	Tillage Type: CONTIL conventional-till
Replications: 1	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: WEWEDR wet-wet-dry
Closest Weather Station: SPINDLTOP Distance, Unit: 2.25 MI

Plant and Soil Science, U of KY Weed Science Research

Application Description

	A	B	C	D
Application Date:	5-13-2011	6-10-2011	6-14-2011	7-15-2011
Time of Day:	10 AM	10 AM	3 PM	3 PM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	4-6"WEEDS	V5	R1
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	B PATTON	B PATTON
Air Temperature, Unit:	78 F	76 F	76 F	80 F
% Relative Humidity:	50	50	38	62
Wind Velocity, Unit:	4 MPH	2 MPH	3 MPH	3 MPH
Wind Direction:	SW	SW	NNW	SW
Soil Temperature, Unit:	69 F	79 F	73 F	77 F
Soil Moisture:	EXCELL	POOR	POOR	GOOD
% Cloud Cover:	30	10	30	0
Next Rain Occurred On:	5-13-2011	6-10-2011	6-15-2011	7-17-2011

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH	BBCH	BBCH
Stage Majority, Percent:		V5	V5	R1
Crop 2 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH	BBCH	BBCH
Stage Majority, Percent:		V5	V5	R1

Pest Stage At Each Application

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

Plant and Soil Science, U of KY Weed Science Research

Application Equipment

	A	B	C	D
Appl. Equipment:	ATV	ATV	BACKPACK	BACKPACK
Equipment Type:	ALTEVE	ALTEVE	BELSPR	BELSPR
Operation Pressure, Unit:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN	FLAT FAN
Nozzle Size:	8004 DG	8004 DG	8004 DG	8004 DG
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN	20 IN
Boom Length, Unit:	15 FT	15 FT	15 FT	15 FT
Boom Height, Unit:	30 IN	30 IN	30 IN	30 IN
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH	4 MPH
Carrier:	WATER	WATER	WATER	WATER
Spray Volume, Unit:	24 GPA	24 GPA	24 GPA	24 GPA
Mix Size, Unit:	3 liters	3 liters	3 liters	3 liters
Propellant:	CO2	CO2	CO2	CO2

Plant and Soil Science, U of KY Weed Science Research

SOYBEAN PREEMERGENCE

Trial ID: S11014 Protocol ID: FMC-CADET SB
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: RUSTY MITCHELL

Pest Type Pest Code Pest Scientific Name Pest Name		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMACH Amaranthus hyb> Smooth pigweed	W Weed CHEAL Chenopodium al> Common lambsqu>		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMACH Amaranthus hyb> Smooth pigweed	W Weed CHEAL Chenopodium al> Common lambsqu>				
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	GLXMA BSOY Glycine max Soybean								GLXMA BSOY Glycine max Soybean			
	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT			
	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK			
		P	P	P	P	P	P	P	P			
	0	0	0	0	0	0	0	0	0			
Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4	5	6	7	8	9
1	DUAL II MAGNUM CADET ROUNDUP POWERMAX AMS	0.665 pt/a 0.6 oz/a 22 fl oz/a 3.7 % v/v	PRE EP EP EP	0 a	99 a	99 a	99 a	0 a	97 a	99 a	99 a	0 a
2	DUAL II MAGNUM RESOURCE ROUNDUP POWERMAX AMS	0.665 pt/a 2 oz/a 22 fl oz/a 3.7 % v/v	PRE EP EP EP	0 a	99 a	99 a	96 ab	0 a	99 a	99 a	96 ab	0 a
3	DUAL II MAGNUM CADET CLASSIC ROUNDUP POWERMAX AMS	0.665 pt/a 0.6 oz/a 0.5 oz/a 22 fl oz/a 3.7 % v/v	PRE EP EP EP EP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
4	DUAL II MAGNUM ROUNDUP POWERMAX AMS	0.665 pt/a 22 fl oz/a 3.7 % v/v	PRE EP EP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMACH Amaranthus hyb> Smooth pigweed	W Weed CHEAL Chenopodium al> Common lambsqu>	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMACH Amaranthus hyb> Smooth pigweed	W Weed CHEAL Chenopodium al> Common lambsqu>	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMACH Amaranthus hyb> Smooth pigweed	W Weed CHEAL Chenopodium al> Common lambsqu>	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMACH Amaranthus hyb> Smooth pigweed	W Weed CHEAL Chenopodium al> Common lambsqu>
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	GLXMA BSOY Glycine max Soybean						GLXMA BSOY Glycine max Soybean					GLXMA BSOY Glycine max Soybean
	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT
	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK
	P	P	P	P	P	P	P	P	P	P	P	P
	0	0	0	0	0	0	0	0	0	0	0	0
Trt Treatment No. Name	Rate Rate	Growth Unit	Stage	1	2	3	4	5	6	7	8	9
5 ANTHEM AUTHORITY XL CADET ROUNDUP POWERMAX AMS	6 oz/a 4 oz/a 0.6 oz/a 22 fl oz/a 3.7 % v/v	PRE PRE MP MP MP		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
6 PREFIX ROUNDUP POWERMAX AMS	32 oz/a 22 fl oz/a 3.7 % v/v	PRE MP MP		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a
7 ROUNDUP POWERMAX AMS ROUNDUP POWERMAX AMS	22 fl oz/a 3.7 % v/v 22 fl oz/a 3.7 % v/v	EP EP MP MP		0 a	99 a	99 a	94 b	0 a	99 a	99 a	94 b	0 a
LSD (P=.05)	0.0	0.0	0.0	0.0	4.9	0.0	2.5	0.0	4.9	0.0	0.0	0.0
Standard Deviation	0.0	0.0	0.0	0.0	3.3	0.0	1.7	0.0	3.3	0.0	0.0	0.0
CV	0.0	0.0	0.0	0.0	3.39	0.0	1.72	0.0	3.39	0.0	0.0	0.0
Replicate F	0.000	0.000	0.000	0.000	1.567	0.000	1.000	0.000	1.567	0.000	0.000	0.000
Replicate Prob(F)	1.0000	1.0000	1.0000	1.0000	0.2319	1.0000	0.4155	1.0000	0.2319	1.0000	1.0000	1.0000
Treatment F	0.000	0.000	0.000	0.000	1.637	0.000	1.000	0.000	1.637	0.000	0.000	0.000
Treatment Prob(F)	1.0000	1.0000	1.0000	1.0000	0.1944	1.0000	0.4552	1.0000	0.1944	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

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						
Part Rated						
Rating Date						
Rating Type				CONTROL	CONTROL	CONTROL
Rating Unit				PERCENT	PERCENT	PERCENT
SE Name						
SE Description						
Rating Timing				8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.						
Trt-Eval Interval						
Plant-Eval Interval						
Days After Emergence						
ARM Action Codes				P	P	P
Sort Order for View						
Number of Decimals				0	0	0
Trt No.	Treatment Name	Rate	Growth Stage	10	11	12
1	DUAL II MAGNUM	0.665 pt/a	PRE	97 a	99 a	99 a
	CADET	0.6 oz/a	EP			
	ROUNDUP POWERMAX	22 fl oz/a	EP			
	AMS	3.7 % v/v	EP			
2	DUAL II MAGNUM	0.665 pt/a	PRE	99 a	99 a	96 ab
	RESOURCE	2 oz/a	EP			
	ROUNDUP POWERMAX	22 fl oz/a	EP			
	AMS	3.7 % v/v	EP			
3	DUAL II MAGNUM	0.665 pt/a	PRE	99 a	99 a	99 a
	CADET	0.6 oz/a	EP			
	CLASSIC	0.5 oz/a	EP			
	ROUNDUP POWERMAX	22 fl oz/a	EP			
	AMS	3.7 % v/v	EP			
4	DUAL II MAGNUM	0.665 pt/a	PRE	99 a	99 a	99 a
	ROUNDUP POWERMAX	22 fl oz/a	EP			
	AMS	3.7 % v/v	EP			

Means followed by same letter do not significantly differ (P=.05, LSD)

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						
Part Rated						
Rating Date						
Rating Type	CONTROL	CONTROL	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT			
SE Name						
SE Description						
Rating Timing	8 WEEK	8 WEEK	8 WEEK			
Days After First/Last Applic.						
Trt-Eval Interval						
Plant-Eval Interval						
Days After Emergence						
ARM Action Codes	P	P	P			
Sort Order for View						
Number of Decimals	0	0	0			
Trt No.	Treatment Name	Rate	Growth Stage	10	11	12
5	ANTHEM	6 oz/a	PRE	99 a	99 a	99 a
	AUTHORITY XL	4 oz/a	PRE			
	CADET	0.6 oz/a	MP			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	AMS	3.7 % v/v	MP			
6	PREFIX	32 oz/a	PRE	99 a	99 a	99 a
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	AMS	3.7 % v/v	MP			
7	ROUNDUP POWERMAX	22 fl oz/a	EP	99 a	99 a	94 b
	AMS	3.7 % v/v	EP			
	ROUNDUP POWERMAX	22 fl oz/a	MP			
	AMS	3.7 % v/v	MP			
LSD (P=.05)		2.5		0.0		4.9
Standard Deviation		1.7		0.0		3.3
CV		1.72		0.0		3.39
Replicate F		1.000		0.000		1.567
Replicate Prob(F)		0.4155		1.0000		0.2319
Treatment F		1.000		0.000		1.637
Treatment Prob(F)		0.4552		1.0000		0.1944

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

SOYBEAN PREEMERGENCE

Trial ID: S11014 Protocol ID: FMC-CADET 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

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 PREEMERGENCE

Trial ID: S11014 Protocol ID: FMC-CADET 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: 5-11-2011

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

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 4031
BBCH Scale: BSOY **Planting Date:** 5-11-2011
Planting Method: ROWS **Rate, Unit:** 170000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 67 F
Soil Moisture: GOOD good **Emergence Date:** 5-18-2011

Plant and Soil Science, U of KY Weed Science Research

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

Site and Design

Plot Width, Unit: 10 FT **Site Type:** FIELD field
Plot Length, Unit: 33 FT
Plot Area, Unit: 330 FT² **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: WEWEDR wet-wet-dry
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2.25 MI

Application Description

	A	B	C
Application Date:	5-12-2011	6-6-2011	6-28-2011
Time of Day:	4 PM	2 PM	1 PM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	EP	MP
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	82 F	87 F	80 F
% Relative Humidity:	52	37	65
Wind Velocity, Unit:	8 MPH	2 MPH	3 MPH
Wind Direction:	SW	SW	WSW
Soil Temperature, Unit:	68 F	74 F	74 F
Soil Moisture:	ADEQUATE	FAIR	GOOD
% Cloud Cover:	10	10	15
Next Rain Occurred On:	5-13-2011	6-10-2011	7-3-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Height, Unit:		8 IN	12 IN

Pest Stage At Each Application			
	A	B	C
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Height, Unit:		2 IN	4 IN
Pest 2 Code, Type, Scale:	AMACH W	AMACH W	AMACH W
Height, Unit:		3 IN	5 IN
Pest 3 Code, Type, Scale:	CHEAL W	CHEAL W	CHEAL W
Height, Unit:		2 IN	3 IN

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

Plant and Soil Science, U of KY Weed Science Research

SOYBEAN PREEMERGENCE II

Trial ID: S11015 Protocol ID: FMC-ANTHEM SB
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: RUSTY MITCHELL

Pest Type Pest Code Pest Scientific Name Pest Name	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail		
											GLXMA BSOY Glycine max Soybean	GLXMA BSOY Glycine max Soybean
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT		
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10
1 ANTHEM ROUNDUP POWERMAX AMS	8 oz/a 22 fl oz/a LP 3.7 % v/v LP	PRE LP	0 a	99 a	70 cd	63 c	0 a	99 a	99 a	99 a	0 a	99 a
2 ANTHEM AUTHORITY XL ROUNDUP POWERMAX AMS	6 oz/a 4 oz/a 22 fl oz/a LP 3.7 % v/v LP	PRE PRE LP LP	0 a	99 a	63 d	63 c	0 a	99 a	99 a	99 a	0 a	99 a
3 AUTHORITY XL ROUNDUP POWERMAX AMS	4 oz/a 22 fl oz/a LP 3.7 % v/v LP	PRE LP LP	0 a	99 a	98 a	95 a	0 a	99 a	99 a	99 a	0 a	99 a
4 AUTHORITY MTZ ROUNDUP POWERMAX AMS	12 oz/a 22 fl oz/a LP 3.7 % v/v LP	PRE LP LP	0 a	99 a	80 bc	70 bc	0 a	99 a	99 a	99 a	0 a	99 a
5 AUTHORITY FIRST ROUNDUP POWERMAX AMS	3.2 oz/a 22 fl oz/a LP 3.7 % v/v LP	PRE LP LP	0 a	99 a	98 a	98 a	0 a	99 a	99 a	99 a	0 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed	GLXMA BSOY Glycine max Soybean	W Weed			
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail			
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT			
	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK			
	P	P	P	P	P	P	P	P	P	P			
	0	0	0	0	0	0	0	0	0	0			
Trt No.	Treatment Name	Rate	Growth	1	2	3	4	5	6	7	8	9	10
		Rate Unit	Stage										
6	VALOR XLT ROUNDUP POWERMAX AMS	4 oz/a 22 fl oz/a LP 3.7 % v/v LP	PRE LP	0 a	99 a	99 a	98 a	0 a	99 a	99 a	99 a	0 a	99 a
7	FIERCE ROUNDUP POWERMAX AMS	3 oz/a 22 fl oz/a LP 3.7 % v/v LP	PRE LP	0 a	99 a	95 ab	93 a	0 a	99 a	99 a	99 a	0 a	99 a
8	PREFIX ROUNDUP POWERMAX AMS	32 oz/a 22 fl oz/a LP 3.7 % v/v LP	PRE LP	0 a	99 a	99 a	92 a	0 a	99 a	99 a	99 a	0 a	99 a
9	AUTHORITY ANTHEM ROUNDUP POWERMAX AMS	4 oz/a 5 oz/a LP 22 fl oz/a LP 3.7 % v/v LP	PRE LP	0 a	99 a	73 cd	60 c	0 a	99 a	99 a	99 a	0 a	99 a
10	ANTHEM ROUNDUP POWERMAX AMS	6 oz/a 22 fl oz/a LP 3.7 % v/v LP	EP LP	0 a	99 a	85 abc	77 b	0 a	99 a	99 a	99 a	0 a	99 a
11	PREFIX ROUNDUP POWERMAX AMS	32 oz/a 22 fl oz/a LP 3.7 % v/v LP	EP LP	0 a	99 a	96 a	96 a	0 a	99 a	99 a	99 a	0 a	99 a
12	FLEXSTAR GT ROUNDUP POWERMAX AMS	48 oz/a 22 fl oz/a LP 3.7 % v/v LP	EP LP	0 a	99 a	99 a	96 a	0 a	99 a	99 a	99 a	0 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail		
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	GLXMA BSOY Glycine max Soybean					GLXMA BSOY Glycine max Soybean				GLXMA BSOY Glycine max Soybean		
	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT		
	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK		
	P	P	P	P	P	P	P	P	P	P		
	0	0	0	0	0	0	0	0	0	0		
Trt Treatment No. Name	Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10
13 ROUNDUP POWERMAX AMS ROUNDUP POWERMAX AMS	22 fl oz/a EP 3.7 % v/v EP 22 fl oz/a LP 3.7 % v/v LP	EP EP LP LP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
LSD (P=.05)	0.0	0.0	15.7	13.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Standard Deviation	0.0	0.0	9.3	7.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CV	0.0	0.0	10.54	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replicate F	0.000	0.000	0.772	1.983	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)	1.0000	1.0000	0.4734	0.1596	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F	0.000	0.000	5.729	11.674	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)	1.0000	1.0000	0.0001	0.0001	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type				W Weed	W Weed
Pest Code				AMBTR	IPOSS
Pest Scientific Name				Ambrosia trifid	Ipomoea sp.
Pest Name				Giant ragweed	Morning glory
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Description					
Part Rated					
Rating Date					
Rating Type				CONTROL	CONTROL
Rating Unit				PERCENT	PERCENT
SE Name					
SE Description					
Rating Timing				8 WEEK	8 WEEK
Days After First/Last Applic.					
Trt-Eval Interval					
Plant-Eval Interval					
Days After Emergence					
ARM Action Codes				P	P
Sort Order for View					
Number of Decimals				0	0
Trt No.	Treatment Name	Rate	Growth Stage	11	12
1	ANTHEM	8 oz/a	PRE	99 a	82 d
	ROUNDUP POWERMAX	22 fl oz/a	LP		
	AMS	3.7 % v/v	LP		
2	ANTHEM	6 oz/a	PRE	99 a	82 d
	AUTHORITY XL	4 oz/a	PRE		
	ROUNDUP POWERMAX	22 fl oz/a	LP		
	AMS	3.7 % v/v	LP		
3	AUTHORITY XL	4 oz/a	PRE	99 a	87 c
	ROUNDUP POWERMAX	22 fl oz/a	LP		
	AMS	3.7 % v/v	LP		
4	AUTHORITY MTZ	12 oz/a	PRE	99 a	95 b
	ROUNDUP POWERMAX	22 fl oz/a	LP		
	AMS	3.7 % v/v	LP		
5	AUTHORITY FIRST	3.2 oz/a	PRE	99 a	99 a
	ROUNDUP POWERMAX	22 fl oz/a	LP		
	AMS	3.7 % v/v	LP		

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed
Pest Code	AMBTR	IPOSS
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.
Pest Name	Giant ragweed	Morning glory
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Part Rated		
Rating Date		
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
SE Name		
SE Description		
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.		
Trt-Eval Interval		
Plant-Eval Interval		
Days After Emergence		
ARM Action Codes	P	P
Sort Order for View		
Number of Decimals	0	0
Trt Treatment	Rate	Growth
No. Name	Rate Unit	Stage
		11
		12
6 VALOR XLT	4 oz/a PRE	99 a
ROUNDUP POWERMAX	22 fl oz/a LP	99 a
AMS	3.7 % v/v LP	
7 FIERCE	3 oz/a PRE	99 a
ROUNDUP POWERMAX	22 fl oz/a LP	86 c
AMS	3.7 % v/v LP	
8 PREFIX	32 oz/a PRE	99 a
ROUNDUP POWERMAX	22 fl oz/a LP	99 a
AMS	3.7 % v/v LP	
9 AUTHORITY	4 oz/a PRE	99 a
ANTHEM	5 oz/a LP	99 a
ROUNDUP POWERMAX	22 fl oz/a LP	
AMS	3.7 % v/v LP	
10 ANTHEM	6 oz/a EP	99 a
ROUNDUP POWERMAX	22 fl oz/a LP	99 a
AMS	3.7 % v/v LP	
11 PREFIX	32 oz/a EP	99 a
ROUNDUP POWERMAX	22 fl oz/a LP	99 a
AMS	3.7 % v/v LP	
12 FLEXSTAR GT	48 oz/a EP	99 a
ROUNDUP POWERMAX	22 fl oz/a LP	99 a
AMS	3.7 % v/v LP	

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed
Pest Code	AMBTR	IPOSS
Pest Scientific Name	Ambrosia trifid	Ipomoea sp.
Pest Name	Giant ragweed	Morning glory
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Part Rated		
Rating Date		
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
SE Name		
SE Description		
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.		
Trt-Eval Interval		
Plant-Eval Interval		
Days After Emergence		
ARM Action Codes	P	P
Sort Order for View		
Number of Decimals	0	0
Trt Treatment	Rate	Growth
No. Name	Rate Unit	Stage
		11
		12
13 ROUNDUP POWERMAX	22 fl oz/a EP	99 a
AMS	3.7 % v/v EP	85 c
ROUNDUP POWERMAX	22 fl oz/a LP	
AMS	3.7 % v/v LP	
LSD (P=.05)	0.0	2.0
Standard Deviation	0.0	1.2
CV	0.0	1.28
Replicate F	0.000	3.904
Replicate Prob(F)	1.0000	0.0340
Treatment F	0.000	116.102
Treatment Prob(F)	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

SOYBEAN PREEMERGENCE II

Trial ID: S11015 Protocol ID: FMC-ANTHEM 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

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 PREEMERGENCE II

Trial ID: S11015 Protocol ID: FMC-ANTHEM 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: 5-11-2011

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

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 4031
BBCH Scale: BSOY **Planting Date:** 5-11-2011
Planting Method: ROWS **Rate, Unit:** 170000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 68 F
Soil Moisture: GOOD good **Emergence Date:** 5-19-2011

Plant and Soil Science, U of KY Weed Science Research

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: 44 FT
Plot Area, Unit: 440 FT² **Tillage Type:** CONTIL conventional-till
Replications: 3 **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: WEWEDR wet-wet-dry
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2.25 MI

Application Description

	A	B	C
Application Date:	5-12-2011	5-27-2011	6-8-2011
Time of Day:	4 PM	2 PM	4 PM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	EP	LP
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	82 F	64 F	90 F
% Relative Humidity:	52	50	45
Wind Velocity, Unit:	8 MPH	6 MPH	6 MPH
Wind Direction:	SW	W	WSW
Soil Temperature, Unit:	68 F	66 F	75 F
Soil Moisture:	ADEQUATE	EXCELL	ADEQUATE
% Cloud Cover:	10	90	10
Next Rain Occurred On:	5-13-2011	5-29-2011	6-10-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Height, Unit:		4 IN	5 IN

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

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

Plant and Soil Science, U of KY Weed Science Research

SOYBEAN POSTEMERGENCE

Trial ID: S11016 Protocol ID: SYN COMMERCIAL SOYBEAN
 Location: LEXINGTON, KY Study Director: CHARLES H. SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: SCOTT CULLY

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory
Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT
Trt Treatment No. Name	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Rate Rate Unit								
Growth Stage								
1 CHECK UNTREATED	0 b	0 b	0 f	0 g	0 b	0 b	0 b	0 c
2 PREFIX TOUCHDOWN TOTAL N-PAK AMS LIQUID	0 b	99 a	93 b	89 d	0 b	99 a	99 a	98 b
3 BOUNDARY FLEXSTAR GT N-PAK AMS LIQUID MSO	0 b	99 a	82 d	80 e	0 b	99 a	99 a	99 a
4 SEQUENCE FLEXSTAR GT N-PAK AMS LIQUID MSO	0 b	99 a	70 e	70 f	0 b	99 a	99 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed		
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		
Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals										
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8
5 ZIDUA SHARPEN MSO AMS ROUNDUP POWERMAX AMS	2.5 oz/a 1 fl oz/a 1 % v/v 17 lb ai/100 gal 22 fl oz/a 2.7 % v/v	PRE PRE PRE PRE MP MP	0 b	99 a	89 c	90 c	0 b	99 a	99 a	99 a
6 ZIDUA SHARPEN MSO AMS ZIDUA ROUNDUP POWERMAX AMS	2.5 oz/a 1 fl oz/a 1 % v/v 17 lb ai/100 gal 1 oz/a 22 fl oz/a 2.7 % v/v	PRE PRE PRE PRE MP MP MP	0 b	99 a	93 b	95 b	0 b	99 a	99 a	99 a
7 VERDICT ROUNDUP POWERMAX AMS	7.5 fl oz/a 22 fl oz/a 2.7 % v/v	PRE MP MP	0 b	99 a	99 a	99 a	0 b	99 a	99 a	99 a
8 VALOR WARRANT ROUNDUP POWERMAX AMS	2 oz/a 1.5 qt/a 22 fl oz/a 2.7 % v/v	PRE MP MP MP	10 a	99 a	99 a	99 a	3 a	99 a	99 a	99 a
9 FIRSTRATE DURANGO AMS	0.3 oz/a 24 fl oz/a 2.7 % v/v	MP MP MP	0 b	0 b	0 f	0 g	0 b	99 a	99 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifidi Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifidi Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		
Pest Code										
Pest Scientific Name										
Pest Name										
Crop Code	GLXMA				GLXMA					
BBCH Scale	BSOY				BSOY					
Crop Scientific Name	Glycine max				Glycine max					
Crop Name	Soybean				Soybean					
Description										
Part Rated										
Rating Date										
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
SE Name										
SE Description	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST		
Rating Timing										
Days After First/Last Applic.										
Trt-Eval Interval										
Plant-Eval Interval										
Days After Emergence										
ARM Action Codes	P	P	P	P	P	P	P	P		
Sort Order for View										
Number of Decimals	0	0	0	0	0	0	0	0		
Trt Treatment	Rate	Growth								
No. Name	Rate Unit	Stage	1	2	3	4	5	6	7	8
10 AUTHORITY XL ROUNDUP POWERMAX AMS	4 oz/a 22 fl oz/a 2.7 % v/v	PRE MP MP	0 b	99 a	99 a	99 a	0 b	99 a	99 a	99 a
11 AUTHORITY MTZ ROUNDUP POWERMAX AMS	12 oz/a 22 fl oz/a 2.7 % v/v	PRE MP MP	0 b	99 a	93 b	99 a	0 b	99 a	99 a	99 a
12 AUTHORITY FIRST ROUNDUP POWERMAX AMS	3.2 oz/a 22 fl oz/a 2.7 % v/v	PRE MP MP	0 b	99 a	99 a	99 a	0 b	99 a	99 a	99 a
13 LINEX DUAL II MAGNUM ROUNDUP POWERMAX AMS	2 pt/a 1.33 pt/a 22 fl oz/a 2.7 % v/v	PRE PRE MP MP	0 b	99 a	95 b	90 c	0 b	99 a	99 a	99 a
LSD (P=.05)			0.0	0.0	2.4	0.5	2.7	0.0	0.0	1.1
Standard Deviation			0.0	0.0	1.4	0.3	1.6	0.0	0.0	0.6
CV			0.0	0.0	1.83	0.41	624.5	0.0	0.0	0.7
Replicate F			0.000	0.000	5.024	1.000	1.000	0.000	0.000	1.000
Replicate Prob(F)			1.0000	1.0000	0.0150	0.3827	0.3827	1.0000	1.0000	0.3827
Treatment F			0.000	0.000	1857.748	36915.379	1.000	0.000	0.000	5501.688
Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001	0.4777	1.0000	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		
Pest Code		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		
Pest Scientific Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		
Pest Name										
Crop Code	GLXMA				GLXMA					
BBCH Scale	BSOY				BSOY					
Crop Scientific Name	Glycine max				Glycine max					
Crop Name	Soybean				Soybean					
Description										
Part Rated										
Rating Date										
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
SE Name										
SE Description										
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK		
Days After First/Last Applic.										
Trt-Eval Interval										
Plant-Eval Interval										
Days After Emergence										
ARM Action Codes	P	P	P	P	P	P	P	P		
Sort Order for View										
Number of Decimals	0	0	0	0	0	0	0	0		
Trt Treatment	Rate	Growth	9	10	11	12	13	14	15	16
No. Name	Rate Unit	Stage								
1 CHECK UNTREATED			0 b	0 b	0 b	0 b	0 b	0 b	0 b	0 b
2 PREFIX	2 pt/a	PRE	0 b	99 a	99 a	96 a	0 b	99 a	99 a	96 a
TOUCHDOWN TOTAL	24 oz/a	MP								
N-PAK AMS LIQUID	2.5 % v/v	MP								
3 BOUNDARY	1.5 pt/a	PRE	0 b	99 a	99 a	98 a	0 b	99 a	99 a	98 a
FLEXSTAR GT	3 pt/a	LP								
N-PAK AMS LIQUID	2.5 % v/v	LP								
MSO	1 pt/a	LP								
4 SEQUENCE	2.5 pt/a	PRE	0 b	99 a	99 a	98 a	0 b	99 a	99 a	98 a
FLEXSTAR GT	3 pt/a	LP								
N-PAK AMS LIQUID	2.5 % v/v	LP								
MSO	1 pt/a	LP								

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed		
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	9	10	11	12	13	14	15	16
5 ZIDUA SHARPEN MSO AMS ROUNDUP POWERMAX AMS	2.5 oz/a 1 fl oz/a 1 % v/v 17 lb ai/100 gal 22 fl oz/a 2.7 % v/v	PRE PRE PRE PRE MP MP	0 b	99 a	99 a	98 a	0 b	99 a	99 a	98 a
6 ZIDUA SHARPEN MSO AMS ZIDUA ROUNDUP POWERMAX AMS	2.5 oz/a 1 fl oz/a 1 % v/v 17 lb ai/100 gal 1 oz/a 22 fl oz/a 2.7 % v/v	PRE PRE PRE PRE MP MP MP	0 b	99 a	99 a	99 a	0 b	99 a	99 a	99 a
7 VERDICT ROUNDUP POWERMAX AMS	7.5 fl oz/a 22 fl oz/a 2.7 % v/v	PRE MP MP	0 b	99 a	99 a	98 a	0 b	99 a	99 a	98 a
8 VALOR WARRANT ROUNDUP POWERMAX AMS	2 oz/a 1.5 qt/a 22 fl oz/a 2.7 % v/v	PRE MP MP MP	7 a	99 a	99 a	99 a	7 a	99 a	99 a	99 a
9 FIRSTRATE DURANGO AMS	0.3 oz/a 24 fl oz/a 2.7 % v/v	MP MP MP	0 b	99 a	99 a	96 a	0 b	99 a	99 a	96 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed	W Weed	W Weed		W Weed	W Weed	W Weed		
Pest Code		SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS		
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		
Pest Name		Giant foxtail	Giant ragweed	Morning glory		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					
Description										
Part Rated										
Rating Date										
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
SE Name										
SE Description										
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK		
Days After First/Last Applic.										
Trt-Eval Interval										
Plant-Eval Interval										
Days After Emergence										
ARM Action Codes	P	P	P	P	P	P	P	P		
Sort Order for View										
Number of Decimals	0	0	0	0	0	0	0	0		
Trt Treatment	Rate	Growth								
No. Name	Rate Unit	Stage	9	10	11	12	13	14	15	16
10 AUTHORITY XL	4 oz/a	PRE	0 b	99 a	99 a	99 a	0 b	99 a	99 a	99 a
ROUNDUP POWERMAX	22 fl oz/a	MP								
AMS	2.7 % v/v	MP								
11 AUTHORITY MTZ	12 oz/a	PRE	0 b	99 a	99 a	99 a	0 b	99 a	99 a	99 a
ROUNDUP POWERMAX	22 fl oz/a	MP								
AMS	2.7 % v/v	MP								
12 AUTHORITY FIRST	3.2 oz/a	PRE	0 b	99 a	99 a	99 a	0 b	99 a	99 a	99 a
ROUNDUP POWERMAX	22 fl oz/a	MP								
AMS	2.7 % v/v	MP								
13 LINEX	2 pt/a	PRE	0 b	99 a	99 a	95 a	0 b	99 a	99 a	95 a
DUAL II MAGNUM	1.33 pt/a	PRE								
ROUNDUP POWERMAX	22 fl oz/a	MP								
AMS	2.7 % v/v	MP								
LSD (P=.05)	2.7	0.0	0.0	4.5	2.7	0.0	0.0	4.5		
Standard Deviation	1.6	0.0	0.0	2.7	1.6	0.0	0.0	2.7		
CV	312.25	0.0	0.0	2.98	312.25	0.0	0.0	2.98		
Replicate F	1.000	0.000	0.000	1.215	1.000	0.000	0.000	1.215		
Replicate Prob(F)	0.3827	1.0000	1.0000	0.3144	0.3827	1.0000	1.0000	0.3144		
Treatment F	4.000	0.000	0.000	305.052	4.000	0.000	0.000	305.052		
Treatment Prob(F)	0.0019	1.0000	1.0000	0.0001	0.0019	1.0000	1.0000	0.0001		

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

SOYBEAN POSTEMERGENCE

Trial ID: S11016 Protocol ID: SYN COMMERCIAL SOYBEAN
Location: LEXINGTON, KY Study Director: CHARLES H. 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 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 POSTEMERGENCE

Trial ID: S11016 Protocol ID: SYN COMMERCIAL SOYBEAN
 Location: LEXINGTON, KY Study Director: CHARLES H. 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: 5-11-2011

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

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 4031
BBCH Scale: BSOY **Planting Date:** 5-11-2011
Planting Method: ROWS **Rate, Unit:** 170000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 68 F
Soil Moisture: ABONOR above normal **Emergence Date:** 5-18-2011

Plant and Soil Science, U of KY Weed Science Research

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: 44 FT
Plot Area, Unit: 440 FT² **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:** 2.25 MI

Application Description

	A	B	C
Application Date:	5-12-2011	6-9-2011	6-9-2011
Time of Day:	4 PM	1 PM	4 PM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	MP	LP
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	82 F	88 F	90 F
% Relative Humidity:	52	65	68
Wind Velocity, Unit:	8 MPH	3 MPH	4 MPH
Wind Direction:	SW	WSW	WSW
Soil Temperature, Unit:	69 F	78 F	79 F
Soil Moisture:	ADEQUATE	GOOD	GOOD
% Cloud Cover:	10	15	15
Next Rain Occurred On:	5-13-2011	6-10-2011	6-10-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Height, Unit:		6 IN	6 IN

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

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

Plant and Soil Science, U of KY Weed Science Research

SOYBEAN PREEMERGENCE III

Trial ID: S11017 Protocol ID: CHEM-FOMME1103
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: JAMES BARRENTINE

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR		
Pest Code		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>		
Pest Scientific Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed		
Pest Name													
Crop Code	GLXMA				GLXMA				GLXMA				
BBCH Scale	BSOY				BSOY				BSOY				
Crop Scientific Name	Glycine max				Glycine max				Glycine max				
Crop Name	Soybean				Soybean				Soybean				
Description													
Part Rated													
Rating Date													
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
SE Name													
SE Description													
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK		
Days After First/Last Applic.													
Trt-Eval Interval													
Plant-Eval Interval													
Days After Emergence													
ARM Action Codes	P	P	P	P	P	P	P	P	P	P	P		
Sort Order for View													
Number of Decimals	0	0	0	0	0	0	0	0	0	0	0		
Trt Treatment	Rate	Growth											
No. Name	Rate Unit	Stage	1	2	3	4	5	6	7	8	9	10	11
1 CHA-044	0.99 lb ai/a	PRE	0 a	99 a	99 a	85 a	0 a	99 a	98 ab	77 c	0 a	99 a	98 ab
2 CHA-044	1.33 lb ai/a	PRE	0 a	99 a	99 a	84 a	0 a	99 a	95 abc	80 bc	0 a	99 a	95 abc
3 CHA-044	1.66 lb ai/a	PRE	0 a	99 a	99 a	92 a	0 a	99 a	96 abc	83 abc	0 a	99 a	96 abc
4 CHA-044	1.99 lb ai/a	PRE	0 a	99 a	99 a	90 a	0 a	99 a	95 abc	89 ab	0 a	99 a	95 abc
5 CHA-044	3.98 lb ai/a	PRE	0 a	99 a	99 a	99 a	0 a	99 a	99 a	95 a	0 a	99 a	99 a
6 DAWN	0.313 lb ai/a	PRE	0 a	99 a	99 a	93 a	0 a	99 a	95 abc	91 ab	0 a	99 a	95 abc
STALWART	1.0 lb ai/a	PRE											
7 DAWN	0.375 lb ai/a	PRE	0 a	99 a	99 a	93 a	0 a	99 a	95 abc	90 ab	0 a	99 a	95 abc
STALWART	1.25 lb ai/a	PRE											
8 PREFIX	1.32 lb ai/a	PRE	0 a	99 a	98 a	88 a	0 a	99 a	91 c	81 bc	0 a	99 a	91 c
9 PREFIX	1.65 lb ai/a	PRE	0 a	99 a	98 a	92 a	0 a	99 a	92 bc	85 abc	0 a	99 a	92 bc

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed		
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	GLXMA BSOY Glycine max Soybean					GLXMA BSOY Glycine max Soybean				GLXMA BSOY Glycine max Soybean			
		CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT		CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT		CONTROL PERCENT	CONTROL PERCENT		
		2 WEEK	2 WEEK	2 WEEK		4 WEEK	4 WEEK	4 WEEK		8 WEEK	8 WEEK		
		P	P	P		P	P	P		P	P		
		0	0	0		0	0	0		0	0		
Trt Treatment No. Name	Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10	11
10 UNTREATED			0 a	0 b	0 b	23 b	0 a	0 b	0 d	0 d	0 a	0 b	0 d
LSD (P=.05)			0.0	0.0	1.8	23.0	0.0	0.0	6.4	11.5	0.0	0.0	6.4
Standard Deviation			0.0	0.0	1.1	13.4	0.0	0.0	3.7	6.7	0.0	0.0	3.7
CV			0.0	0.0	1.19	15.99	0.0	0.0	4.38	8.69	0.0	0.0	4.38
Replicate F			0.000	0.000	0.474	1.691	0.000	0.000	2.919	2.022	0.000	0.000	2.919
Replicate Prob(F)			1.0000	1.0000	0.6302	0.2124	1.0000	1.0000	0.0798	0.1613	1.0000	1.0000	0.0798
Treatment F			0.000	0.000	2596.661	7.852	0.000	0.000	194.014	51.190	0.000	0.000	194.014
Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001	1.0000	1.0000	0.0001	0.0001	1.0000	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed			
Pest Code	IPOSS			
Pest Scientific Name	Ipomoea sp.			
Pest Name	Morning glory			
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Description				
Part Rated				
Rating Date				
Rating Type	CONTROL			
Rating Unit	PERCENT			
SE Name				
SE Description				
Rating Timing	8 WEEK			
Days After First/Last Applic.				
Trt-Eval Interval				
Plant-Eval Interval				
Days After Emergence				
ARM Action Codes	P			
Sort Order for View				
Number of Decimals	0			
Trt No.	Treatment Name	Rate	Growth	
		Rate Unit	Stage	
				12
1	CHA-044	0.99 lb ai/a	PRE	72 d
2	CHA-044	1.33 lb ai/a	PRE	73 cd
3	CHA-044	1.66 lb ai/a	PRE	77 bcd
4	CHA-044	1.99 lb ai/a	PRE	86 ab
5	CHA-044	3.98 lb ai/a	PRE	89 a
6	DAWN	0.313 lb ai/a	PRE	86 ab
	STALWART	1.0 lb ai/a	PRE	
7	DAWN	0.375 lb ai/a	PRE	88 a
	STALWART	1.25 lb ai/a	PRE	
8	PREFIX	1.32 lb ai/a	PRE	80 a-d
9	PREFIX	1.65 lb ai/a	PRE	83 abc

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed
Pest Code	IPOSS
Pest Scientific Name	Ipomoea sp.
Pest Name	Morning glory
Crop Code	
BBCH Scale	
Crop Scientific Name	
Crop Name	
Description	
Part Rated	
Rating Date	
Rating Type	CONTROL
Rating Unit	PERCENT
SE Name	
SE Description	
Rating Timing	8 WEEK
Days After First/Last Applic.	
Trt-Eval Interval	
Plant-Eval Interval	
Days After Emergence	
ARM Action Codes	P
Sort Order for View	
Number of Decimals	0
Trt Treatment	Rate Growth
No. Name	Rate Unit Stage
10 UNTREATED	0 e
LSD (P=.05)	10.6
Standard Deviation	6.2
CV	8.39
Replicate F	0.843
Replicate Prob(F)	0.4467
Treatment F	55.600
Treatment Prob(F)	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

SOYBEAN PREEMERGENCE III

Trial ID: S11017 Protocol ID: CHEM-FOMME1103
Location: LEXINGTON, KY Study Director: CHARLES SLACK
Project ID: Investigator: Charles H Slack
Sponsor Contact: JAMES BARRENTINE

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 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 PREEMERGENCE III

Trial ID: S11017 Protocol ID: CHEM-FOMME1103
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: JAMES BARRENTINE

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: 5-11-2011

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

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 4031
BBCH Scale: BSOY **Description:** ROUNDUP READY
Planting Method: ROWS **Planting Date:** 5-11-2011
Depth, Unit: 1.5 IN **Rate, Unit:** 170000 S/A
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 68 F
Soil Moisture: ABONOR above normal **Emergence Date:** 5-18-2011

Plant and Soil Science, U of KY Weed Science Research

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: 44 FT
Plot Area, Unit: 440 FT² **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:** 2.25 MI

Application Description

	A
Application Date:	5-12-2011
Time of Day:	4 PM
Application Method:	SPRAY
Application Timing:	PRE
Application Placement:	BROS0I
Applied By:	C H SLACK
Air Temperature, Unit:	82 F
% Relative Humidity:	52
Wind Velocity, Unit:	8 MPH
Wind Direction:	SW
Soil Temperature, Unit:	69 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	10
Next Rain Occurred On:	5-13-2011

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	GLXMA BSOY

Plant and Soil Science, U of KY Weed Science Research

Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale:	SETFA W
Pest 2 Code, Type, Scale:	AMBTR W
Pest 3 Code, Type, Scale:	IPOSS W

Application Equipment

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

Plant and Soil Science, U of KY Weed Science Research

SOYBEAN PREEMERGENCE IV

Trial ID: S11018 Protocol ID: CHEM-CLOM1101
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: JAMES BARRENTINE

Pest Type Pest Code Pest Scientific Name Pest Name	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	W Weed SETFA Setaria faberi Giant foxtail			
											GLXMA BSOY Glycine max Soybean	GLXMA BSOY Glycine max Soybean	GLXMA BSOY Glycine max Soybean
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT		
Trt Treatment No. Name	Rate Rate	Growth Unit	Stage	1	2	3	4	5	6	7	8	9	10
1 ALERT	0.50 lb ai/a	PRE		0 a	99 a	99 a	99 a	0 a	99 a	73 c	73 d	0 a	99 a
2 ALERT	0.75 lb ai/a	PRE		0 a	99 a	99 a	99 a	0 a	99 a	87 b	87 c	0 a	99 a
3 ALERT	1.0 lb ai/a	PRE		0 a	99 a	99 a	99 a	0 a	99 a	87 b	88 bc	0 a	99 a
4 ALERT DAWN	0.50 lb ai/a 0.25 lb ai/a	PRE PRE		0 a	99 a	99 a	99 a	0 a	99 a	94 ab	95 ab	0 a	99 a
5 ALERT DAWN	0.50 lb ai/a 0.375 lb ai/a	PRE PRE		0 a	99 a	99 a	99 a	0 a	99 a	95 ab	96 a	0 a	99 a
6 ALERT DAWN	0.75 lb ai/a 0.25 lb ai/a	PRE PRE		0 a	99 a	99 a	99 a	0 a	99 a	91 ab	93 abc	0 a	99 a
7 ALERT DAWN	0.75 lb ai/a 0.375 lb ai/a	PRE PRE		0 a	99 a	99 a	99 a	0 a	99 a	96 a	96 a	0 a	99 a
8 DUAL II MAGNUM	1.0 lb ai/a	PRE		0 a	99 a	57 b	73 b	0 a	99 a	37 d	37 e	0 a	99 a
9 PREFIX	1.68 lb ai/a	PRE		0 a	99 a	99 a	99 a	0 a	99 a	96 a	96 a	0 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifida Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifida Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail
Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	GLXMA BSOY Glycine max Soybean					GLXMA BSOY Glycine max Soybean				GLXMA BSOY Glycine max Soybean
	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT
	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK
	P	P	P	P	P	P	P	P	P	P
	0	0	0	0	0	0	0	0	0	0
Trt Treatment No. Name	Rate Rate	Growth Unit								
	1	2	3	4	5	6	7	8	9	10
10 UNTREATED	0 a	0 b	0 c	0 c	0 a	0 b	0 e	0 f	0 a	0 b
LSD (P=.05)	0.0	0.0	6.3	13.4	0.0	0.0	8.5	7.9	0.0	0.0
Standard Deviation	0.0	0.0	3.7	7.8	0.0	0.0	4.9	4.6	0.0	0.0
CV	0.0	0.0	4.3	9.01	0.0	0.0	6.52	6.03	0.0	0.0
Replicate F	0.000	0.000	1.000	1.000	0.000	0.000	4.783	5.345	0.000	0.000
Replicate Prob(F)	1.0000	1.0000	0.3874	0.3874	1.0000	1.0000	0.0216	0.0151	1.0000	1.0000
Treatment F	0.000	0.000	239.890	48.954	0.000	0.000	127.386	149.683	0.000	0.000
Treatment Prob(F)	1.0000	1.0000	0.0001	0.0001	1.0000	1.0000	0.0001	0.0001	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

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		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Part Rated		
Rating Date		
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
SE Name		
SE Description		
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.		
Trt-Eval Interval		
Plant-Eval Interval		
Days After Emergence		
ARM Action Codes	P	P
Sort Order for View		
Number of Decimals	0	0
Trt No.	11	12
Treatment Name		
Rate		
Unit		
Growth Stage		
1 ALERT	0.50 lb ai/a PRE	37 b
2 ALERT	0.75 lb ai/a PRE	73 a
3 ALERT	1.0 lb ai/a PRE	77 a
4 ALERT	0.50 lb ai/a PRE	83 a
DAWN	0.25 lb ai/a PRE	86 ab
5 ALERT	0.50 lb ai/a PRE	89 a
DAWN	0.375 lb ai/a PRE	93 a
6 ALERT	0.75 lb ai/a PRE	80 a
DAWN	0.25 lb ai/a PRE	87 ab
7 ALERT	0.75 lb ai/a PRE	87 a
DAWN	0.375 lb ai/a PRE	91 a
8 DUAL II MAGNUM	1.0 lb ai/a PRE	17 c
9 PREFIX	1.68 lb ai/a PRE	20 d
		86 a
		89 a

Means followed by same letter do not significantly differ (P=.05, LSD)

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		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Part Rated		
Rating Date		
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
SE Name		
SE Description		
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.		
Trt-Eval Interval		
Plant-Eval Interval		
Days After Emergence		
ARM Action Codes	P	P
Sort Order for View		
Number of Decimals	0	0
Trt Treatment	Rate	Growth
No. Name	Rate Unit	Stage
10 UNTREATED	11	12
	0 d	0 e
LSD (P=.05)	15.7	11.0
Standard Deviation	9.1	6.4
CV	14.53	9.51
Replicate F	2.875	8.769
Replicate Prob(F)	0.0825	0.0022
Treatment F	38.271	85.685
Treatment Prob(F)	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

SOYBEAN PREEMERGENCE IV

Trial ID: S11018 Protocol ID: CHEM-CLOM1101
Location: LEXINGTON, KY Study Director: CHARLES SLACK
Project ID: Investigator: Charles H Slack
Sponsor Contact: JAMES BARRENTINE

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 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 PREEMERGENCE IV

Trial ID: S11018 Protocol ID: CHEM-CLOM1101
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: JAMES BARRENTINE

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: 5-11-2011

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

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 4031
BBCH Scale: BSOY **Planting Date:** 5-11-2011
Planting Method: ROWS **Rate, Unit:** 170000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: COMPAC compacted **Soil Temperature, Unit:** 68 F
Soil Moisture: GOOD good **Emergence Date:** 5-17-2011

Plant and Soil Science, U of KY Weed Science Research

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: 44 FT
Plot Area, Unit: 440 FT² **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:** 2.25 MI

Application Description

	A
Application Date:	5-12-2011
Time of Day:	4 PM
Application Method:	SPRAY
Application Timing:	PRE
Application Placement:	BROS0I
Applied By:	C H SLACK
Air Temperature, Unit:	82 F
% Relative Humidity:	52
Wind Velocity, Unit:	8 MPH
Wind Direction:	SW
Soil Temperature, Unit:	68 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	10
Next Rain Occurred On:	5-13-2011

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	GLXMA BSOY

Plant and Soil Science, U of KY Weed Science Research

Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale:	SETFA W
Pest 2 Code, Type, Scale:	AMBTR W
Pest 3 Code, Type, Scale:	IPOSS W

Application Equipment

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

Plant and Soil Science, U of KY Weed Science Research

NO TILL SOYBEAN

Trial ID: S11020 Protocol ID: DOW-SOY1
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: JONATHAN HUFF

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA			
Pest Code		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi			
Pest Scientific Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail			
Pest Name													
Crop Code	GLXMA				GLXMA				GLXMA				
BBCH Scale	BSOY				BSOY				BSOY				
Crop Scientific Name	Glycine max				Glycine max				Glycine max				
Crop Name	Soybean				Soybean				Soybean				
Description													
Part Rated													
Rating Date													
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
SE Name													
SE Description													
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK			
Days After First/Last Applic.													
Trt-Eval Interval													
Plant-Eval Interval													
Days After Emergence													
ARM Action Codes	P	P	P	P	P	P	P	P	P	P			
Sort Order for View													
Number of Decimals	0	0	0	0	0	0	0	0	0	0			
Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4	5	6	7	8	9	10
1	SONIC DURANGO DMA AMS	3 oz/a 24 fl oz/a LP 2.5 % v/v LP	PRE LP LP	0 a	99 a	98 a	98 a	0 a	99 a	99 a	99 a	0 a	99 a
2	SONIC DURANGO DMA AMS	4.5 oz/a 24 fl oz/a LP 2.5 % v/v LP	PRE LP LP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
3	DURANGO DMA FIRSTRATE AMS DURANGO DMA AMS	24 fl oz/a LP 0.3 oz/a LP 2.5 % v/v LP 24 fl oz/a 2-4"REGROW 2.5 % v/v 2-4"REGROW	LP LP LP LP LP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
LSD (P=.05)		0.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Standard Deviation		0.0	0.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CV		0.0	0.0	1.35	1.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replicate F		0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)		1.0000	1.0000	0.4444	0.4444	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F		0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)		1.0000	1.0000	0.4444	0.4444	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed
Pest Code	AMBTR	IPOSS
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.
Pest Name	Giant ragweed	Morning glory
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Part Rated		
Rating Date		
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
SE Name		
SE Description		
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.		
Trt-Eval Interval		
Plant-Eval Interval		
Days After Emergence		
ARM Action Codes	P	P
Sort Order for View		
Number of Decimals	0	0
Trt No.		
Treatment Name		
Rate		
Rate Unit		
Growth Stage		
	11	12
1 SONIC	3 oz/a	PRE
DURANGO DMA	24 fl oz/a	LP
AMS	2.5 % v/v	LP
	99 a	99 a
2 SONIC	4.5 oz/a	PRE
DURANGO DMA	24 fl oz/a	LP
AMS	2.5 % v/v	LP
	99 a	99 a
3 DURANGO DMA	24 fl oz/a	LP
FIRSTRATE	0.3 oz/a	LP
AMS	2.5 % v/v	LP
DURANGO DMA	24 fl oz/a	2-4"REGROW
AMS	2.5 % v/v	2-4"REGROW
	96 a	99 a
LSD (P=.05)	6.8	0.0
Standard Deviation	3.0	0.0
CV	3.06	0.0
Replicate F	1.000	0.000
Replicate Prob(F)	0.4444	1.0000
Treatment F	1.000	0.000
Treatment Prob(F)	0.4444	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

NO TILL SOYBEAN

Trial ID: S11020 Protocol ID: DOW-SOY1
Location: LEXINGTON, KY Study Director: CHARLES SLACK
Project ID: 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

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: S11020 Protocol ID: DOW-SOY1
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: 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: 5-11-2011

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

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 4031
BBCH Scale: BSOY **Planting Date:** 5-10-2011
Planting Method: DRILLE drilled **Rate, Unit:** 210000 S/A
Depth, Unit: 1.25 IN
Row Spacing, Unit: 7 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 64 F
Soil Moisture: WET wet **Emergence Date:** 5-17-2011

Plant and Soil Science, U of KY Weed Science Research

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: 6.67 FT **Site Type:** FIELD field
Plot Length, Unit: 44 FT
Plot Area, Unit: 293.48 FT² **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RAOBL 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: WEWEDR wet-wet-dry
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2 MI

Application Description

	A	B	C
Application Date:	5-11-2011	6-7-2011	6-28-2011
Time of Day:	11 AM	2 PM	10 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	LP	2-4"REGROWTH
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	SARA CARTER
Air Temperature, Unit:	80 F	85 F	78 F
% Relative Humidity:	57	65	68
Wind Velocity, Unit:	6 MPH	5 MPH	6 MPH
Wind Direction:	SW	WSW	SE
Soil Temperature, Unit:	66 F	74 F	74 F
Soil Moisture:	EXCELL	GOOD	GOOD
% Cloud Cover:	10	20	10
Next Rain Occurred On:	5-13-2011	6-10-2011	7-3-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Height, Unit:		5 IN	18 IN

Pest Stage At Each Application			
	A	B	C
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Height, Unit:	1 IN	3 IN	5 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Height, Unit:	2 IN	5 IN	7 IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W	IPOSS W
Height, Unit:	1 IN	2 IN	3 IN

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

Plant and Soil Science, U of KY Weed Science Research

NO TILL SOYBEAN EARLY PREPLANT

Trial ID: S11021 Protocol ID: CHEM-FOMME1102
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: JAMES BARRENTINE

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed	GLXMA BSOY Glycine max Soybean	W Weed	W Weed
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed
INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT
2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK		
	P	P	P	P	P	P	P	P	P	P	P
	0	0	0	0	0	0	0	0	0	0	0
Trt Treatment Rate Growth No. Name Rate Unit Stage	1	2	3	4	5	6	7	8	9	10	
01 DAWN 0.188 lb ai/a - 14D GLYFOS X-TRA 0.75 lb ae/a - 14D	0 a	99 a	99 a	99 a	0 a	99 a	90 ab	93 a	0 a	99 a	
02 DAWN 0.25 lb ai/a - 14D GLYFOS X-TRA 0.75 lb ae/a - 14D	0 a	99 a	99 a	99 a	0 a	99 a	90 ab	88 ab	0 a	99 a	
03 DAWN 0.375 lb ai/a - 14D GLYFOS X-TRA 0.75 lb ae/a - 14D	0 a	99 a	99 a	99 a	0 a	99 a	89 ab	92 a	0 a	99 a	
04 DAWN 0.5 lb ai/a - 14D GLYFOS X-TRA 0.75 lb ae/a - 14D	0 a	99 a	99 a	99 a	0 a	98 ab	92 a	93 a	0 a	98 ab	
05 DAWN 0.25 lb ai/a - 14D IGNITE 280 0.50 lb ai/a - 14D	0 a	99 a	99 a	99 a	0 a	89 b	78 b	83 b	0 a	89 b	
06 DAWN 0.375 lb ai/a - 14D IGNITE 280 0.50 lb ai/a - 14D	0 a	99 a	99 a	99 a	0 a	99 a	90 ab	92 ab	0 a	99 a	
07 GLYFOS X-TRA 0.75 lb ae/a PRE DAWN 0.188 lb ai/a PRE ALERT 0.50 lb ai/a PRE	0 a	99 a	99 a	99 a	0 a	99 a	95 a	95 a	0 a	99 a	

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	
Pest Code		Setaria faberi	Ambrosia trifida	Ipomoea sp.		Setaria faberi	Ambrosia trifida	Ipomoea sp.		Setaria faberi	
Pest Scientific Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	
Pest Name											
Crop Code	GLXMA				GLXMA				GLXMA		
BBCH Scale	BSOY				BSOY				BSOY		
Crop Scientific Name	Glycine max				Glycine max				Glycine max		
Crop Name	Soybean				Soybean				Soybean		
Description											
Part Rated											
Rating Date											
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	
SE Name											
SE Description											
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.											
Trt-Eval Interval											
Plant-Eval Interval											
Days After Emergence											
ARM Action Codes	P	P	P	P	P	P	P	P	P	P	
Sort Order for View											
Number of Decimals	0	0	0	0	0	0	0	0	0	0	
Trt Treatment	Rate	Growth									
No. Name	Rate Unit Stage	1	2	3	4	5	6	7	8	9	10
08 GLYFOS X-TRA	0.75 lb ae/a PRE	0 a	99 a	99 a	99 a	0 a	99 a	96 a	92 ab	0 a	99 a
DAWN	0.25 lb ai/a PRE										
ALERT	0.50 lb ai/a PRE										
09 GLYFOS X-TRA	0.75 lb ae/a PRE	0 a	99 a	99 a	99 a	0 a	99 a	99 a	96 a	0 a	99 a
DAWN	0.375 lb ai/a PRE										
ALERT	0.50 lb ai/a PRE										
10 REFLEX	0.25 lb ai/a - 14D	0 a	99 a	99 a	99 a	0 a	95 ab	89 ab	92 a	0 a	95 ab
GLYFOS X-TRA	0.75 lb ae/a - 14D										
11 GLYFOS X-TRA	0.75 lb ae/a PRE	0 a	99 a	99 a	99 a	0 a	99 a	96 a	96 a	0 a	99 a
PREFIX	1.32 lb ai/a PRE										
12 UNTREATED		0 a	0 b	0 b	0 b	0 a	0 c	0 c	0 c	0 a	0 c
LSD (P=.05)		0.0	0.0	0.0	0.0	0.0	8.4	12.0	9.5	0.0	8.4
Standard Deviation		0.0	0.0	0.0	0.0	0.0	5.0	7.1	5.6	0.0	5.0
CV		0.0	0.0	0.0	0.0	0.0	5.56	8.5	6.66	0.0	5.56
Replicate F		0.000	0.000	0.000	0.000	0.000	2.173	2.118	0.270	0.000	2.173
Replicate Prob(F)		1.0000	1.0000	1.0000	1.0000	1.0000	0.1376	0.1442	0.7659	1.0000	0.1376
Treatment F		0.000	0.000	0.000	0.000	0.000	97.343	42.769	68.271	0.000	97.343
Treatment Prob(F)		1.0000	1.0000	1.0000	1.0000	1.0000	0.0001	0.0001	0.0001	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

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		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Part Rated		
Rating Date		
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
SE Name		
SE Description		
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.		
Trt-Eval Interval		
Plant-Eval Interval		
Days After Emergence		
ARM Action Codes	P	P
Sort Order for View		
Number of Decimals	0	0
Trt No.		
Treatment Name		
Rate		
Unit		
Growth Stage		
	11	12
01 DAWN		
GLYFOS X-TRA	0.188 lb ai/a - 14D	0.75 lb ae/a - 14D
	78 abc	78 ab
02 DAWN		
GLYFOS X-TRA	0.25 lb ai/a - 14D	0.75 lb ae/a - 14D
	70 bcd	63 cd
03 DAWN		
GLYFOS X-TRA	0.375 lb ai/a - 14D	0.75 lb ae/a - 14D
	66 bcd	82 ab
04 DAWN		
GLYFOS X-TRA	0.5 lb ai/a - 14D	0.75 lb ae/a - 14D
	78 abc	83 a
05 DAWN		
IGNITE 280	0.25 lb ai/a - 14D	0.50 lb ai/a - 14D
	53 d	53 d
06 DAWN		
IGNITE 280	0.375 lb ai/a - 14D	0.50 lb ai/a - 14D
	70 bcd	70 bc
07 GLYFOS X-TRA	0.75 lb ae/a PRE	
DAWN	0.188 lb ai/a PRE	
ALERT	0.50 lb ai/a PRE	
	87 ab	84 a

Means followed by same letter do not significantly differ (P=.05, LSD)

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		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Part Rated		
Rating Date		
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
SE Name		
SE Description		
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.		
Trt-Eval Interval		
Plant-Eval Interval		
Days After Emergence		
ARM Action Codes	P	P
Sort Order for View		
Number of Decimals	0	0
Trt Treatment	Rate	Growth
No. Name	Rate Unit Stage	
	11	12
08 GLYFOS X-TRA	0.75 lb ae/a PRE	85 ab
DAWN	0.25 lb ai/a PRE	83 ab
ALERT	0.50 lb ai/a PRE	
09 GLYFOS X-TRA	0.75 lb ae/a PRE	93 a
DAWN	0.375 lb ai/a PRE	83 a
ALERT	0.50 lb ai/a PRE	
10 REFLEX	0.25 lb ai/a - 14D	57 cd
GLYFOS X-TRA	0.75 lb ae/a - 14D	77 ab
11 GLYFOS X-TRA	0.75 lb ae/a PRE	85 ab
PREFIX	1.32 lb ai/a PRE	85 a
12 UNTREATED		0 e
LSD (P=.05)	21.8	12.8
Standard Deviation	12.8	7.6
CV	18.73	10.8
Replicate F	0.803	2.435
Replicate Prob(F)	0.4605	0.1108
Treatment F	11.180	30.503
Treatment Prob(F)	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

NO TILL SOYBEAN EARLY PREPLANT

Trial ID: S11021 Protocol ID: CHEM-FOMME1102
Location: LEXINGTON, KY Study Director: CHARLES SLACK
Project ID: Investigator: Charles H Slack
Sponsor Contact: JAMES BARRENTINE

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 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: S11021 Protocol ID: CHEM-FOMME1102
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: JAMES BARRENTINE

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: 4-29-2011

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

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 4031
BBCH Scale: BSOY **Planting Date:** 5-10-2011
Planting Method: DRILLE drilled **Rate, Unit:** 200000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 7 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 64 F
Soil Moisture: WET wet **Emergence Date:** 5-17-2011

Plant and Soil Science, U of KY Weed Science Research

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: 6.67 FT **Site Type:** FIELD field
Plot Length, Unit: 44 FT
Plot Area, Unit: 293.48 FT² **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RAOBL 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: WEWEDR wet-wet-dry
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2 MI

Application Description

	A	B
Application Date:	4-29-2011	5-11-2011
Time of Day:	11 AM	11 AM
Application Method:	SPRAY	SPRAY
Application Timing:	EPP 2WK	PRE
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	59 F	80 F
% Relative Humidity:	58	57
Wind Velocity, Unit:	8 MPH	6 MPH
Wind Direction:	NW	SW
Soil Temperature, Unit:	58 F	66 F
Soil Moisture:	VERWET	EXCELL
% Cloud Cover:	50	10
Next Rain Occurred On:	4-29-2011	5-13-2011

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY

Plant and Soil Science, U of KY Weed Science Research

Pest Stage At Each Application

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

Application Equipment

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

Plant and Soil Science, U of KY Weed Science Research

NO TILL SOYBEAN EARLY PREPLANT II

Trial ID: S11022 Protocol ID: DUPONT-USA-11-907-RR
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: DAN SMITH

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	
		CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT		CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT		CONTROL PERCENT	CONTROL PERCENT	
		2 WEEK	2 WEEK	2 WEEK		4 WEEK	4 WEEK	4 WEEK		8 WEEK	8 WEEK	
		P	P	P		P	P	P		P	P	
		0	0	0		0	0	0		0	0	
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10
1 LEADOFF ROUNDUP POWERMAX WEEDONE LV4 GRAMOXONE INTEON ENVIVE NIS ROUNDUP POWERMAX	1.5 oz/a 22 fl oz/a 2 pt/a 48 fl oz/a 3.5 oz/a 0.25 % v/v 22 fl oz/a	30D EPP 30D EPP 30D EPP PRE PRE PRE EP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
2 CANOPY EX ROUNDUP POWERMAX WEEDONE LV4 GRAMOXONE INTEON ENVIVE NIS ROUNDUP POWERMAX	1.5 oz/a 22 fl oz/a 2 pt/a 48 fl oz/a 3.5 oz/a 0.25 % v/v 22 fl oz/a	30D EPP 30D EPP 30D EPP PRE PRE PRE EP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail		
	GLXMA BSOY Glycine max Soybean				GLXMA BSOY Glycine max Soybean				GLXMA BSOY Glycine max Soybean			
	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT		
	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK		
		P	P	P	P	P	P	P	P	P		
	0	0	0	0	0	0	0	0	0	0		
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10
3 ENVIVE ROUNDUP POWERMAX WEEDONE LV4 GRAMOXONE INTEON CINCH NIS ROUNDUP POWERMAX	3.5 oz/a 22 fl oz/a 2 pt/a 48 fl oz/a 16 fl oz/a 0.25 % v/v 22 fl oz/a	30D EPP 30D EPP 30D EPP PRE PRE PRE EP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
4 GRAMOXONE INTEON ENVIVE NIS ROUNDUP POWERMAX	48 fl oz/a 3.5 oz/a 0.25 % v/v 22 fl oz/a	PRE PRE PRE EP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
5 GRAMOXONE INTEON CANOPY NIS ROUNDUP POWERMAX	48 fl oz/a 6 oz ai/a 0.25 % v/v 22 fl oz/a	PRE PRE PRE EP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
6 GRAMOXONE INTEON CANOPY CINCH NIS ROUNDUP POWERMAX	48 fl oz/a 4 oz ai/a 16 fl oz/a 0.25 % v/v 22 fl oz/a	PRE PRE PRE PRE EP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
7 CANOPY EX ROUNDUP POWERMAX CLASSIC	2 oz/a 40 fl oz/a 0.50 oz/a	PRE EP EP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed	W Weed	W Weed		W Weed	W Weed	W Weed		W Weed		
Pest Code		SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS		SETFA		
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi		
Pest Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail		
Crop Code	GLXMA				GLXMA				GLXMA			
BBCH Scale	BSOY				BSOY				BSOY			
Crop Scientific Name	Glycine max				Glycine max				Glycine max			
Crop Name	Soybean				Soybean				Soybean			
Description												
Part Rated												
Rating Date												
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
SE Name												
SE Description												
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK		
Days After First/Last Applic.												
Trt-Eval Interval												
Plant-Eval Interval												
Days After Emergence												
ARM Action Codes	P	P	P	P	P	P	P	P	P	P		
Sort Order for View												
Number of Decimals	0	0	0	0	0	0	0	0	0	0		
Trt Treatment	Rate	Growth										
No. Name	Rate Unit	Stage	1	2	3	4	5	6	7	8	9	10
8 ENVIVE	3.5 oz/a	PRE	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
ROUNDUP POWERMAX	40 fl oz/a	EP										
CLASSIC	0.50 oz/a	EP										
9 CHECK UNTREATED			0 a	0 b	0 b	0 b	0 a	0 b	0 b	0 b	0 a	0 b
LSD (P=.05)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Standard Deviation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replicate F	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed			
Pest Code	AMBTR	IPOSS			
Pest Scientific Name	Ambrosia trifid	Ipomoea sp.			
Pest Name	Giant ragweed	Morning glory			
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Description					
Part Rated					
Rating Date					
Rating Type	CONTROL	CONTROL			
Rating Unit	PERCENT	PERCENT			
SE Name					
SE Description					
Rating Timing	8 WEEK	8 WEEK			
Days After First/Last Applic.					
Trt-Eval Interval					
Plant-Eval Interval					
Days After Emergence					
ARM Action Codes	P	P			
Sort Order for View					
Number of Decimals	0	0			
Trt No.	Treatment	Rate	Growth		
	Name	Rate Unit	Stage	11	12
1	LEADOFF	1.5 oz/a	30D EPP	99 a	99 a
	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	EP		
2	CANOPY EX	1.5 oz/a	30D EPP	99 a	99 a
	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	EP		

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed
Pest Code	AMBTR	IPOSS
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.
Pest Name	Giant ragweed	Morning glory
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Part Rated		
Rating Date		
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
SE Name		
SE Description		
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.		
Trt-Eval Interval		
Plant-Eval Interval		
Days After Emergence		
ARM Action Codes	P	P
Sort Order for View		
Number of Decimals	0	0
Trt Treatment	Rate	Growth
No. Name	Rate Unit	Stage
		11
		12
3 ENVIVE	3.5 oz/a	30D EPP
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	EP
		99 a
		99 a
4 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	EP
		99 a
		99 a
5 GRAMOXONE INTEON	48 fl oz/a	PRE
CANOPY	6 oz ai/a	PRE
NIS	0.25 % v/v	PRE
ROUNDUP POWERMAX	22 fl oz/a	EP
		99 a
		99 a
6 GRAMOXONE INTEON	48 fl oz/a	PRE
CANOPY	4 oz ai/a	PRE
CINCH	16 fl oz/a	PRE
NIS	0.25 % v/v	PRE
ROUNDUP POWERMAX	22 fl oz/a	EP
		99 a
		99 a
7 CANOPY EX	2 oz/a	PRE
ROUNDUP POWERMAX	40 fl oz/a	EP
CLASSIC	0.50 oz/a	EP
		99 a
		99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed
Pest Code	AMBTR	IPOSS
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.
Pest Name	Giant ragweed	Morning glory
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Part Rated		
Rating Date		
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
SE Name		
SE Description		
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.		
Trt-Eval Interval		
Plant-Eval Interval		
Days After Emergence		
ARM Action Codes	P	P
Sort Order for View		
Number of Decimals	0	0
Trt Treatment	Rate	Growth
No. Name	Rate Unit	Stage
		11
8 ENVIVE	3.5 oz/a	PRE
ROUNDUP POWERMAX	40 fl oz/a	EP
CLASSIC	0.50 oz/a	EP
		99 a
9 CHECK UNTREATED		0 b
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

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

NO TILL SOYBEAN EARLY PREPLANT II

Trial ID: S11022 Protocol ID: DUPONT-USA-11-907-RR
Location: LEXINGTON, KY Study Director: CHARLES SLACK
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

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 II

Trial ID: S11022 Protocol ID: DUPONT-USA-11-907-RR
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 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: 4-13-2011

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

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 4031
BBCH Scale: BSOY **Planting Date:** 5-10-2011
Planting Method: DRILLE drilled **Rate, Unit:** 210000 S/A
Depth, Unit: 1.25 IN
Row Spacing, Unit: 7 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 64 F
Soil Moisture: SLIWET slightly wet **Emergence Date:** 5-15-2011

Plant and Soil Science, U of KY Weed Science Research

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: 6.67 FT **Site Type:** FIELD field
Plot Length, Unit: 44 FT
Plot Area, Unit: 293.48 FT² **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RAOBL 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: WEWEDR wet-wet-dry
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2 MI

Application Description

	A	B	C
Application Date:	4-13-2011	5-11-2011	6-7-2011
Time of Day:	3 PM	11 AM	1 PM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	30D EPP	PRE	EP
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	63 F	80 F	88 F
% Relative Humidity:	31	57	65
Wind Velocity, Unit:	6 MPH	6 MPH	4 MPH
Wind Direction:	WNW	SW	WSW
Soil Temperature, Unit:	55 F	67 F	74 F
Soil Moisture:	VERWET	EXCELL	GOOD
% Cloud Cover:	0	10	15
Next Rain Occurred On:	4-15-2011	5-13-2011	6-10-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Height, Unit:			6 IN

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

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

Plant and Soil Science, U of KY Weed Science Research

NO TILL SOYBEAN EARLY PREPLANT III

Trial ID: S11023 Protocol ID: DUPONT-USA-11-907-LL
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: DAN SMITH

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifida Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifida Giant ragweed	IPOSS Ipomoea sp. Morning glory
Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT
Trt Treatment No. Name	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Rate Rate Unit	1	2	3	4	5	6	7	8
Growth Stage	1	2	3	4	5	6	7	8
1 LEADOFF ROUNDUP POWERMAX WEEDONE LV4 GRAMOXONE INTEON ENVIVE NIS IGNITE 280 DUAL MAGNUM	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
2 CANOPY EX ROUNDUP POWERMAX WEEDONE LV4 GRAMOXONE INTEON ENVIVE NIS IGNITE 280 DUAL MAGNUM	0 a	99 a	98 a	99 a	0 a	99 a	99 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory			
	GLXMA BSOY Glycine max Soybean				GLXMA BSOY Glycine max Soybean						
	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT			
	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST			
		P	P	P	P	P	P	P			
	0	0	0	0	0	0	0	0			
Trt Treatment No. Name	Rate Rate	Growth Unit	Stage	1	2	3	4	5	6	7	8
3 GRAMOXONE INTEON ENVIVE NIS IGNITE 280 PREFIX	48 fl oz/a 3.5 oz/a 0.25 % v/v 29 fl oz/a 32 fl oz/a	PRE PRE PRE EP EP		3 a	99 a	99 a	95 a	0 a	99 a	99 a	99 a
4 GRAMOXONE INTEON ENVIVE NIS IGNITE 280 DUAL MAGNUM	48 fl oz/a 3.5 oz/a 0.25 % v/v 29 fl oz/a 16 fl oz/a	PRE PRE PRE EP EP		0 a	99 a	96 a	99 a	0 a	99 a	99 a	99 a
5 GRAMOXONE INTEON DUAL II MAGNUM CADET CLASSIC IGNITE 280 AMS	48 fl oz/a 0.665 pt/a 0.6 oz/a 0.5 oz/a 29 fl oz/a 3.7 % v/v	PRE PRE EP EP EP EP		0 a	99 a	88 b	95 a	0 a	99 a	99 a	99 a
6 GRAMOXONE INTEON ANTHEM AUTHORITY XL CADET IGNITE 280 AMS	48 fl oz/a 6 oz/a 4 oz/a 0.6 oz/a 29 fl oz/a 3.7 % v/v	PRE PRE PRE MP MP MP		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	
Pest Code									
Pest Scientific Name									
Pest Name									
Crop Code	GLXMA				GLXMA				
BBCH Scale	BSOY				BSOY				
Crop Scientific Name	Glycine max				Glycine max				
Crop Name	Soybean				Soybean				
Description									
Part Rated									
Rating Date									
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	
SE Name									
SE Description									
Rating Timing	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST	
Days After First/Last Applic.									
Trt-Eval Interval									
Plant-Eval Interval									
Days After Emergence									
ARM Action Codes	P	P	P	P	P	P	P	P	
Sort Order for View									
Number of Decimals	0	0	0	0	0	0	0	0	
Trt Treatment	Rate	Growth							
No. Name	Rate Unit Stage	1	2	3	4	5	6	7	8
7 GRAMOXONE INTEON	48 fl oz/a PRE	0 a	99 a	96 a	96 a	0 a	99 a	99 a	99 a
AUTHORITY MTZ	12 oz/a PRE								
IGNITE 280	29 fl oz/a MP								
AMS	3.7 % v/v MP								
8 CHECK UNTREATED		0 a	0 b	0 c	0 b	0 a	0 b	0 b	0 b
LSD (P=.05)		3.2	0.0	5.3	4.6	0.0	0.0	0.0	0.0
Standard Deviation		1.8	0.0	3.0	2.6	0.0	0.0	0.0	0.0
CV		489.9	0.0	3.57	3.05	0.0	0.0	0.0	0.0
Replicate F		1.000	0.000	0.239	2.761	0.000	0.000	0.000	0.000
Replicate Prob(F)		0.3927	1.0000	0.7907	0.0976	1.0000	1.0000	1.0000	1.0000
Treatment F		1.000	0.000	388.278	528.401	0.000	0.000	0.000	0.000
Treatment Prob(F)		0.4706	1.0000	0.0001	0.0001	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed				
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi-> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi-> Giant ragweed	IPOSS Ipomoea sp. Morning glory				
INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT				
4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK				
P	P	P	P	P	P	P	P	P				
0	0	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Growth Unit	Stage	9	10	11	12	13	14	15	16
1	LEADOFF	1.5 oz/a	30D EPP		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
	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									
	IGNITE 280	29 fl oz/a	EP									
	DUAL MAGNUM	16 fl oz/a	EP									
2	CANOPY EX	1.5 oz/a	30D EPP		0 a	99 a	98 a	99 a	0 a	99 a	98 a	99 a
	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									
	IGNITE 280	29 fl oz/a	EP									
	DUAL MAGNUM	16 fl oz/a	EP									

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed			
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory			
INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT			
4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK			
P	P	P	P	P	P	P	P	P			
0	0	0	0	0	0	0	0	0			
Trt Treatment No. Name	Rate Rate	Growth Unit	Stage	9	10	11	12	13	14	15	16
3 GRAMOXONE INTEON ENVIVE NIS IGNITE 280 PREFIX	48 fl oz/a 3.5 oz/a 0.25 % v/v 29 fl oz/a 32 fl oz/a	PRE PRE PRE EP EP		3 a	99 a	99 a	95 a	0 a	99 a	99 a	95 a
4 GRAMOXONE INTEON ENVIVE NIS IGNITE 280 DUAL MAGNUM	48 fl oz/a 3.5 oz/a 0.25 % v/v 29 fl oz/a 16 fl oz/a	PRE PRE PRE EP EP		0 a	99 a	96 a	99 a	0 a	99 a	96 a	99 a
5 GRAMOXONE INTEON DUAL II MAGNUM CADET CLASSIC IGNITE 280 AMS	48 fl oz/a 0.665 pt/a 0.6 oz/a 0.5 oz/a 29 fl oz/a 3.7 % v/v	PRE PRE EP EP EP EP		0 a	99 a	88 b	95 a	0 a	99 a	88 b	95 a
6 GRAMOXONE INTEON ANTHEM AUTHORITY XL CADET IGNITE 280 AMS	48 fl oz/a 6 oz/a 4 oz/a 0.6 oz/a 29 fl oz/a 3.7 % v/v	PRE PRE PRE MP MP MP		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS	
Pest Code		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.	
Pest Scientific Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory	
Pest Name									
Crop Code	GLXMA				GLXMA				
BBCH Scale	BSOY				BSOY				
Crop Scientific Name	Glycine max				Glycine max				
Crop Name	Soybean				Soybean				
Description									
Part Rated									
Rating Date									
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	
SE Name									
SE Description									
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.									
Trt-Eval Interval									
Plant-Eval Interval									
Days After Emergence									
ARM Action Codes	P	P	P	P	P	P	P	P	
Sort Order for View									
Number of Decimals	0	0	0	0	0	0	0	0	
Trt Treatment	Rate	Growth							
No. Name	Rate Unit Stage	9	10	11	12	13	14	15	16
7 GRAMOXONE INTEON	48 fl oz/a PRE	0 a	99 a	96 a	96 a	0 a	99 a	96 a	96 a
AUTHORITY MTZ	12 oz/a PRE								
IGNITE 280	29 fl oz/a MP								
AMS	3.7 % v/v MP								
8 CHECK UNTREATED		0 a	0 b	0 c	0 b	0 a	0 b	0 c	0 b
LSD (P=.05)		3.2	0.0	5.3	4.6	0.0	0.0	5.3	4.6
Standard Deviation		1.8	0.0	3.0	2.6	0.0	0.0	3.0	2.6
CV		489.9	0.0	3.57	3.05	0.0	0.0	3.57	3.05
Replicate F		1.000	0.000	0.239	2.761	0.000	0.000	0.239	2.761
Replicate Prob(F)		0.3927	1.0000	0.7907	0.0976	1.0000	1.0000	0.7907	0.0976
Treatment F		1.000	0.000	388.278	528.401	0.000	0.000	388.278	528.401
Treatment Prob(F)		0.4706	1.0000	0.0001	0.0001	1.0000	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

NO TILL SOYBEAN EARLY PREPLANT III

Trial ID: S11023 Protocol ID: DUPONT-USA-11-907-LL
Location: LEXINGTON, KY Study Director: CHARLES SLACK
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

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 III

Trial ID: S11023 Protocol ID: DUPONT-USA-11-907-LL
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 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: 4-13-2011

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

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: S070147 **Description:** LL
BBCH Scale: BSOY **Planting Date:** 5-10-2011
Planting Method: DRILLE drilled **Rate, Unit:** 210000 S/A
Depth, Unit: 1.25 IN
Row Spacing, Unit: 7 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 64 F
Soil Moisture: VERWET very wet **Emergence Date:** 5-15-2011

Plant and Soil Science, U of KY Weed Science Research

Pest Description

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

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

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

Site and Design

Plot Width, Unit: 6.67 FT **Site Type:** FIELD field
Plot Length, Unit: 44 FT
Plot Area, Unit: 293.48 FT² **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RACOB� Randomized Complete Block (RCB)

Soil Description

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

Moisture and Weather Conditions

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

Application Description

	A	B	C	D
Application Date:	4-13-2011	5-11-2011	6-7-2011	6-7-2011
Time of Day:	3 PM	11 AM	10 AM	2 PM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	30D EPP	PRE	EP	MP
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	63 F	80 F	85 F	88 F
% Relative Humidity:	31	57	65	70
Wind Velocity, Unit:	6 MPH	6 MPH	3 MPH	4 MPH
Wind Direction:	WNW	SW	WSW	WSW
Soil Temperature, Unit:	55 F	67 F	74 F	74 F
Soil Moisture:	VERWET	EXCELL	GOOD	GOOD
% Cloud Cover:	0	10	10	10
Next Rain Occurred On:	4-15-2011	5-13-2011	6-10-2011	6-10-2011

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Height, Unit:			6 IN	6 IN

Plant and Soil Science, U of KY Weed Science Research

Pest Stage At Each Application

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

Application Equipment

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

Plant and Soil Science, U of KY Weed Science Research

NO TILL SOYBEAN II

Trial ID: S11024 Protocol ID: BASF-ZIDUA SOY 02-11
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: GREG STAPLETON

Pest Type		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory			
Pest Code											
Pest Scientific Name											
Pest Name											
Crop Code	GLXMA				GLXMA						
BBCH Scale	BSOY				BSOY						
Crop Scientific Name	Glycine max				Glycine max						
Crop Name	Soybean				Soybean						
Description											
Part Rated											
Rating Date											
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
SE Name											
SE Description	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST			
Rating Timing					2 WEEK	2 WEEK	2 WEEK	2 WEEK			
Days After First/Last Applic.											
Trt-Eval Interval											
Plant-Eval Interval											
Days After Emergence											
ARM Action Codes	P	P	P	P	P	P	P	P			
Sort Order for View											
Number of Decimals	0	0	0	0	0	0	0	0			
Trt No.	Treatment	Rate	Growth	1	2	3	4	5	6	7	8
	Name	Rate Unit	Stage								
1	ZIDUA	2.5 oz wt/a	PRE	0 a	99 a	90 c	90 c	0 a	99 a	99 a	99 a
	SHARPEN	1 fl oz/a	PRE								
	ROUNDUP POWERMAX	22 fl oz/a	PRE								
	MSO	1 % v/v	PRE								
	AMS	17 lb/100 gal	PRE								
	ROUNDUP POWERMAX	22 fl oz/a	MP								
	AMS	17 lb/100 gal	MP								
2	ZIDUA	2 oz wt/a	PRE	0 a	99 a	93 b	95 b	0 a	99 a	99 a	99 a
	SHARPEN	1 fl oz/a	PRE								
	ROUNDUP POWERMAX	22 fl oz/a	PRE								
	MSO	1 % v/v	PRE								
	AMS	17 lb/100 gal	PRE								
	ZIDUA	1 oz wt/a	MP								
	ROUNDUP POWERMAX	22 fl oz/a	MP								
	AMS	17 lb/100 gal	MP								

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type			W Weed	W Weed	W Weed		W Weed	W Weed	W Weed		
Pest Code			SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS		
Pest Scientific Name			Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		
Pest Name			Giant foxtail	Giant ragweed	Morning glory		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				
Description											
Part Rated											
Rating Date											
Rating Type			INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL		
Rating Unit			PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
SE Name											
SE Description			BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	AFTER POST	AFTER POST	AFTER POST		
Rating Timing							2 WEEK	2 WEEK	2 WEEK		
Days After First/Last Applic.											
Trt-Eval Interval											
Plant-Eval Interval											
Days After Emergence											
ARM Action Codes			P	P	P	P	P	P	P		
Sort Order for View											
Number of Decimals			0	0	0	0	0	0	0		
Trt No.	Treatment Name	Rate Unit	Growth Stage	1	2	3	4	5	6	7	8
3	ZIDUA	2.5 oz wt/a	PRE	0 a	99 a	93 b	93 b	0 a	99 a	99 a	99 a
	SHARPEN	1 fl oz/a	PRE								
	ROUNDUP POWERMAX	22 fl oz/a	PRE								
	MSO	1 % v/v	PRE								
	AMS	17 lb/100 gal	PRE								
	ZIDUA	1 oz wt/a	MP								
	ROUNDUP POWERMAX	22 fl oz/a	MP								
	AMS	17 lb/100 gal	MP								
4	VALOR SX	2 oz wt/a	PRE	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	22 fl oz/a	PRE								
	AMS	17 lb/100 gal	PRE								
	WARRANT	1.25 qt/a	MP								
	ROUNDUP POWERMAX	22 fl oz/a	MP								
	AMS	17 lb/100 gal	MP								

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed	W Weed	W Weed		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name		Giant foxtail	Giant ragweed	Morning glory		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			
Description								
Part Rated								
Rating Date								
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
SE Name								
SE Description	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Rating Timing					2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.								
Trt-Eval Interval								
Plant-Eval Interval								
Days After Emergence								
ARM Action Codes	P	P	P	P	P	P	P	P
Sort Order for View								
Number of Decimals	0	0	0	0	0	0	0	0
Trt Treatment	Rate	Growth						
No. Name	Rate Unit	Stage	1	2	3	4	5	6
5 ZIDUA	1.5 oz wt/a	PRE	0 a	99 a	99 a	99 a	0 a	99 a
VALOR SX	2 oz wt/a	PRE						
ROUNDUP POWERMAX	22 fl oz/a	PRE						
AMS	17 lb/100 gal	PRE						
WARRANT	1.25 qt/a	MP						
ROUNDUP POWERMAX	22 fl oz/a	MP						
AMS	17 lb/100 gal	MP						
LSD (P=.05)	0.0	0.0	3.0	2.4	0.0	0.0	0.0	0.0
Standard Deviation	0.0	0.0	1.6	1.3	0.0	0.0	0.0	0.0
CV	0.0	0.0	1.67	1.36	0.0	0.0	0.0	0.0
Replicate F	0.000	0.000	2.667	1.000	0.000	0.000	0.000	0.000
Replicate Prob(F)	1.0000	1.0000	0.1296	0.4096	1.0000	1.0000	1.0000	1.0000
Treatment F	0.000	0.000	18.760	26.740	0.000	0.000	0.000	0.000
Treatment Prob(F)	1.0000	1.0000	0.0004	0.0001	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

			W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory				W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory
			GLXMA BSOY Glycine max Soybean						GLXMA BSOY Glycine max Soybean		
Pest Type	Pest Code	Pest Scientific Name									
Crop Code	BBCH Scale	Crop Scientific Name									
Crop Name	Description	Part Rated									
Rating Date	Rating Type	Rating Unit	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	
SE Name	SE Description	Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.	Trt-Eval Interval	Plant-Eval Interval									
ARM Action Codes	Sort Order for View	Number of Decimals	P	P	P	P	P	P	P	P	
			0	0	0	0	0	0	0	0	
Trt No.	Treatment Name	Rate Rate Unit	Growth Stage	9	10	11	12	13	14	15	16
1	ZIDUA	2.5 oz wt/a	PRE	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
	SHARPEN	1 fl oz/a	PRE								
	ROUNDUP POWERMAX	22 fl oz/a	PRE								
	MSO	1 % v/v	PRE								
	AMS	17 lb/100 gal	PRE								
	ROUNDUP POWERMAX	22 fl oz/a	MP								
	AMS	17 lb/100 gal	MP								
2	ZIDUA	2 oz wt/a	PRE	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
	SHARPEN	1 fl oz/a	PRE								
	ROUNDUP POWERMAX	22 fl oz/a	PRE								
	MSO	1 % v/v	PRE								
	AMS	17 lb/100 gal	PRE								
	ZIDUA	1 oz wt/a	MP								
	ROUNDUP POWERMAX	22 fl oz/a	MP								
	AMS	17 lb/100 gal	MP								

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed		
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	9	10	11	12	13	14	15	16
3 ZIDUA SHARPEN ROUNDUP POWERMAX MSO AMS ZIDUA ROUNDUP POWERMAX AMS	2.5 oz wt/a 1 fl oz/a 22 fl oz/a 1 % v/v 17 lb/100 gal 1 oz wt/a 22 fl oz/a 17 lb/100 gal	PRE PRE PRE PRE PRE MP MP MP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
4 VALOR SX ROUNDUP POWERMAX AMS WARRANT ROUNDUP POWERMAX AMS	2 oz wt/a 22 fl oz/a 17 lb/100 gal 1.25 qt/a 22 fl oz/a 17 lb/100 gal	PRE PRE PRE MP MP MP	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		
Pest Code										
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		
Pest Name		Giant foxtail	Giant ragweed	Morning glory		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					
Description										
Part Rated										
Rating Date										
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
SE Name										
SE Description										
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK		
Days After First/Last Applic.										
Trt-Eval Interval										
Plant-Eval Interval										
Days After Emergence										
ARM Action Codes	P	P	P	P	P	P	P	P		
Sort Order for View										
Number of Decimals	0	0	0	0	0	0	0	0		
Trt Treatment	Rate	Growth								
No. Name	Rate Unit	Stage	9	10	11	12	13	14	15	16
5 ZIDUA	1.5 oz wt/a	PRE	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a
VALOR SX	2 oz wt/a	PRE								
ROUNDUP POWERMAX	22 fl oz/a	PRE								
AMS	17 lb/100 gal	PRE								
WARRANT	1.25 qt/a	MP								
ROUNDUP POWERMAX	22 fl oz/a	MP								
AMS	17 lb/100 gal	MP								
LSD (P=.05)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Standard Deviation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replicate F	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

NO TILL SOYBEAN II

Trial ID: S11024 Protocol ID: BASF-ZIDUA SOY 02-11
Location: LEXINGTON, KY Study Director: CHARLES SLACK
Project ID: Investigator: Charles H Slack
Sponsor Contact: GREG STAPLETON

Pest Type

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

Pest Code

SETFA, *Setaria faberi*, = US

AMBTR, *Ambrosia trifida*, = US

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 II

Trial ID: S11024 Protocol ID: BASF-ZIDUA SOY 02-11
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: GREG STAPLETON

General Trial Information

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

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-10-2011

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

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 4031
BBCH Scale: BSOY **Planting Date:** 5-10-2011
Planting Method: DRILLE drilled **Rate, Unit:** 200000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 7 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 63 F
Soil Moisture: WET wet **Emergence Date:** 5-15-2011

Plant and Soil Science, U of KY Weed Science Research

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: 6.67 FT **Site Type:** FIELD field
Plot Length, Unit: 44 FT
Plot Area, Unit: 293.48 FT² **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RAOBL 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: WEWEDR wet-wet-dry
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2 MI

Application Description

	A	B
Application Date:	5-11-2011	6-7-2011
Time of Day:	11 AM	1 PM
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	MP
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	80 F	80 F
% Relative Humidity:	57	80
Wind Velocity, Unit:	6 MPH	4 MPH
Wind Direction:	SW	WSW
Soil Temperature, Unit:	67 F	73 F
Soil Moisture:	EXCELL	GOOD
% Cloud Cover:	10	20
Next Rain Occurred On:	5-13-2011	6-10-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Height, Unit:		5 IN

Pest Stage At Each Application

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

Application Equipment

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

Plant and Soil Science, U of KY Weed Science Research

NO TILL SOYBEAN III

Trial ID: S11025 Protocol ID: CHEM-FOMME1101
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: JAMES BARRENTINE

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	
Pest Code		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	
Pest Scientific Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	
Pest Name											
Crop Code	GLXMA				GLXMA				GLXMA		
BBCH Scale	BSOY				BSOY				BSOY		
Crop Scientific Name	Glycine max				Glycine max				Glycine max		
Crop Name	Soybean				Soybean				Soybean		
Description											
Part Rated											
Rating Date	6-21-2011	6-21-2011	6-21-2011	6-21-2011	7-5-2011	7-5-2011	7-5-2011	7-5-2011	8-5-2011	8-5-2011	
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	
SE Name											
SE Description											
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.	41 14	41 14	41 14	41 14	55 28	55 28	55 28	55 28	86 59	86 59	
Trt-Eval Interval											
Plant-Eval Interval	42 DP-1	42 DP-1	42 DP-1	42 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1	87 DP-1	87 DP-1	
Days After Emergence	37 DE-1	37 DE-1	37 DE-1	37 DE-1	51 DE-1	51 DE-1	51 DE-1	51 DE-1	82 DE-1	82 DE-1	
ARM Action Codes	P	P	P	P	P	P	P	P	P	P	
Sort Order for View											
Number of Decimals	0	0	0	0	0	0	0	0	0	0	
Trt No.	1	2	3	4	5	6	7	8	9	10	
Treatment Name	GLYFOS X-TRA AMS RHYTHM AMS SELECT	GLYFOS X-TRA AMS RHYTHM GLYFOS X-TRA	GLYFOS X-TRA AMS RHYTHM GLYFOS X-TRA	GLYFOS X-TRA AMS DAWN NIS SELECT	GLYFOS X-TRA AMS RHYTHM GLYFOS X-TRA	GLYFOS X-TRA AMS RHYTHM GLYFOS X-TRA	GLYFOS X-TRA AMS RHYTHM GLYFOS X-TRA	GLYFOS X-TRA AMS RHYTHM GLYFOS X-TRA	GLYFOS X-TRA AMS RHYTHM GLYFOS X-TRA	GLYFOS X-TRA AMS RHYTHM GLYFOS X-TRA	GLYFOS X-TRA AMS RHYTHM GLYFOS X-TRA
Rate	1 lb ai/a 3.7 % v/v 0.294 lb ai/a 2.50 % v/v 0.125 lb ai/a	1 lb ai/a 3.7 % v/v 0.147 lb ai/a 0.75 lb ae/a	1 lb ai/a 3.7 % v/v 0.294 lb ai/a 0.75 lb ae/a	1 lb ai/a 3.7 % v/v 0.375 lb ai/a 0.25 % v/v 0.125 lb ai/a	1 lb ai/a 3.7 % v/v 0.294 lb ai/a 0.75 lb ae/a	1 lb ai/a 3.7 % v/v 0.294 lb ai/a 0.75 lb ae/a	1 lb ai/a 3.7 % v/v 0.294 lb ai/a 0.75 lb ae/a	1 lb ai/a 3.7 % v/v 0.294 lb ai/a 0.75 lb ae/a	1 lb ai/a 3.7 % v/v 0.294 lb ai/a 0.75 lb ae/a	1 lb ai/a 3.7 % v/v 0.294 lb ai/a 0.75 lb ae/a	1 lb ai/a 3.7 % v/v 0.294 lb ai/a 0.75 lb ae/a
Growth Stage	PRE PRE EP EP EP	PRE PRE EP EP	PRE PRE EP EP	PRE PRE EP EP EP	PRE PRE EP EP	PRE PRE EP EP	PRE PRE EP EP	PRE PRE EP EP	PRE PRE EP EP	PRE PRE EP EP	PRE PRE EP EP
Mean	0 a	99 a	90 b	90 b	0 a	99 a	83 c	85 c	0 a	99 a	
SE											

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA		
Pest Code												
Pest Scientific Name		Setaria faberi	Ambrosia trifida	Ipomoea sp.		Setaria faberi	Ambrosia trifida	Ipomoea sp.		Setaria faberi		
Pest Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail		
Crop Code	GLXMA				GLXMA				GLXMA			
BBCH Scale	BSOY				BSOY				BSOY			
Crop Scientific Name	Glycine max				Glycine max				Glycine max			
Crop Name	Soybean				Soybean				Soybean			
Description												
Part Rated												
Rating Date	6-21-2011	6-21-2011	6-21-2011	6-21-2011	7-5-2011	7-5-2011	7-5-2011	7-5-2011	8-5-2011	8-5-2011		
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
SE Name												
SE Description												
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK		
Days After First/Last Applic.	41 14	41 14	41 14	41 14	55 28	55 28	55 28	55 28	86 59	86 59		
Trt-Eval Interval												
Plant-Eval Interval	42 DP-1	42 DP-1	42 DP-1	42 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1	87 DP-1	87 DP-1		
Days After Emergence	37 DE-1	37 DE-1	37 DE-1	37 DE-1	51 DE-1	51 DE-1	51 DE-1	51 DE-1	82 DE-1	82 DE-1		
ARM Action Codes	P	P	P	P	P	P	P	P	P	P		
Sort Order for View												
Number of Decimals	0	0	0	0	0	0	0	0	0	0		
Trt Treatment	Rate	Growth										
No. Name	Rate Unit	Stage	1	2	3	4	5	6	7	8	9	10
5 GLYFOS X-TRA	1 lb ai/a	PRE	0 a	99 a	99 a	99 a	0 a	96 a	92 b	92 b	0 a	96 a
AMS	3.7 % v/v	PRE										
FLEXSTAR	0.294 lb ai/a	EP										
AMS	2.50 % v/v	EP										
SELECT	0.125 lb ai/a	EP										
6 GLYFOS X-TRA	1 lb ai/a	PRE	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
AMS	3.7 % v/v	PRE										
TACKLE	1.03 lb ai/a	EP										
AMS	2.5 % v/v	EP										
NIS	0.25 % v/v	EP										
7 GLYFOS X-TRA	1 lb ai/a	PRE	0 a	0 b	0 c	0 c	0 a	0 b	0 d	0 d	0 a	0 b
AMS	3.7 % v/v	PRE										
UNTREATED												
LSD (P=.05)			0.0	0.0	0.0	0.0	0.0	3.5	4.1	4.4	0.0	3.5
Standard Deviation			0.0	0.0	0.0	0.0	0.0	2.0	2.3	2.5	0.0	2.0
CV			0.0	0.0	0.0	0.0	0.0	2.33	2.9	3.07	0.0	2.33
Replicate F			0.000	0.000	0.000	0.000	0.000	1.000	3.389	0.774	0.000	1.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000	0.3966	0.0681	0.4828	1.0000	0.3966
Treatment F			0.000	0.000	0.000	0.000	0.000	1079.000	716.337	632.127	0.000	1079.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000	0.0001	0.0001	0.0001	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed
Pest Code	AMBTR	IPOSS
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.
Pest Name	Giant ragweed	Morning glory
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Part Rated		
Rating Date	8-5-2011	8-5-2011
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
SE Name		
SE Description		
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.	86 59	86 59
Trt-Eval Interval		
Plant-Eval Interval	87 DP-1	87 DP-1
Days After Emergence	82 DE-1	82 DE-1
ARM Action Codes	P	P
Sort Order for View		
Number of Decimals	0	0
Trt No.	11	12
Treatment Name		
Rate		
Unit		
Growth Stage		
1 GLYFOS X-TRA	1 lb ai/a	PRE
AMS	3.7 % v/v	PRE
RHYTHM	0.294 lb ai/a	EP
AMS	2.50 % v/v	EP
SELECT	0.125 lb ai/a	EP
2 GLYFOS X-TRA	1 lb ai/a	PRE
AMS	3.7 % v/v	PRE
RHYTHM	0.147 lb ai/a	EP
GLYFOS X-TRA	0.75 lb ae/a	EP
3 GLYFOS X-TRA	1 lb ai/a	PRE
AMS	3.7 % v/v	PRE
RHYTHM	0.294 lb ai/a	EP
GLYFOS X-TRA	0.75 lb ae/a	EP
4 GLYFOS X-TRA	1 lb ai/a	PRE
AMS	3.7 % v/v	PRE
DAWN	0.375 lb ai/a	EP
NIS	0.25 % v/v	EP
SELECT	0.125 lb ai/a	EP

Means followed by same letter do not significantly differ (P=.05, LSD)

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		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Part Rated		
Rating Date	8-5-2011	8-5-2011
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
SE Name		
SE Description		
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.	86 59	86 59
Trt-Eval Interval		
Plant-Eval Interval	87 DP-1	87 DP-1
Days After Emergence	82 DE-1	82 DE-1
ARM Action Codes	P	P
Sort Order for View		
Number of Decimals	0	0
Trt Treatment		
No. Name	Rate Unit Growth	
	Rate Unit Stage	
5 GLYFOS X-TRA	1 lb ai/a PRE	11
AMS	3.7 % v/v PRE	92 bc
FLEXSTAR	0.294 lb ai/a EP	12
AMS	2.50 % v/v EP	92 bc
SELECT	0.125 lb ai/a EP	
6 GLYFOS X-TRA	1 lb ai/a PRE	99 a
AMS	3.7 % v/v PRE	99 a
TACKLE	1.03 lb ai/a EP	
AMS	2.5 % v/v EP	
NIS	0.25 % v/v EP	
7 GLYFOS X-TRA	1 lb ai/a PRE	0 e
AMS	3.7 % v/v PRE	0 f
UNTREATED		
LSD (P=.05)	6.5	4.2
Standard Deviation	3.7	2.3
CV	4.83	3.11
Replicate F	2.575	2.110
Replicate Prob(F)	0.1174	0.1640
Treatment F	269.575	662.012
Treatment Prob(F)	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

NO TILL SOYBEAN III

Trial ID: S11025 Protocol ID: CHEM-FOMME1101
Location: LEXINGTON, KY Study Director: CHARLES SLACK
Project ID: Investigator: Charles H Slack
Sponsor Contact: JAMES BARRENTINE

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 Unit

PERCENT = percent

Plant-Eval Interval

42 DP-1 = 1 5-10-2011

56 DP-1 = 1 5-10-2011

87 DP-1 = 1 5-10-2011

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: S11025 Protocol ID: CHEM-FOMME1101
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: JAMES BARRENTINE

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: 5-10-2011

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

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 4031
BBCH Scale: BSOY **Planting Date:** 5-10-2011
Planting Method: DRILLE drilled **Rate, Unit:** 200000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 7 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 63 F
Soil Moisture: WET wet **Emergence Date:** 5-15-2011

Plant and Soil Science, U of KY Weed Science Research

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: 6.67 FT **Site Type:** FIELD field
Plot Length, Unit: 44 FT
Plot Area, Unit: 293.48 FT² **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RAOBL 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: WEWEDR wet-wet-dry
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2 MI

Application Description

	A	B
Application Date:	5-11-2011	6-7-2011
Time of Day:	11 AM	11 AM
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	EP
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	80 F	85 F
% Relative Humidity:	57	45
Wind Velocity, Unit:	6 MPH	4 MPH
Wind Direction:	SW	SW
Soil Temperature, Unit:	67 F	74 F
Soil Moisture:	EXCELL	FAIR
% Cloud Cover:	10	20
Next Rain Occurred On:	5-13-2011	6-10-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Height, Unit:		5 IN

Pest Stage At Each Application

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

Application Equipment

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

Plant and Soil Science, U of KY Weed Science Research

NO TILL SOYBEAN EARLY PREPLANT IV

Trial ID: S11026 Protocol ID: BASF KIXOR SB
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: GREG STAPLETON

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	GLXMA BSOY Glycine max Soybean	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	GLXMA BSOY Glycine max Soybean	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	GLXMA BSOY Glycine max Soybean	W Weed SETFA Setaria faberi Giant foxtail		
		CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT		INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT		CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10
1 CHECK UNTREATED			0 a	0 b	0 c	0 b	0 a	0 b	0 c	0 c	0 a	0 b
2 ROUNDUP ORIGINAL NIS AMS ROUNDUP ORIGINAL NIS AMS	32 fl oz/a 0.25 % v/v 17 lb/100 gal 32 fl oz/a 0.25 % v/v 17 lb/100 gal	7 DAY 7 DAY 7 DAY 6WAP 6WAP 6WAP	0 a	99 a	90 b	93 a	0 a	99 a	83 b	84 b	0 a	99 a
3 ROUNDUP ORIGINAL WEEDONE LV4 NIS AMS ROUNDUP ORIGINAL NIS AMS	32 fl oz/a 16 fl oz/a 0.25 % v/v 17 lb/100 gal 32 fl oz/a 0.25 % v/v 17 lb/100 gal	7 DAY 7 DAY 7 DAY 7 DAY 6WAP 6WAP 6WAP	0 a	99 a	89 b	92 a	0 a	99 a	85 b	89 a	0 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed	GLXMA BSOY Glycine max Soybean	W Weed		
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifida Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifida Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail		
INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT		
2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK		
P	P	P	P	P	P	P	P	P	P	P		
0	0	0	0	0	0	0	0	0	0	0		
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10
4 SHARPEN	1 fl oz/a	7 DAY	0 a	99 a	89 b	93 a	0 a	99 a	85 b	91 a	0 a	99 a
ROUNDUP ORIGINAL	32 fl oz/a	7 DAY										
MSO	1 % v/v	7 DAY										
AMS	17 lb/100 gal	7 DAY										
ROUNDUP ORIGINAL	32 fl oz/a	6WAP										
NIS	0.25 % v/v	6WAP										
AMS	17 lb/100 gal	6WAP										
5 SHARPEN	1 fl oz/a	7 DAY	0 a	99 a	98 a	95 a	0 a	99 a	91 a	92 a	0 a	99 a
SCEPTER	2.8 oz wt/a	7 DAY										
ROUNDUP ORIGINAL	32 fl oz/a	7 DAY										
MSO	1 % v/v	7 DAY										
AMS	17 lb/100 gal	7 DAY										
ROUNDUP ORIGINAL	32 fl oz/a	6WAP										
NIS	0.25 % v/v	6WAP										
AMS	17 lb/100 gal	6WAP										
6 VERDICT	5 fl oz/a	7 DAY	0 a	99 a	91 ab	96 a	0 a	99 a	86 ab	88 ab	0 a	99 a
ROUNDUP ORIGINAL	32 fl oz/a	7 DAY										
MSO	1 % v/v	7 DAY										
AMS	17 lb/100 gal	7 DAY										
ROUNDUP ORIGINAL	32 fl oz/a	6WAP										
NIS	0.25 % v/v	6WAP										
AMS	17 lb/100 gal	6WAP										

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed	GLXMA BSOY Glycine max Soybean	W Weed	W Weed	W Weed	GLXMA BSOY Glycine max Soybean	W Weed		
		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail	AMBTR Ambrosia trifi> Giant ragweed	IPOSS Ipomoea sp. Morning glory		SETFA Setaria faberi Giant foxtail		
INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT		
2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK		
P	P	P	P	P	P	P	P	P	P	P		
0	0	0	0	0	0	0	0	0	0	0		
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9	10
7 SHARPEN	1 fl oz/a	7 DAY	0 a	99 a	87 b	93 a	0 a	99 a	83 b	90 a	0 a	99 a
PROWL H20	2.6 pt/a	7 DAY										
ROUNDUP ORIGINAL	32 fl oz/a	7 DAY										
MSO	1 % v/v	7 DAY										
AMS	17 lb/100 gal	7 DAY										
ROUNDUP ORIGINAL	32 fl oz/a	6WAP										
NIS	0.25 % v/v	6WAP										
AMS	17 lb/100 gal	6WAP										
8 VERDICT	7.5 fl oz/a	7 DAY	0 a	99 a	92 ab	98 a	0 a	99 a	82 b	89 a	0 a	99 a
ROUNDUP ORIGINAL	32 fl oz/a	7 DAY										
MSO	1 % v/v	7 DAY										
AMS	17 lb/100 gal	7 DAY										
ROUNDUP ORIGINAL	32 fl oz/a	6WAP										
NIS	0.25 % v/v	6WAP										
AMS	17 lb/100 gal	6WAP										
LSD (P=.05)	0.0		0.0	0.0	8.0	6.8	0.0	0.0	5.2	4.7	0.0	0.0
Standard Deviation	0.0		0.0	0.0	4.5	3.9	0.0	0.0	3.0	2.7	0.0	0.0
CV	0.0		0.0	0.0	5.73	4.73	0.0	0.0	4.0	3.43	0.0	0.0
Replicate F	0.000		0.000	0.000	0.395	0.099	0.000	0.000	11.893	3.165	0.000	0.000
Replicate Prob(F)	1.0000		1.0000	1.0000	0.6811	0.9067	1.0000	1.0000	0.0010	0.0734	1.0000	1.0000
Treatment F	0.000		0.000	0.000	150.765	219.850	0.000	0.000	308.339	419.224	0.000	0.000
Treatment Prob(F)	1.0000		1.0000	1.0000	0.0001	0.0001	1.0000	1.0000	0.0001	0.0001	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed			
Pest Code	AMBTR	IPOSS			
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.			
Pest Name	Giant ragweed	Morning glory			
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Description					
Part Rated					
Rating Date					
Rating Type	CONTROL	CONTROL			
Rating Unit	PERCENT	PERCENT			
SE Name					
SE Description					
Rating Timing	8 WEEK	8 WEEK			
Days After First/Last Applic.					
Trt-Eval Interval					
Plant-Eval Interval					
Days After Emergence					
ARM Action Codes	P	P			
Sort Order for View					
Number of Decimals	0	0			
Trt No.	Treatment	Rate	Growth		
	Name	Rate Unit	Stage	11	12
1	CHECK UNTREATED			0 b	0 b
2	ROUNDUP ORIGINAL	32 fl oz/a	7 DAY	99 a	99 a
	NIS	0.25 % v/v	7 DAY		
	AMS	17 lb/100 gal	7 DAY		
	ROUNDUP ORIGINAL	32 fl oz/a	6WAP		
	NIS	0.25 % v/v	6WAP		
	AMS	17 lb/100 gal	6WAP		
3	ROUNDUP ORIGINAL	32 fl oz/a	7 DAY	99 a	99 a
	WEEDONE LV4	16 fl oz/a	7 DAY		
	NIS	0.25 % v/v	7 DAY		
	AMS	17 lb/100 gal	7 DAY		
	ROUNDUP ORIGINAL	32 fl oz/a	6WAP		
	NIS	0.25 % v/v	6WAP		
	AMS	17 lb/100 gal	6WAP		

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed
Pest Code	AMBTR	IPOSS
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.
Pest Name	Giant ragweed	Morning glory
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Part Rated		
Rating Date		
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
SE Name		
SE Description		
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.		
Trt-Eval Interval		
Plant-Eval Interval		
Days After Emergence		
ARM Action Codes	P	P
Sort Order for View		
Number of Decimals	0	0
Trt Treatment	Rate	Growth
No. Name	Rate Unit	Stage
		11
		12
4 SHARPEN	1 fl oz/a	7 DAY
ROUNDUP ORIGINAL	32 fl oz/a	7 DAY
MISO	1 % v/v	7 DAY
AMS	17 lb/100 gal	7 DAY
ROUNDUP ORIGINAL	32 fl oz/a	6WAP
NIS	0.25 % v/v	6WAP
AMS	17 lb/100 gal	6WAP
5 SHARPEN	1 fl oz/a	7 DAY
SCEPTER	2.8 oz wt/a	7 DAY
ROUNDUP ORIGINAL	32 fl oz/a	7 DAY
MISO	1 % v/v	7 DAY
AMS	17 lb/100 gal	7 DAY
ROUNDUP ORIGINAL	32 fl oz/a	6WAP
NIS	0.25 % v/v	6WAP
AMS	17 lb/100 gal	6WAP
6 VERDICT	5 fl oz/a	7 DAY
ROUNDUP ORIGINAL	32 fl oz/a	7 DAY
MISO	1 % v/v	7 DAY
AMS	17 lb/100 gal	7 DAY
ROUNDUP ORIGINAL	32 fl oz/a	6WAP
NIS	0.25 % v/v	6WAP
AMS	17 lb/100 gal	6WAP

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed
Pest Code	AMBTR	IPOSS
Pest Scientific Name	Ambrosia trifida	Ipomoea sp.
Pest Name	Giant ragweed	Morning glory
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Part Rated		
Rating Date		
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
SE Name		
SE Description		
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.		
Trt-Eval Interval		
Plant-Eval Interval		
Days After Emergence		
ARM Action Codes	P	P
Sort Order for View		
Number of Decimals	0	0
Trt Treatment	Rate	Growth
No. Name	Rate Unit	Stage
		11
		12
7 SHARPEN	1 fl oz/a	7 DAY
PROWL H20	2.6 pt/a	7 DAY
ROUNDUP ORIGINAL	32 fl oz/a	7 DAY
MSO	1 % v/v	7 DAY
AMS	17 lb/100 gal	7 DAY
ROUNDUP ORIGINAL	32 fl oz/a	6WAP
NIS	0.25 % v/v	6WAP
AMS	17 lb/100 gal	6WAP
8 VERDICT	7.5 fl oz/a	7 DAY
ROUNDUP ORIGINAL	32 fl oz/a	7 DAY
MSO	1 % v/v	7 DAY
AMS	17 lb/100 gal	7 DAY
ROUNDUP ORIGINAL	32 fl oz/a	6WAP
NIS	0.25 % v/v	6WAP
AMS	17 lb/100 gal	6WAP
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

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

NO TILL SOYBEAN EARLY PREPLANT IV

Trial ID: S11026 Protocol ID: BASF KIXOR SB
Location: LEXINGTON, KY Study Director: CHARLES SLACK
Project ID: Investigator: Charles H Slack
Sponsor Contact: GREG STAPLETON

Pest Type

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

Pest Code

SETFA, *Setaria faberi*, = US

AMBTR, *Ambrosia trifida*, = US

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 IV

Trial ID: S11026 Protocol ID: BASF KIXOR SB
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: GREG STAPLETON

General Trial Information

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

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 4-29-2011

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

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 4031
BBCH Scale: BSOY **Planting Date:** 5-10-2011
Planting Method: DRILLE drilled **Rate, Unit:** 200000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 7 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 64 F
Soil Moisture: WET wet **Emergence Date:** 5-15-2011

Plant and Soil Science, U of KY Weed Science Research

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: 6.67 FT **Site Type:** FIELD field
Plot Length, Unit: 44 FT
Plot Area, Unit: 293.48 FT² **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RAOBL 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: WEWEDR wet-wet-dry
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2 MI

Application Description

	A	B
Application Date:	4-29-2011	6-21-2011
Time of Day:	11 AM	2 PM
Application Method:	SPRAY	SPRAY
Application Timing:	7 DAY	6 WAP
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	59 F	85 F
% Relative Humidity:	85	70
Wind Velocity, Unit:	8 MPH	6 MPH
Wind Direction:	NW	SW
Soil Temperature, Unit:	60 F	74 F
Soil Moisture:	VERWET	GOOD
% Cloud Cover:	20	40
Next Rain Occurred On:	5-1-2011	6-22-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Height, Unit:		6 IN

Pest Stage At Each Application

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

Application Equipment

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

Plant and Soil Science, U of KY Weed Science Research

NO TILL SOYBEAN IV

Trial ID: S11027 Protocol ID: CHEM-FOMME1104
 Location: LEXINGTON, KY Study Director: CHARLES H SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: BRENT JACOBSON

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA				
Pest Code		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi				
Pest Scientific Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail				
Pest Name														
Crop Code	GLXMA				GLXMA				GLXMA					
BBCH Scale	BSOY				BSOY				BSOY					
Crop Scientific Name	Glycine max				Glycine max				Glycine max					
Crop Name	Soybean				Soybean				Soybean					
Description														
Part Rated														
Rating Date	6-21-2011	6-21-2011	6-21-2011	6-21-2011	7-5-2011	7-5-2011	7-5-2011	7-5-2011	7-5-2011	7-5-2011				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
SE Name														
SE Description														
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK				
Days After First/Last Applic.	41 14	41 14	41 14	41 14	55 28	55 28	55 28	55 28	55 28	55 28				
Trt-Eval Interval														
Plant-Eval Interval	42 DP-1	42 DP-1	42 DP-1	42 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1				
Days After Emergence	35 DE-1	35 DE-1	35 DE-1	35 DE-1	49 DE-1	49 DE-1	49 DE-1	49 DE-1	49 DE-1	49 DE-1				
ARM Action Codes	P	P	P	P	P	P	P	P	P	P				
Sort Order for View														
Number of Decimals	0	0	0	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Growth Unit	Stage	1	2	3	4	5	6	7	8	9	10
1	GLYFOS X-TRA AMS CHA-044 IGNITE 280 AMS	1 lb ai/a 3.7 % v/v 0.99 lb ai/a 29 oz/a 3.7 % v/v	PRE PRE MP MP MP		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
2	GLYFOS X-TRA AMS CHA-044 IGNITE 280 AMS	1 lb ai/a 3.7 % v/v 1.33 lb ai/a 29 oz/a 2.7 % v/v	PRE PRE MP MP MP		0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
3	GLYFOS X-TRA AMS CHA-044 IGNITE 280 AMS	1 lb ai/a 3.7 % v/v 1.66 lb ai/a 29 oz/a 2.7 % v/v	PRE PRE MP MP MP		0 a	99 a	99 a	99 a	0 a	99 a	99 a	93 a	0 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA				
Pest Code		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi				
Pest Scientific Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail				
Pest Name														
Crop Code	GLXMA				GLXMA				GLXMA					
BBCH Scale	BSOY				BSOY				BSOY					
Crop Scientific Name	Glycine max				Glycine max				Glycine max					
Crop Name	Soybean				Soybean				Soybean					
Description														
Part Rated														
Rating Date	6-21-2011	6-21-2011	6-21-2011	6-21-2011	7-5-2011	7-5-2011	7-5-2011	7-5-2011	7-5-2011	7-5-2011				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
SE Name														
SE Description														
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK				
Days After First/Last Applic.	41 14	41 14	41 14	41 14	55 28	55 28	55 28	55 28	55 28	55 28				
Trt-Eval Interval														
Plant-Eval Interval	42 DP-1	42 DP-1	42 DP-1	42 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1				
Days After Emergence	35 DE-1	35 DE-1	35 DE-1	35 DE-1	49 DE-1	49 DE-1	49 DE-1	49 DE-1	49 DE-1	49 DE-1				
ARM Action Codes	P	P	P	P	P	P	P	P	P	P				
Sort Order for View														
Number of Decimals	0	0	0	0	0	0	0	0	0	0				
Trt Treatment	Rate	Growth												
No.	Name	Rate	Unit	Stage	1	2	3	4	5	6	7	8	9	10
4	GLYFOS X-TRA AMS CHA-044 IGNITE 280 AMS	1 lb ai/a 3.7 % v/v 3.3 lb ai/a 29 oz/a 2.7 % v/v	PRE PRE MP MP MP	PRE	0 a	99 a	99 a	99 a	0 a	99 a	96 a	93 a	0 a	99 a
5	GLYFOS X-TRA AMS DAWN STALWART IGNITE 280 AMS	1 lb ai/a 3.7 % v/v 0.375 lb ai/a 1 lb ai/a 29 oz/a 2.7 % v/v	PRE PRE MP MP MP MP	PRE	0 a	99 a	99 a	99 a	0 a	99 a	99 a	99 a	0 a	99 a
6	GLYFOS X-TRA AMS PREFIX IGNITE 280 AMS	1 lb ai/a 3.7 % v/v 1.32 lb ai/a 29 oz/a 2.7 % v/v	PRE PRE MP MP MP	PRE	0 a	99 a	99 a	99 a	0 a	99 a	99 a	96 a	0 a	99 a
7	GLYFOS X-TRA AMS PREFIX IGNITE 280 AMS	1 lb ai/a 3.7 % v/v 1.65 lb ai/a 29 oz/a 2.7 % v/v	PRE PRE MP MP MP	PRE	0 a	99 a	99 a	99 a	0 a	99 a	96 a	93 a	0 a	99 a

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA
Pest Code										
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi
Pest Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail
Crop Code	GLXMA				GLXMA				GLXMA	
BBCH Scale	BSOY				BSOY				BSOY	
Crop Scientific Name	Glycine max				Glycine max				Glycine max	
Crop Name	Soybean				Soybean				Soybean	
Description										
Part Rated										
Rating Date	6-21-2011	6-21-2011	6-21-2011	6-21-2011	7-5-2011	7-5-2011	7-5-2011	7-5-2011	7-5-2011	7-5-2011
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
SE Name										
SE Description										
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	41 14	41 14	41 14	41 14	55 28	55 28	55 28	55 28	55 28	55 28
Trt-Eval Interval										
Plant-Eval Interval	42 DP-1	42 DP-1	42 DP-1	42 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1
Days After Emergence	35 DE-1	35 DE-1	35 DE-1	35 DE-1	49 DE-1	49 DE-1	49 DE-1	49 DE-1	49 DE-1	49 DE-1
ARM Action Codes	P	P	P	P	P	P	P	P	P	P
Sort Order for View										
Number of Decimals	0	0	0	0	0	0	0	0	0	0
Trt Treatment										
Rate										
Growth										
No. Name	1	2	3	4	5	6	7	8	9	10
Rate Unit										
Growth Stage										
8 UNTREATED	0 a	0 b	0 b	0 b	0 a	0 b	0 b	0 b	0 a	0 b
LSD (P=.05)	0.0	0.0	0.0	0.0	0.0	0.0	4.2	7.7	0.0	0.0
Standard Deviation	0.0	0.0	0.0	0.0	0.0	0.0	2.4	4.4	0.0	0.0
CV	0.0	0.0	0.0	0.0	0.0	0.0	2.8	5.21	0.0	0.0
Replicate F	0.000	0.000	0.000	0.000	0.000	0.000	2.333	3.504	0.000	0.000
Replicate Prob(F)	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.1335	0.0584	1.0000	1.0000
Treatment F	0.000	0.000	0.000	0.000	0.000	0.000	625.250	181.389	0.000	0.000
Treatment Prob(F)	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0001	0.0001	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

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		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Part Rated		
Rating Date	7-5-2011	7-5-2011
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
SE Name		
SE Description		
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.	55 28	55 28
Trt-Eval Interval		
Plant-Eval Interval	56 DP-1	56 DP-1
Days After Emergence	49 DE-1	49 DE-1
ARM Action Codes	P	P
Sort Order for View		
Number of Decimals	0	0
Trt No.	11	12
Treatment Name		
Rate		
Unit		
Growth Stage		
1	99 a	99 a
GLYFOS X-TRA	1 lb ai/a PRE	
AMS	3.7 % v/v PRE	
CHA-044	0.99 lb ai/a MP	
IGNITE 280	29 oz/a MP	
AMS	3.7 % v/v MP	
2	99 a	99 a
GLYFOS X-TRA	1 lb ai/a PRE	
AMS	3.7 % v/v PRE	
CHA-044	1.33 lb ai/a MP	
IGNITE 280	29 oz/a MP	
AMS	2.7 % v/v MP	
3	99 a	93 a
GLYFOS X-TRA	1 lb ai/a PRE	
AMS	3.7 % v/v PRE	
CHA-044	1.66 lb ai/a MP	
IGNITE 280	29 oz/a MP	
AMS	2.7 % v/v MP	

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed
Pest Code	AMBTR	IPOSS
Pest Scientific Name	Ambrosia trifid	Ipomoea sp.
Pest Name	Giant ragweed	Morning glory
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Part Rated		
Rating Date	7-5-2011	7-5-2011
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
SE Name		
SE Description		
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.	55 28	55 28
Trt-Eval Interval		
Plant-Eval Interval	56 DP-1	56 DP-1
Days After Emergence	49 DE-1	49 DE-1
ARM Action Codes	P	P
Sort Order for View		
Number of Decimals	0	0
Trt Treatment	Rate	Growth
No. Name	Rate Unit Stage	
	11	12
4 GLYFOS X-TRA	1 lb ai/a PRE	96 a
AMS	3.7 % v/v PRE	
CHA-044	3.3 lb ai/a MP	
IGNITE 280	29 oz/a MP	
AMS	2.7 % v/v MP	93 a
5 GLYFOS X-TRA	1 lb ai/a PRE	99 a
AMS	3.7 % v/v PRE	
DAWN	0.375 lb ai/a MP	
STALWART	1 lb ai/a MP	
IGNITE 280	29 oz/a MP	
AMS	2.7 % v/v MP	99 a
6 GLYFOS X-TRA	1 lb ai/a PRE	99 a
AMS	3.7 % v/v PRE	
PREFIX	1.32 lb ai/a MP	
IGNITE 280	29 oz/a MP	
AMS	2.7 % v/v MP	96 a
7 GLYFOS X-TRA	1 lb ai/a PRE	96 a
AMS	3.7 % v/v PRE	
PREFIX	1.65 lb ai/a MP	
IGNITE 280	29 oz/a MP	
AMS	2.7 % v/v MP	93 a

Means followed by same letter do not significantly differ (P=.05, LSD)

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		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Part Rated		
Rating Date	7-5-2011	7-5-2011
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
SE Name		
SE Description		
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.	55 28	55 28
Trt-Eval Interval		
Plant-Eval Interval	56 DP-1	56 DP-1
Days After Emergence	49 DE-1	49 DE-1
ARM Action Codes	P	P
Sort Order for View		
Number of Decimals	0	0
Trt Treatment		
No. Name	Rate Unit Stage	
8 UNTREATED	11	12
	0 b	0 b
LSD (P=.05)	4.2	7.7
Standard Deviation	2.4	4.4
CV	2.8	5.21
Replicate F	2.333	3.504
Replicate Prob(F)	0.1335	0.0584
Treatment F	625.250	181.389
Treatment Prob(F)	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

NO TILL SOYBEAN IV

Trial ID: S11027 Protocol ID: CHEM-FOMME1104
Location: LEXINGTON, KY Study Director: CHARLES H 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

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Unit

PERCENT = percent

Plant-Eval Interval

42 DP-1 = 1 5-10-2011

56 DP-1 = 1 5-10-2011

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: S11027 Protocol ID: CHEM-FOMME1104
 Location: LEXINGTON, KY Study Director: CHARLES H 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: 5-10-2011

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

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: S070147 LL **Description:** LIBERTY LINK
BBCH Scale: BSOY **Planting Date:** 5-10-2011
Planting Method: DRILLE drilled **Rate, Unit:** 210000 S/A
Depth, Unit: 1.25 IN
Row Spacing, Unit: 7 IN
Seed Bed: MEDTRA medium/trashy **Soil Temperature, Unit:** 64 F
Soil Moisture: GOOD good **Emergence Date:** 5-17-2011

Plant and Soil Science, U of KY Weed Science Research

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: 6.67 FT **Site Type:** FIELD field
Plot Length, Unit: 44 FT
Plot Area, Unit: 293.48 FT² **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RACOB Randomized Complete Block (RCB)

Soil Description

Description Name: LANTON
% Sand: 7 **% OM:** 4.0 **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: WEWEDR wet-wet-dry
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2 MI

Application Description

	A	B
Application Date:	5-11-2011	6-7-2011
Time of Day:	11 AM	11 AM
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	MP
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	80 F	82 F
% Relative Humidity:	57	45
Wind Velocity, Unit:	6 MPH	4 MPH
Wind Direction:	SW	SW
Soil Temperature, Unit:	67 F	74 F
Soil Moisture:	EXCELL	GOOD
% Cloud Cover:	10	20
Next Rain Occurred On:	5-13-2011	6-10-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Height, Unit:		6 IN

Pest Stage At Each Application

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

Application Equipment

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

Plant and Soil Science, U of KY Weed Science Research

SOYBEAN POSTEMERGENCE II

Trial ID: S11030 Protocol ID: SYNGENTA-ZSC050A4
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: SCOTT CULLY

Pest Type		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMACH Amaranthus hyb> Smooth pigweed		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMACH Amaranthus hyb> Smooth pigweed	
Pest Code							
Pest Scientific Name							
Pest Name							
Crop Code	GLXMA			GLXMA			GLXMA
BBCH Scale	BSOY			BSOY			BSOY
Crop Scientific Name	Glycine max			Glycine max			Glycine max
Crop Name	Soybean			Soybean			Soybean
Description							
Part Rated							
Rating Date							11-2-2011
Rating Type	INJURY	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU
SE Name							
Rating Timing	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.							173 91
Trt-Eval Interval							
Plant-Eval Interval							173 DP-1
Days After Emergence							167 DE-1
ARM Action Codes	P	P	P	P	P	P	TY1
Sort Order for View							
Number of Decimals	0	0	0	0	0	0	0
Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	1	2	3	4	5
			6	7	8	9	
1 NK 39-A3			0	100	100	0	100
TOUCHDOWN TOTAL	24 fl oz/a	4-6"WEEDS					
N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS					
TOUCHDOWN TOTAL	24 fl oz/a	B+21 DAYS					
N-PAK AMS LIQUID	2.5 % v/v	B+21 DAYS					
QUILT XCEL	10.5 fl oz/a	R3					
ENDIGO	3.5 fl oz/a	R3					
2 NK 39-A3			0	100	100	0	100
FLEXSTAR GT	3.5 pt/a	4-6"WEEDS					
N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS					
TOUCHDOWN TOTAL	24 fl oz/a	B+21 DAYS					
N-PAK AMS LIQUID	2.5 % v/v	B+21 DAYS					
QUILT XCEL	10.5 fl oz/a	R3					
ENDIGO	3.5 fl oz/a	R3					

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMACH Amaranthus hyb> Smooth pigweed		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMACH Amaranthus hyb> Smooth pigweed				
Pest Code										
Pest Scientific Name										
Pest Name										
Crop Code	GLXMA			GLXMA			GLXMA			
BBCH Scale	BSOY			BSOY			BSOY			
Crop Scientific Name	Glycine max			Glycine max			Glycine max			
Crop Name	Soybean			Soybean			Soybean			
Description										
Part Rated										
Rating Date							11-2-2011			
Rating Type	INJURY	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	YIELD			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU			
SE Name										
Rating Timing	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK				
Days After First/Last Applic.							173 91			
Trt-Eval Interval										
Plant-Eval Interval							173 DP-1			
Days After Emergence							167 DE-1			
ARM Action Codes	P	P	P	P	P	P	TY1			
Sort Order for View										
Number of Decimals	0	0	0	0	0	0	0			
Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4	5	6	9
3	NK 39-A3 PREFIX TOUCHDOWN TOTAL N-PAK AMS LIQUID QUILT XCEL ENDIGO	2 pt/a 24 fl oz/a 2.5 % v/v 10.5 fl oz/a 3.5 fl oz/a	PRE 4-6"WEEDS 4-6"WEEDS R3 R3	0	100	100	0	100	100	49
4	NK 39-A3 TOUCHDOWN TOTAL N-PAK AMS LIQUID TOUCHDOWN TOTAL N-PAK AMS LIQUID	24 fl oz/a 2.5 % v/v 24 fl oz/a 2.5 % v/v	4-6"WEEDS 4-6"WEEDS B+21 DAYS B+21 DAYS	0	100	100	0	100	100	41
5	NK 39-A3 FLEXSTAR GT N-PAK AMS LIQUID TOUCHDOWN TOTAL N-PAK AMS LIQUID	3.5 pt/a 2.5 % v/v 24 fl oz/a 2.5 % v/v	4-6"WEEDS 4-6"WEEDS B+21 DAYS B+21 DAYS	0	100	100	0	100	100	43
6	NK 39-A3 PREFIX TOUCHDOWN TOTAL N-PAK AMS LIQUID	2 pt/a 24 fl oz/a 2.5 % v/v	PRE B+21 DAYS B+21 DAYS	0	100	100	0	100	100	44
7	NK 39-A3 TOUCHDOWN TOTAL N-PAK AMS LIQUID TOUCHDOWN TOTAL N-PAK AMS LIQUID QUADRIS WARRIOR II	24 fl oz/a 2.5 % v/v 24 fl oz/a 2.5 % v/v 6 fl oz/a 1.6 fl oz/a	4-6"WEEDS 4-6"WEEDS B+21 DAYS B+21 DAYS R3 R3	0	100	100	0	100	100	58

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMACH Amaranthus hyb> Smooth pigweed		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMACH Amaranthus hyb> Smooth pigweed	
Pest Code							
Pest Scientific Name							
Pest Name							
Crop Code	GLXMA			GLXMA			GLXMA
BBCH Scale	BSOY			BSOY			BSOY
Crop Scientific Name	Glycine max			Glycine max			Glycine max
Crop Name	Soybean			Soybean			Soybean
Description							
Part Rated							
Rating Date							11-2-2011
Rating Type	INJURY	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU
SE Name							
Rating Timing	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.							173 91
Trt-Eval Interval							
Plant-Eval Interval							173 DP-1
Days After Emergence							167 DE-1
ARM Action Codes	P	P	P	P	P	P	TY1
Sort Order for View							
Number of Decimals	0	0	0	0	0	0	0
Trt No.							
Treatment Name							
Rate							
Growth Stage							
	1	2	3	4	5	6	9
8 NK 39-A3	0	100	100	0	100	100	59
FLEXSTAR GT							
N-PAK AMS LIQUID							
TOUCHDOWN TOTAL							
N-PAK AMS LIQUID							
QUADRIS							
WARRIOR II							
9 NK 39-A3	0	100	100	0	100	100	52
PREFIX							
TOUCHDOWN TOTAL							
N-PAK AMS LIQUID							
QUADRIS							
WARRIOR II							
LSD (P=.05)	.	.	.	.	.	.	.
Standard Deviation	.	.	.	.	.	.	.
CV	.	.	.	.	.	.	.

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

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

Crop Code
GLXMA, BSOY, Glycine max, = US

Rating Type
YIELD = yield

Rating Unit
PERCENT = percent
BU = bushel

Plant-Eval Interval

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

173 DP-1 = 1 5-13-2011

ARM Action Codes

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

TY1 = $1.861538 * [C7] * (100 - [C8]) / 87$

Plant and Soil Science, U of KY Weed Science Research

SOYBEAN POSTEMERGENCE II

Trial ID: S11030 Protocol ID: SYNGENTA-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: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-13-2011

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

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: NK 39-A3
BBCH Scale: BSOY **Planting Date:** 5-13-2011
Planting Method: PLANTD planted **Rate, Unit:** 170000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE fine
Soil Moisture: GOOD good **Soil Temperature, Unit:** 69 F
Harvest Date: 11-2-2011 **Emergence Date:** 5-19-2011
Harvested Width, Unit: 5 FT **Harvest Equipment:** COMBINE
% Standard Moisture: 13.0 **Harvested Length, Unit:** 78 FT

Plant and Soil Science, U of KY Weed Science Research

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: 15 FT **Site Type:** FIELD field
Plot Length, Unit: 100 FT
Plot Area, Unit: 1500 FT² **Tillage Type:** CONTIL conventional-till
Replications: 1 **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:** 2.5 MI

Application Description

	A	B	C	D
Application Date:	5-13-2011	6-10-2011	7-1-2011	8-3-2011
Time of Day:	10 AM	10 AM	1 PM	10 AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	4-6"WEEDS	B+21D	R3
Application Placement:	BROSOI	BROFOL	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	SARA CARTER	B PATTON
Air Temperature, Unit:	78 F	78 F	82 F	82 F
% Relative Humidity:	50	50	75	85
Wind Velocity, Unit:	4 MPH	4 MPH	3 MPH	5 MPH
Wind Direction:	SW	SW	WSW	SW
Soil Temperature, Unit:	69 F	79 F	74 F	80 F
Soil Moisture:	EXCELL	POOR	POOR	GOOD
% Cloud Cover:	10	10	15	25
Next Rain Occurred On:	5-13-2011	6-10-2011	7-3-2011	8-3-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application				
	A	B	C	D
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:				BBCH
Stage Majority, Percent:				R3 90
Height, Unit:		6 IN	8 IN	42 IN

Pest Stage At Each Application				
	A	B	C	D
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W	SETFA W
Height, Unit:		4 IN	6 IN	8 IN
Pest 2 Code, Type, Scale:	AMACH W	AMACH W	AMACH W	AMACH W
Height, Unit:		4 IN	6 IN	10 IN

Application Equipment				
	A	B	C	D
Appl. Equipment:	ATV	BACKPACK	BACKPACK	BACKPACK
Equipment Type:	ALTEVE	BELSPR	BELSPR	BELSPR
Operation Pressure, Unit:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN	FLAT FAN
Nozzle Size:	8004 DG	8004 DG	8004 DG	8004 DG
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN	20 IN
Boom Length, Unit:	15 FT	15 FT	15 FT	15 FT
Boom Height, Unit:	30 IN	30 IN	30 IN	30 IN
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH	4 MPH
Carrier:	WATER	WATER	WATER	WATER
Spray Volume, Unit:	24 GPA	24 GPA	24 GPA	24 GPA
Propellant:	CO2	CO2	CO2	CO2

Plant and Soil Science, U of KY Weed Science Research

SOYBEAN PLANTING DATES

Trial ID: S11040 Protocol ID: MON-2011-01-24-19
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: SARA ALLEN

Pest Type Pest Code Pest Scientific Name				W Weed SETFA Setaria faberi	W Weed CHEAL Chenopodium al>			
Pest Name Crop Code BBCH Scale Crop Scientific Name	GLXMA BSOY Glycine max	GLXMA BSOY Glycine max	GLXMA BSOY Glycine max	Giant foxtail	Common lambsqu>	GLXMA BSOY Glycine max		
Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description Rating Timing Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval Days After Emergence ARM Action Codes Sort Order for View Number of Decimals	1 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	10-5-2011 YIELD BU 13.0% 181 121 167 DP-1 160 DE-1 TY2		
Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5	10
1 WARRANT	1.5 qt/a	14D-A	3 de	3 de	0 b	99 a	91 b	61 ab
2 WARRANT	3 qt/a	14D-A	13 bc	13 bc	0 b	99 a	93 b	64 a
3 WARRANT	1.5 qt/a	PRE-B	0 e	0 e	0 b	97 a	85 d	56 bcd
4 WARRANT	3 qt/a	PRE-B	0 e	0 e	0 b	97 a	90 bc	58 bcd
5 WARRANT	1.5 qt/a	V3-C	3 de	3 de	0 b	98 a	87 cd	55 cd
6 WARRANT	3 qt/a	V3-C	5 de	3 de	0 b	97 a	85 d	58 bcd
7 VALOR SX	2 oz wt/a	PRE-B	15 b	15 b	0 b	99 a	99 a	60 abc
8 ROUNDUP WeatherMAX AMS	0.75 lb ae/a 5 % v/v	V3-C V3-C	0 e	0 e	0 b	99 a	99 a	58 bcd
9 WARRANT	1.5 qt/a	14D-D	3 de	3 de	0 b	99 a	99 a	55 cd
10 WARRANT	3 qt/a	14D-D	0 e	3 de	0 b	99 a	99 a	57 bcd
11 WARRANT	1.5 qt/a	PRE-E	0 e	0 e	0 b	99 a	99 a	54 d
12 WARRANT	3 qt/a	PRE-E	8 cd	8 cd	0 b	99 a	99 a	57 bcd

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type				W Weed	W Weed	
Pest Code				SETFA	CHEAL	
Pest Scientific Name				Setaria faberi	Chenopodium al>	
Pest Name				Giant foxtail	Common lambsqu>	
Crop Code	GLXMA	GLXMA	GLXMA			GLXMA
BBCH Scale	BSOY	BSOY	BSOY			BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max			Glycine max
Crop Name	Soybean	Soybean	Soybean			Soybean
Description						
Part Rated						
Rating Date						10-5-2011
Rating Type	INJURY	INJURY	INJURY	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU
SE Name						
SE Description						13.%
Rating Timing	1 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	
Days After First/Last Applic.						181 121
Trt-Eval Interval						
Plant-Eval Interval						167 DP-1
Days After Emergence						160 DE-1
ARM Action Codes	P	P	P	P	P	TY2
Sort Order for View						
Number of Decimals	0	0	0	0	0	0
Trt No.	Treatment	Rate	Growth			
	Name	Rate Unit	Stage	1	2	3
13	WARRANT	1.5 qt/a	V3-F	3 de	3 de	0 b
						99 a
						99 a
						55 cd
14	WARRANT	3 qt/a	V3-F	3 de	3 de	0 b
						99 a
						99 a
						57 bcd
15	VALOR SX	2 oz wt/a	PRE-E	33 a	33 a	10 a
						99 a
						99 a
						55 d
16	ROUNDUP WeatherMAX AMS	0.75 lb ae/a 5 % v/v	V3-F V3-F	0 e	0 e	0 b
						99 a
						99 a
						56 bcd
LSD (P=.05)				6.5	6.7	0.0
Standard Deviation				4.6	4.7	0.0
CV				86.2	88.46	0.0
						2.6
						1.8
						1.85
						3.4
						2.4
						2.51
						5.0
						3.5
						6.14
Replicate F				0.894	0.849	0.000
Replicate Prob(F)				0.4516	0.4744	1.0000
Treatment F				13.967	13.113	0.000
Treatment Prob(F)				0.0001	0.0001	1.0000
						4.529
						0.0074
						1.000
						0.4718
						0.847
						0.4754
						0.0001
						26.751
						0.0001
						2.129
						0.0259

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

Pest Code
SETFA, Setaria faberi, = US
CHEAL, Chenopodium album, = US

Crop Code
GLXMA, BSOY, Glycine max, = US

Rating Type
YIELD = yield

Rating Unit
PERCENT = percent
BU = bushel

Plant-Eval Interval

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

167 DP-1 = 1 4-21-2011

ARM Action Codes

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

TY2 = $5.808 * [C8] * (100 - [C9]) / 87$

Plant and Soil Science, U of KY Weed Science Research

SOYBEAN PLANTING DATES

Trial ID: S11040 Protocol ID: MON-2011-01-24-19
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: SARA ALLEN

General Trial Information

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

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 4-7-2011

Trial Location

City: LEXINGTON USA 49.376656 - 24.53833
State/Prov.: KENTUCKY -124.715843 - -66.968887
Postal Code: 40511
Country: USA

Personnel

Study Director: 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
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
Variety: AG 4031
Description: 30" ROWS
BBCH Scale: BSOY **Planting Date:** 4-21-2011
Planting Method: PLANTD planted **Rate, Unit:** 174000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: SMOOTH smooth **Soil Temperature, Unit:** 54 F
Soil Moisture: EXCELL excellent **Emergence Date:** 4-28-2011
Harvest Date: 10-5-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 28 FT
% Standard Moisture: 13.0

Crop 2: GLXMA Glycine max Soybean
Variety: AG4031
Planting Date: 5-5-2011
BBCH Scale: BSOY **Rate, Unit:** 174000 S/A
Planting Method: PLANTD planted
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: SMOOTH smooth **Soil Temperature, Unit:** 57 F
Soil Moisture: VERWET very wet **Emergence Date:** 5-13-2011
Harvest Date: 10-5-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 25 FT
% Standard Moisture: 13.0

Pest Description

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

Pest 2 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: 33 FT
Plot Area, Unit: 330 FT2 **Tillage Type:** CONTIL conventional-till
Replications: 4 **Study Design:** SPLBLO Split-Block

Soil Description

Description Name: MAURY
% Sand: 6 **% OM:** 2.6 **Texture:** SIL silt loam
% Silt: 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM
% Clay: 32 **CEC:** 17 **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:** 2.25 MI

Plant and Soil Science, U of KY Weed Science Research

Application Description						
	A	B	C	D	E	F
Application Date:	4-7-2011	4-21-2011	5-31-2011	4-21-2011	5-5-2011	6-6-2011
Time of Day:	10 AM	4 PM	2 PM	11 AM	1 PM	11 AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	14 DAY A	PRE A	V3 A	14 DAY B	PRE B	V3 B
Application Placement:	BROSOI	BROSOI	BROFOL	BROSOI	BROSOI	BROSOI
Applied By:	SARA CARTER	SARA CARTER	C H SLACK	SARA CARTER	SARA CARTER	SARA CARTER
Air Temperature, Unit:	60 F	52 F	80 F	52 F	52 F	77 F
% Relative Humidity:	45	40	30	40	30	45
Wind Velocity, Unit:	8 MPH	8 MPH	6 MPH	8 MPH	5 MPH	6 MPH
Wind Direction:	SSW	ENE	SW	ENE	NE	SSW
Soil Temperature, Unit:	54 F	58 F	72 F	52 F	57 F	77 F
Soil Moisture:	GOOD	GOOD	ABONOR	GOOD	ABONOR	ABONOR
% Cloud Cover:	0	10	20	10	15	10
Next Rain Occurred On:	4-8-2011	4-22-2011	6-10-2011	4-22-2011	5-6-2011	6-10-2011

Crop Stage At Each Application						
	A	B	C	D	E	F
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH
Stage Majority, Percent:			V3 85			
Crop 2 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH
Stage Majority, Percent:						V3 90

Pest Stage At Each Application						
	A	B	C	D	E	F
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W	SETFA W	SETFA W	SETFA W
Height, Unit:			2 IN			4 IN
Pest 2 Code, Type, Scale:	CHEAL W	CHEAL W	CHEAL W	CHEAL W	CHEAL W	CHEAL W
Height, Unit:			4 IN			6 IN

Plant and Soil Science, U of KY Weed Science Research

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

Plant and Soil Science, U of KY Weed Science Research

SOYBEAN PREEMERGENCE & POSTEMERGENCE

Trial ID: S11041 Protocol ID: MON-2011-01-24-23
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: CHRISTOPHER KAMIENSKI

Pest Type	GLXMA		GLXMA		GLXMA		W Weed	W Weed	W Weed	GLXMA		
Pest Code	BSOY		BSOY		BSOY		SETFA	AMBTR	IPOSS	BSOY		
Pest Scientific Name	Glycine max		Glycine max		Glycine max		Setaria faberi	Ambrosia trifi->	Ipomoea sp.	Glycine max		
Pest Name	Soybean		Soybean		Soybean		Giant foxtail	Giant ragweed	Morning glory	Soybean		
Crop Code	GLXMA		GLXMA		GLXMA					GLXMA		
BBCH Scale	BSOY		BSOY		BSOY					BSOY		
Crop Scientific Name	Glycine max		Glycine max		Glycine max					Glycine max		
Crop Name	Soybean		Soybean		Soybean					Soybean		
Description												
Part Rated												
Rating Date	5-19-2011		6-2-2011		6-24-2011		6-24-2011		6-24-2011		7-13-2011	
Rating Type	INJURY		INJURY		INJURY		CONTROL		CONTROL		INJURY	
Rating Unit	PERCENT		PERCENT		PERCENT		PERCENT		PERCENT		PERCENT	
SE Name												
SE Description					BEFORE POST D		BEFORE POST D		BEFORE POST D		AFTER POST D	
Rating Timing	1 WEEK PRE		3 WEEK PRE									
Days After First/Last Applic.	7 7		21 2		43 18		43 18		43 18		62 15	
Trt-Eval Interval												
Plant-Eval Interval	8 DP-1		22 DP-1		44 DP-1		44 DP-1		44 DP-1		63 DP-1	
Days After Emergence	2 DE-1		16 DE-1		38 DE-1		38 DE-1		38 DE-1		57 DE-1	
ARM Action Codes	P		P		P		P		P		P	
Sort Order for View												
Number of Decimals	0				0		0		0		0	
Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4	5	6	7	
1	ROUNDUP POWERMAX AMS	0.77 lb ae/a	MP	2 % w/v	0 b	0.0 b	0 b	0 c	0 c	0 c	0 b	
2	ROUNDUP POWERMAX AMS	0.77 lb ae/a	MP	2 % w/w	0 b	0.0 b	0 b	0 c	0 c	0 c	0 b	
	ROUNDUP POWERMAX AMS	0.77 lb ae/a	++MP	2 % w/v								
3	ROUNDUP POWERMAX AMS	0.77 lb ae/a	MP	2 % w/v	0 b	0.0 b	0 b	0 c	0 c	0 c	0 b	
	WARRANT	1.13 lb ai/a	MP									
4	ROUNDUP POWERMAX AMS	0.77 lb ae/a	MP	2 % w/v	0 b	0.0 b	0 b	0 c	0 c	0 c	0 b	
	WARRANT	1.13 lb ai/a	MP									
	ROUNDUP POWERMAX AMS	0.77 lb ae/a	++MP	2 % w/v								

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description	GLXMA BSOY Glycine max Soybean		GLXMA BSOY Glycine max Soybean		GLXMA BSOY Glycine max Soybean		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	GLXMA BSOY Glycine max Soybean
	5-19-2011 INJURY PERCENT	6-2-2011 INJURY PERCENT	6-24-2011 INJURY PERCENT	6-24-2011 CONTROL PERCENT	6-24-2011 CONTROL PERCENT	6-24-2011 CONTROL PERCENT	6-24-2011 CONTROL PERCENT	7-13-2011 INJURY PERCENT		
Rating Timing	1 WEEK PRE		3 WEEK PRE		BEFORE POST D	BEFORE POST D	BEFORE POST D	BEFORE POST D	AFTER POST D	
Days After First/Last Applic.	7 7	21 2	43 18	43 18	43 18	43 18	43 18	62 15		
Trt-Eval Interval	8 DP-1	22 DP-1	44 DP-1	44 DP-1	44 DP-1	44 DP-1	44 DP-1	63 DP-1		
Plant-Eval Interval	2 DE-1	16 DE-1	38 DE-1	38 DE-1	38 DE-1	38 DE-1	38 DE-1	57 DE-1		
Days After Emergence	P	P	P	P	P	P	P	P		
ARM Action Codes										
Sort Order for View	0		0	0	0	0	0	0		
Number of Decimals										
Trt Treatment No. Name	Rate	Unit	Growth Stage	1	2	3	4	5	6	7
5 ROUNDUP POWERMAX AMS WARRANT	0.77 2 %	lb ae/a w/v	MP MP	0 b	0.0 b	0 b	0 c	0 c	0 c	0 b
ROUNDUP POWERMAX AMS WARRANT	0.77 2 %	lb ae/a w/v	++MP ++MP							
6 WARRANT ROUNDUP POWERMAX AMS	1.13 0.77 2 %	lb ai/a lb ae/a w/v	PRE +MP +MP	0 b	0.0 b	0 b	99 a	89 ab	89 ab	0 b
7 VALOR ROUNDUP POWERMAX AMS	0.0625 0.77 2 %	lb ai/a lb ae/a w/v	PRE +MP +MP	0 b	0.0 b	0 b	99 a	87 ab	92 a	0 b
8 VALOR ROUNDUP POWERMAX AMS WARRANT	0.0625 0.77 2 % 1.13	lb ai/a lb ae/a w/v lb ai/a	PRE +MP +MP +MP	0 b	0.0 b	0 b	99 a	89 ab	93 a	0 b
9 GANGSTER FR ROUNDUP POWERMAX AMS	0.126 0.77 2 %	lb ai/a lb ae/a w/v	PRE +MP +MP	0 b	0.0 b	0 b	99 a	99 a	99 a	0 b
10 GANGSTER FR ROUNDUP POWERMAX AMS WARRANT	0.126 0.77 2 % 1.13	lb ai/a lb ae/a w/v lb ai/a	PRE +MP +MP +MP	0 b	0.0 b	0 b	99 a	99 a	99 a	0 b

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description	GLXMA BSOY Glycine max Soybean		GLXMA BSOY Glycine max Soybean		GLXMA BSOY Glycine max Soybean		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	GLXMA BSOY Glycine max Soybean		
	5-19-2011 INJURY PERCENT	6-2-2011 INJURY PERCENT	6-24-2011 INJURY PERCENT	6-24-2011 CONTROL PERCENT	6-24-2011 CONTROL PERCENT	6-24-2011 CONTROL PERCENT	7-13-2011 INJURY PERCENT	BEFORE POST D	BEFORE POST D	BEFORE POST D	AFTER POST D	
Rating Timing	1 WEEK PRE		3 WEEK PRE									
Days After First/Last Applic.	7	7	21	2	43	18	43	18	43	18	62	15
Trt-Eval Interval	8 DP-1		22 DP-1		44 DP-1		44 DP-1		44 DP-1		63 DP-1	
Plant-Eval Interval	2 DE-1		16 DE-1		38 DE-1		38 DE-1		38 DE-1		57 DE-1	
Days After Emergence	P		P		P		P		P		P	
ARM Action Codes	P		P		P		P		P		P	
Sort Order for View	0		0		0		0		0		0	
Number of Decimals	0		0		0		0		0		0	
Trt Treatment No. Name	Rate	Unit	Growth Stage	1	2	3	4	5	6	7		
11 AUTHORITY FIRST ROUNDUP POWERMAX AMS	0.14 lb ai/a 0.77 lb ae/a 2 % w/v	PRE +MP +MP		0 b	0.0 b	0 b	99 a	95 a	96 a	0 b		
12 AUTHORITY FIRST ROUNDUP POWERMAX AMS WARRANT	0.14 lb ai/a 0.77 lb ae/a 2 % w/v 1.13 lb ai/a	PRE +MP +MP +MP		0 b	0.0 b	0 b	99 a	94 a	97 a	0 b		
13 VALOR XLT ROUNDUP POWERMAX AMS	0.0756 lb ai/a 0.77 lb ae/a 2 % w/v	PRE +MP +MP		0 b	0.0 b	0 b	74 b	73 b	74 b	0 b		
14 VALOR XLT ROUNDUP POWERMAX AMS WARRANT	0.0756 lb ai/a 0.77 lb ae/a 2 % w/v 1.13 lb ai/a	PRE +MP +MP +MP		0 b	0.0 b	0 b	99 a	98 a	99 a	0 b		
15 AUTHORITY XL ROUNDUP POWERMAX AMS	0.175 lb ai/a 0.77 lb ae/a 2 % w/v	PRE +MP +MP		0 b	0.0 b	0 b	99 a	91 a	97 a	0 b		
16 AUTHORITY XL ROUNDUP POWERMAX AMS WARRANT	0.175 lb ai/a 0.77 lb ae/a 2 % w/v 1.13 lb ai/a	PRE +MP +MP +MP		0 b	0.0 b	0 b	99 a	95 a	98 a	0 b		

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit SE Name SE Description	GLXMA BSOY Glycine max Soybean	GLXMA BSOY Glycine max Soybean	GLXMA BSOY Glycine max Soybean	W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed IPOSS Ipomoea sp. Morning glory	GLXMA BSOY Glycine max Soybean			
Rating Date	5-19-2011	6-2-2011	6-24-2011	6-24-2011	6-24-2011	6-24-2011	7-13-2011			
Rating Type	INJURY	INJURY	INJURY	CONTROL	CONTROL	CONTROL	INJURY			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
SE Name										
SE Description			BEFORE POST D	BEFORE POST D	BEFORE POST D	BEFORE POST D	AFTER POST D			
Rating Timing	1 WEEK PRE	3 WEEK PRE								
Days After First/Last Applic.	7 7	21 2	43 18	43 18	43 18	43 18	62 15			
Trt-Eval Interval										
Plant-Eval Interval	8 DP-1	22 DP-1	44 DP-1	44 DP-1	44 DP-1	44 DP-1	63 DP-1			
Days After Emergence	2 DE-1	16 DE-1	38 DE-1	38 DE-1	38 DE-1	38 DE-1	57 DE-1			
ARM Action Codes	P	P	P	P	P	P	P			
Sort Order for View										
Number of Decimals	0		0	0	0	0	0			
Trt Treatment No. Name	Rate	Unit	Growth Stage	1	2	3	4	5	6	7
17 FIERCE ROUNDUP POWERMAX AMS	0.143 lb ai/a 0.77 lb ae/a 2 % w/v	PRE +MP +MP		5 ab	5.0 ab	5 ab	99 a	92 a	96 a	5 ab
18 FIERCE ROUNDUP POWERMAX AMS WARRANT	0.143 lb ai/a 0.77 lb ae/a 2 % w/v 1.13 lb ai/a	PRE +MP +MP +MP		10 a	10.0 a	10 a	99 a	97 a	97 a	10 a
LSD (P=.05)				5.2	5.18	5.2	16.5	17.2	17.0	5.2
Standard Deviation				3.7	3.66	3.7	11.7	12.2	12.0	3.7
CV				439.25	439.25	439.25	16.64	18.31	17.64	439.25
Replicate F				0.415	0.415	0.415	1.000	1.119	0.937	0.415
Replicate Prob(F)				0.7432	0.7432	0.7432	0.4005	0.3502	0.4296	0.7432
Treatment F				1.976	1.976	1.976	59.824	49.517	53.275	1.976
Treatment Prob(F)				0.0316	0.0316	0.0316	0.0001	0.0001	0.0001	0.0316

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	W Weed		W Weed	W Weed	W Weed		
Pest Code	SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS		
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		
Pest Name	Giant foxtail	Giant ragweed	Morning glory		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	
Description									
Part Rated									
Rating Date	7-13-2011	7-13-2011	7-13-2011	7-27-2011	7-27-2011	7-27-2011	7-27-2011	10-5-2011	
Rating Type	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	YIELD	
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU	
SE Name									
SE Description	AFTER POST D	AFTER POST D	AFTER POST D	AFTER POST D	AFTER POST D	AFTER POST D	AFTER POST D	13%	
Rating Timing									
Days After First/Last Applic.	62 15	62 15	62 15	76 29	76 29	76 29	76 29	146 99	
Trt-Eval Interval									
Plant-Eval Interval	63 DP-1	63 DP-1	63 DP-1	77 DP-1	77 DP-1	77 DP-1	77 DP-1	147 DP-1	
Days After Emergence	57 DE-1	57 DE-1	57 DE-1	71 DE-1	71 DE-1	71 DE-1	71 DE-1	141 DE-1	
ARM Action Codes	P	P	P	P	P	P	P	TY2	
Sort Order for View									
Number of Decimals	0	0	0	0	0	0	0	0	
Trt Treatment									
No. Name	8	9	10	11	12	13	14	18	
Rate									
Unit									
Growth Stage									
1 ROUNDUP POWERMAX AMS	0.77 lb ae/a MP 2 % w/v MP	99 a	99 a	99 a	0 c	99 a	94 bc	94 bcd	49 ab
2 ROUNDUP POWERMAX AMS	0.77 lb ae/a MP 2 % w/v MP	99 a	99 a	99 a	0 c	99 a	99 a	99 a	47 a-e
ROUNDUP POWERMAX AMS	0.77 lb ae/a ++MP 2 % w/v ++MP								
3 ROUNDUP POWERMAX AMS	0.77 lb ae/a MP 2 % w/v MP	99 a	99 a	99 a	0 c	99 a	89 d	92 cd	45 b-f
WARRANT	1.13 lb ai/a MP								
4 ROUNDUP POWERMAX AMS	0.77 lb ae/a MP 2 % w/v MP	99 a	99 a	99 a	0 c	99 a	99 a	99 a	51 a
WARRANT	1.13 lb ai/a MP								
ROUNDUP POWERMAX AMS	0.77 lb ae/a ++MP 2 % w/v ++MP								

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	W Weed		W Weed	W Weed	W Weed			
Pest Code	SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS			
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.			
Pest Name	Giant foxtail	Giant ragweed	Morning glory		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		
Description										
Part Rated										
Rating Date	7-13-2011	7-13-2011	7-13-2011	7-27-2011	7-27-2011	7-27-2011	7-27-2011	10-5-2011		
Rating Type	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	YIELD		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU		
SE Name										
SE Description	AFTER POST D	AFTER POST D	AFTER POST D	AFTER POST D	AFTER POST D	AFTER POST D	AFTER POST D	13%		
Rating Timing										
Days After First/Last Applic.	62 15	62 15	62 15	76 29	76 29	76 29	76 29	146 99		
Trt-Eval Interval										
Plant-Eval Interval	63 DP-1	63 DP-1	63 DP-1	77 DP-1	77 DP-1	77 DP-1	77 DP-1	147 DP-1		
Days After Emergence	57 DE-1	57 DE-1	57 DE-1	71 DE-1	71 DE-1	71 DE-1	71 DE-1	141 DE-1		
ARM Action Codes	P	P	P	P	P	P	P	TY2		
Sort Order for View										
Number of Decimals	0	0	0	0	0	0	0	0		
Trt Treatment										
No. Name	8	9	10	11	12	13	14	18		
Rate										
Unit										
Growth Stage										
5 ROUNDUP POWERMAX AMS	0.77 lb ae/a	MP	99 a	99 a	99 a	0 c	99 a	99 a	99 a	44 b-f
WARRANT	1.13 lb ai/a	MP								
ROUNDUP POWERMAX AMS	0.77 lb ae/a	++MP								
WARRANT	1.13 lb ai/a	++MP								
6 WARRANT	1.13 lb ai/a	PRE	99 a	97 b	96 c	0 c	99 a	92 cd	90 d	42 f
ROUNDUP POWERMAX AMS	0.77 lb ae/a	+MP								
	2 % w/v	+MP								
7 VALOR	0.0625 lb ai/a	PRE	99 a	98 ab	99 a	0 c	99 a	93 bcd	94 bc	45 b-f
ROUNDUP POWERMAX AMS	0.77 lb ae/a	+MP								
	2 % w/v	+MP								
8 VALOR	0.0625 lb ai/a	PRE	99 a	98 ab	98 b	3 c	99 a	96 abc	98 a	44 c-f
ROUNDUP POWERMAX AMS	0.77 lb ae/a	+MP								
	2 % w/v	+MP								
WARRANT	1.13 lb ai/a	+MP								
9 GANGSTER FR	0.126 lb ai/a	PRE	99 a	99 a	99 a	0 c	99 a	98 ab	99 a	46 b-f
ROUNDUP POWERMAX AMS	0.77 lb ae/a	+MP								
	2 % w/v	+MP								
10 GANGSTER FR	0.126 lb ai/a	PRE	99 a	99 a	99 a	0 c	99 a	96 abc	98 a	48 abc
ROUNDUP POWERMAX AMS	0.77 lb ae/a	+MP								
	2 % w/v	+MP								
WARRANT	1.13 lb ai/a	+MP								

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	W Weed		W Weed	W Weed	W Weed			
Pest Code	SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS			
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.			
Pest Name	Giant foxtail	Giant ragweed	Morning glory		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		
Description										
Part Rated										
Rating Date	7-13-2011	7-13-2011	7-13-2011	7-27-2011	7-27-2011	7-27-2011	7-27-2011	10-5-2011		
Rating Type	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	YIELD		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU		
SE Name										
SE Description	AFTER POST D	AFTER POST D	AFTER POST D	AFTER POST D	AFTER POST D	AFTER POST D	AFTER POST D	13%		
Rating Timing										
Days After First/Last Applic.	62 15	62 15	62 15	76 29	76 29	76 29	76 29	146 99		
Trt-Eval Interval										
Plant-Eval Interval	63 DP-1	63 DP-1	63 DP-1	77 DP-1	77 DP-1	77 DP-1	77 DP-1	147 DP-1		
Days After Emergence	57 DE-1	57 DE-1	57 DE-1	71 DE-1	71 DE-1	71 DE-1	71 DE-1	141 DE-1		
ARM Action Codes	P	P	P	P	P	P	P	TY2		
Sort Order for View										
Number of Decimals	0	0	0	0	0	0	0	0		
Trt Treatment										
No. Name	8	9	10	11	12	13	14	18		
Rate										
Unit										
Growth Stage										
11 AUTHORITY FIRST ROUNDUP POWERMAX AMS	0.14 lb ai/a 0.77 lb ae/a 2 % w/v	PRE +MP +MP	99 a	99 a	99 a	0 c	99 a	97 abc	99 a	45 b-f
12 AUTHORITY FIRST ROUNDUP POWERMAX AMS WARRANT	0.14 lb ai/a 0.77 lb ae/a 2 % w/v 1.13 lb ai/a	PRE +MP +MP +MP	99 a	99 a	99 a	0 c	99 a	96 abc	99 a	44 c-f
13 VALOR XLT ROUNDUP POWERMAX AMS	0.0756 lb ai/a 0.77 lb ae/a 2 % w/v	PRE +MP +MP	99 a	99 a	99 a	0 c	99 a	98 ab	99 a	47 b-f
14 VALOR XLT ROUNDUP POWERMAX AMS WARRANT	0.0756 lb ai/a 0.77 lb ae/a 2 % w/v 1.13 lb ai/a	PRE +MP +MP +MP	99 a	99 a	99 a	0 c	99 a	98 ab	99 a	48 a-d
15 AUTHORITY XL ROUNDUP POWERMAX AMS	0.175 lb ai/a 0.77 lb ae/a 2 % w/v	PRE +MP +MP	99 a	99 a	99 a	0 c	99 a	97 abc	99 a	47 a-e
16 AUTHORITY XL ROUNDUP POWERMAX AMS WARRANT	0.175 lb ai/a 0.77 lb ae/a 2 % w/v 1.13 lb ai/a	PRE +MP +MP +MP	99 a	99 a	99 a	0 c	99 a	96 abc	97 ab	46 b-f

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed	W Weed	W Weed		W Weed	W Weed	W Weed			
Pest Code	SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS			
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.			
Pest Name	Giant foxtail	Giant ragweed	Morning glory		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		
Description										
Part Rated										
Rating Date	7-13-2011	7-13-2011	7-13-2011	7-27-2011	7-27-2011	7-27-2011	7-27-2011	10-5-2011		
Rating Type	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	YIELD		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU		
SE Name										
SE Description	AFTER POST D	AFTER POST D	AFTER POST D	AFTER POST D	AFTER POST D	AFTER POST D	AFTER POST D	13%		
Rating Timing										
Days After First/Last Applic.	62 15	62 15	62 15	76 29	76 29	76 29	76 29	146 99		
Trt-Eval Interval										
Plant-Eval Interval	63 DP-1	63 DP-1	63 DP-1	77 DP-1	77 DP-1	77 DP-1	77 DP-1	147 DP-1		
Days After Emergence	57 DE-1	57 DE-1	57 DE-1	71 DE-1	71 DE-1	71 DE-1	71 DE-1	141 DE-1		
ARM Action Codes	P	P	P	P	P	P	P	TY2		
Sort Order for View										
Number of Decimals	0	0	0	0	0	0	0	0		
Trt Treatment										
No. Name	8	9	10	11	12	13	14	18		
Rate										
Unit										
Growth Stage										
17 FIERCE	0.143 lb ai/a	PRE	99 a	99 a	99 a	8 b	99 a	96 abc	97 ab	43 ef
ROUNDUP POWERMAX	0.77 lb ae/a	+MP								
AMS	2 % w/v	+MP								
18 FIERCE	0.143 lb ai/a	PRE	99 a	99 a	99 a	13 a	99 a	94 bc	98 a	44 def
ROUNDUP POWERMAX	0.77 lb ae/a	+MP								
AMS	2 % w/v	+MP								
WARRANT	1.13 lb ai/a	+MP								
LSD (P=.05)	0.0	1.2	0.9	4.9	0.0	4.8	3.6	4.3		
Standard Deviation	0.0	0.8	0.7	3.5	0.0	3.4	2.5	3.1		
CV	0.0	0.83	0.67	279.12	0.0	3.54	2.62	6.66		
Replicate F	0.000	2.615	1.360	0.114	0.000	4.372	2.383	12.032		
Replicate Prob(F)	1.0000	0.0610	0.2655	0.9515	1.0000	0.0082	0.0802	0.0001		
Treatment F	0.000	1.769	4.920	3.685	0.000	2.432	4.775	2.058		
Treatment Prob(F)	1.0000	0.0597	0.0001	0.0002	1.0000	0.0075	0.0001	0.0244		

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

SOYBEAN PREEMERGENCE & POSTEMERGENCE

Trial ID: S11041 Protocol ID: MON-2011-01-24-23
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: CHRISTOPHER KAMIENSKI

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

8 DP-1 = 1 5-11-2011
 22 DP-1 = 1 5-11-2011
 44 DP-1 = 1 5-11-2011
 63 DP-1 = 1 5-11-2011
 77 DP-1 = 1 5-11-2011
 147 DP-1 = 1 5-11-2011

ARM Action Codes

P = Rating scale of 0 to 100 (e.g. % control or injury)
 $TY2 = 5.808 * [C16] * (100 - [C17]) / 87$

Plant and Soil Science, U of KY Weed Science Research

SOYBEAN PREEMERGENCE & POSTEMERGENCE

Trial ID: S11041 Protocol ID: MON-2011-01-24-23
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: CHRISTOPHER KAMIENSKI

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: 5-11-2011

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

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 4031
BBCH Scale: BSOY **Planting Date:** 5-11-2011
Planting Method: ROWS **Rate, Unit:** 170000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 68 F
Soil Moisture: ABONOR above normal **Emergence Date:** 5-17-2011
Harvest Date: 10-5-2011 **Harvest Equipment:** COMBINE
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 25 FT
% Standard Moisture: 13.0

Plant and Soil Science, U of KY Weed Science Research

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 FT² **Tillage Type:** CONTIL conventional-till
Replications: 4 **Study Design:** RAOBL 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:** 2.25 MI

Application Description

	A	B	C	D
Application Date:	5-12-2011	5-31-2011	6-6-2011	6-28-2011
Time of Day:	4 PM	3 PM	2 PM	1 PM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	MP	+MP	++MP
Application Placement:	BROSOI	BROFOL	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK	SARA CARTER
Air Temperature, Unit:	82 F	91 F	87 F	79 F
% Relative Humidity:	52	44	37	70
Wind Velocity, Unit:	8 MPH	6 MPH	2 MPH	4 MPH
Wind Direction:	SW	W	SW	WSW
Soil Temperature, Unit:	69 F	72 F	76 F	75 F
Soil Moisture:	EXCELL	GOOD	FAIR	GOOD
% Cloud Cover:	10	0	10	10
Next Rain Occurred On:	5-13-2011	6-10-2011	6-10-2011	7-3-2011

Plant and Soil Science, U of KY Weed Science Research

Crop Stage At Each Application				
	A	B	C	D
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Height, Unit:		6 IN	10 IN	16 IN

Pest Stage At Each Application				
	A	B	C	D
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W	SETFA W
Height, Unit:		2 IN	3 IN	5 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W	AMBTR W
Height, Unit:		3 IN	6 IN	8 IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W	IPOSS W	IPOSS W
Height, Unit:		1 IN	2 IN	4 IN

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

Plant and Soil Science, U of KY Weed Science Research

NON CROP

Trial ID: NC11001 Protocol ID: SYNGENTA-HSC001A4
 Location: LEXINGTON, KY Study Director: CHARLES SLACK
 Project ID: Investigator: Charles H Slack
 Sponsor Contact: SCOTT CULLY

Pest Type	W Weed SETFA	W Weed AMBTR	W Weed AMACH	W Weed SETFA	W Weed AMBTR	W Weed AMACH	W Weed SETFA	W Weed AMBTR			
Pest Code	Setaria faberi	Ambrosia trifi>	Amaranthus hyb>	Setaria faberi	Ambrosia trifi>	Amaranthus hyb>	Setaria faberi	Ambrosia trifi>			
Pest Scientific Name	Giant foxtail	Giant ragweed	Smooth pigweed	Giant foxtail	Giant ragweed	Smooth pigweed	Giant foxtail	Giant ragweed			
Pest Name											
Crop Code											
BBCH Scale											
Crop Scientific Name											
Crop Name											
Description											
Part Rated											
Rating Date	6-17-2011	6-17-2011	6-17-2011	7-1-2011	7-1-2011	7-1-2011	7-29-2011	7-29-2011			
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
SE Name											
SE Description											
Rating Timing	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK			
Days After First/Last Applic.	36 14	36 14	36 14	50 28	50 28	50 28	78 56	78 56			
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A	14 DA-A	28 DA-B	28 DA-B	28 DA-B	56 DA-B			
Plant-Eval Interval											
Days After Emergence											
ARM Action Codes	P	P	P	P	P	P	P	P			
Sort Order for View											
Number of Decimals	0	0	0	0	0	0	0	0			
Trt No.	Treatment Name	Rate	Growth Stage	1	2	3	4	5	6	7	8
1	UNTREATED			0	0	0	0	0	0	0	0
2	HALEX GT	3.5 pt/a	4-6"WEEDS	99	99	99	99	99	99	99	90
3	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS	99	99	99	99	99	99	60	99
	TOUCHDOWN TOTAL	30 fl oz/a	4-6"WEEDS								
	CALLISTO XTRA	24 fl oz/a	4-6"WEEDS								
4	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS	99	99	99	99	99	99	60	95
	TOUCHDOWN TOTAL	30 fl oz/a	4-6"WEEDS								
	CALLISTO	1.5 fl oz/a	4-6"WEEDS								
5	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS	99	99	99	99	99	99	90	85
	TOUCHDOWN TOTAL	30 fl oz/a	4-6"WEEDS								
	STATUS	2.5 oz/a	4-6"WEEDS								
6	LEXAR	3 qt/a	PRE	99	99	99	90	88	90	95	70
7	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS	99	99	99	99	99	99	90	88
	TOUCHDOWN TOTAL	30 fl oz/a	4-6"WEEDS								
	IMPACT	0.5 fl oz/a	4-6"WEEDS								

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

Pest Type	W Weed SETFA	W Weed AMBTR	W Weed AMACH	W Weed SETFA	W Weed AMBTR	W Weed AMACH	W Weed SETFA	W Weed AMBTR
Pest Code	SETFA	AMBTR	AMACH	SETFA	AMBTR	AMACH	SETFA	AMBTR
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Amaranthus hyb>	Setaria faberi	Ambrosia trifi>	Amaranthus hyb>	Setaria faberi	Ambrosia trifi>
Pest Name	Giant foxtail	Giant ragweed	Smooth pigweed	Giant foxtail	Giant ragweed	Smooth pigweed	Giant foxtail	Giant ragweed
Crop Code								
BBCH Scale								
Crop Scientific Name								
Crop Name								
Description								
Part Rated								
Rating Date	6-17-2011	6-17-2011	6-17-2011	7-1-2011	7-1-2011	7-1-2011	7-29-2011	7-29-2011
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
SE Name								
SE Description								
Rating Timing	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	36 14	36 14	36 14	50 28	50 28	50 28	78 56	78 56
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A	14 DA-A	28 DA-B	28 DA-B	28 DA-B	56 DA-B
Plant-Eval Interval								
Days After Emergence								
ARM Action Codes	P	P	P	P	P	P	P	P
Sort Order for View								
Number of Decimals	0	0	0	0	0	0	0	0
Trt Treatment								
No. Name	1	2	3	4	5	6	7	8
Rate Unit								
Growth Stage								
8 N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS	99	99	99	99	90	90
TOUCHDOWN TOTAL	30 fl oz/a	4-6"WEEDS						
SURESTART	1 pt/a	4-6"WEEDS						
9 N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS	99	99	99	99	90	85
TOUCHDOWN TOTAL	30 fl oz/a	4-6"WEEDS						
CAPRENO HERBICIDE	1.5 fl oz/a	4-6"WEEDS						
LSD (P=.05)	.	.	.	.	.	.	.	.
Standard Deviation	.	.	.	.	.	.	.	.
CV	.	.	.	.	.	.	.	.

Means followed by same letter do not significantly differ (P=.05, LSD)

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			
Description			
Part Rated			
Rating Date		7-29-2011	7-29-2011
Rating Type		CONTROL	CONTROL
Rating Unit		PERCENT	PERCENT
SE Name			
SE Description			
Rating Timing		8 WEEK	8 WEEK
Days After First/Last Applic.		78 56	78 56
Trt-Eval Interval		56 DA-B	56 DA-B
Plant-Eval Interval			
Days After Emergence			
ARM Action Codes		P	P
Sort Order for View			
Number of Decimals		0	0
Trt No.	Treatment Name	Rate	Growth Stage
		Rate Unit	
1	UNTREATED		
2	HALEX GT	3.5 pt/a	4-6"WEEDS
3	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	TOUCHDOWN TOTAL	30 fl oz/a	4-6"WEEDS
	CALLISTO XTRA	24 fl oz/a	4-6"WEEDS
4	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	TOUCHDOWN TOTAL	30 fl oz/a	4-6"WEEDS
	CALLISTO	1.5 fl oz/a	4-6"WEEDS
5	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	TOUCHDOWN TOTAL	30 fl oz/a	4-6"WEEDS
	STATUS	2.5 oz/a	4-6"WEEDS
6	LEXAR	3 qt/a	PRE
7	N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
	TOUCHDOWN TOTAL	30 fl oz/a	4-6"WEEDS
	IMPACT	0.5 fl oz/a	4-6"WEEDS

Means followed by same letter do not significantly differ (P=.05, LSD)

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		
Description		
Part Rated		
Rating Date	7-29-2011	7-29-2011
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
SE Name		
SE Description		
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.	78 56	78 56
Trt-Eval Interval	56 DA-B	56 DA-B
Plant-Eval Interval		
Days After Emergence		
ARM Action Codes	P	P
Sort Order for View		
Number of Decimals	0	0
Trt Treatment	Rate	Growth
No. Name	Rate Unit	Stage
		9
		10
8 N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
TOUCHDOWN TOTAL	30 fl oz/a	4-6"WEEDS
SURESTART	1 pt/a	4-6"WEEDS
		90
		50
9 N-PAK AMS LIQUID	2.5 % v/v	4-6"WEEDS
TOUCHDOWN TOTAL	30 fl oz/a	4-6"WEEDS
CAPRENO HERBICIDE	1.5 fl oz/a	4-6"WEEDS
		95
		60
LSD (P=.05)	.	.
Standard Deviation	.	.
CV	.	.

Means followed by same letter do not significantly differ (P=.05, LSD)

Plant and Soil Science, U of KY Weed Science Research

NON CROP

Trial ID: NC11001 Protocol ID: SYNGENTA-HSC001A4
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

AMACH, *Amaranthus hybridus*, = US

IPOSS, *Ipomoea sp.*, = 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

NON CROP

Trial ID: NC11001 Protocol ID: SYNGENTA-HSC001A4
 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: 5-12-2011

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

Crop Description

Crop 1: WEEDS NON-CROP
Seed Bed: FINE fine

Pest Description

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

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

Pest 3 Type: W **Code:** AMACH *Amaranthus hybridus*
Common Name: Smooth pigweed

Plant and Soil Science, U of KY Weed Science Research

Site and Design

Plot Width, Unit: 10 FT **Site Type:** FIELD field
Plot Length, Unit: 132 FT
Plot Area, Unit: 1320 FT² **Tillage Type:** CONTIL conventional-till
Replications: 1 **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:** 2.25 MI

Application Description

	A	B
Application Date:	5-12-2011	6-3-2011
Time of Day:	4 PM	11 AM
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	4-6" WEEDS
Application Placement:	BROSOI	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	82 F	80 F
% Relative Humidity:	52	40
Wind Velocity, Unit:	8 MPH	4 MPH
Wind Direction:	SW	SW
Soil Temperature, Unit:	69 F	73 F
Soil Moisture:	ADEQUATE	GOOD
% Cloud Cover:	10	5
Next Rain Occurred On:	5-13-2011	6-10-2011

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	WEEDS	WEEDS

Plant and Soil Science, U of KY Weed Science Research

Pest Stage At Each Application

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

Application Equipment

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