



**2009**

**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.

[Table of Contents](#)  
[Acknowledgements](#)  
[Chemicals Used](#)  
[Methods of Application](#)  
[Weed/Crop Code Abbreviations](#)  
[Climatology](#)

**Trials**

C9003	C9004	C9005	C9006	C9007	C9008
C9009	C9010	C9011	C9012	C9014	C9015
C9016	C9017	C9018			
S9020	S9021	S9022	S9023	S9024	S9025
S9026	S9027	S9028	S9029	S9030	S9031
S9032	S9033	S9034	S9041		

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[UK WEED SCIENCE](#)

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## TABLE OF CONTENTS

CORN POSTEMERGENCE (C9005)  
CORN POSTEMERGENCE II (C9006)  
CORN POSTEMERGENCE III (C9007)  
CORN POSTEMERGENCE IV (C9008)  
CORN POSTEMERGENCE V (C9009)  
CORN POSTEMERGENCE VI (C9010)  
CORN POSTEMERGENCE VII (C9011)  
CORN POSTEMERGENCE VIII (C9012)  
CORN POSTEMERGENCE IX (C9014)  
CORN POSTEMERGENCE X (C9015)  
CORN POSTEMERGENCE XI (C9016)  
CORN POSTEMERGENCE XII (C9017)  
CORN POSTEMERGENCE XIII (C9018)  
NO-TILL CORN PREEMERGENCE & POSTEMERGENCE (C9004)  
CORN POSTEMERGENCE VARIETIES (C9003)

SOYBEAN PREEMERGENCE & POSTEMERGENCE (S9030)  
SOYBEAN PREEMERGENCE & POSTEMERGENCE II (S9031)  
SOYBEAN PREEMERGENCE & POSTEMERGENCE III (S9034)  
SOYBEAN PREEMERGENCE & POSTEMERGENCE IV (S9041)  
SOYBEAN POSTEMERGENCE LIBERTY (S9032)  
SOYBEAN POSTEMERGENCE LIBERTY II (S9033)  
NO-TILL SOYBEAN EARLY PREPLANT (S9021)  
NO-TILL SOYBEAN EARLY PREPLANT II (S9022)  
NO-TILL SOYBEAN EARLY PREPLANT III (S9023)  
NO-TILL SOYBEAN EARLY PREPLANT IV (S9024)  
NO-TILL SOYBEAN EARLY PREPLANT V (S9025)  
NO-TILL SOYBEAN EARLY PREPLANT VI (S9026)  
NO-TILL SOYBEAN EARLY PREPLANT VII (S9027)  
NO-TILL SOYBEAN EARLY PREPLANT VIII (S9028)  
NO-TILL SOYBEAN EARLY PREPLANT IX (S9029)  
NO-TILL SOYBEAN (S9020)

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## HERBICIDES IN REPORT

<u>TRADE NAME</u>	<u>COMMON NAME</u>	<u>COMPANY</u>
A16907		SYNGENTA
AATREX	ATRAZINE	SYNGENTA
ACCENT	NICOSULFURON	DUPONT
ACTIVATOR 90	NON-IONIC SURFACTANT	LOVELAND
AGRIDEX	CROP OIL CONCENTRATE	HELENA
AMS	AMMONIUM SULFATE	CLEAN CROP
ARRAY	AMMONIUM SULFATE BLEND + POLYMERS FOR DEPOSITION AID/FOLIAR RETENTION/CANOPY PENETRATION	ROSEN' S
AMS PREMIUM BLEND	AMMONIUM SULFATE	FERTIZONA
AUTHORITY ASSIST	SULFENTRAZONE + IMAZETHAPYR	FMC
AUTHORITY FIRST	SULFENTRAZONE + CLORANSULAM	FMC
AUTHORITY MTZ	SULFENTRAZONE + METRIBUZIN	FMC
BALANCE FLEXX HERBICIDE	ISOXAFLUTOLE	BAYER
BICEP II MAGNUM	S-METOLACHLOR + ATRAZINE + BENOXACOR	SYNGENTA
BORDER EG	NON-IONIC DEPOSITION ADJUVANT/DRIFT RETARDANT	PRECISION LABS
BORDER EXTRA	LIQUID AMMONIUM SULFATE + NON-IONIC RETENTION ADJUVANT	PRECISION LABS
BOUNDARY	S-METOLACHLOR + METRIBUZIN	SYNGENTA
CADET	FLUTHIACET-METHYL	FMC
CALLISTO	MESOTRIONE	SYNGENTA
CANOPY	METRIBUZIN + CHLORIMURON ETHYL	DUPONT
CANOPY EX	CHLORIMURON + TRIBENURON	DUPONT
CAPRENO HERBICIDE	TEMBOTRIONE + THIENCARBAZONE-METHYL	BAYER
CHA-016	CLOMAZONE	CHEMINOVA
CHA-019	CLOMAZONE + METRIBUZIN	CHEMINOVA
CHA-021	CLOMAZONE + METRIBUZIN	CHEMINOVA
CHA-023	RIMSULFURON	CHEMINOVA
CHA-024	RIMSULFURON + NICOSULFURON	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
COBRA	LACTOFEN	VALENT
COMPADRE	DEPOSITION AID + DRIFT CONTROL + ANTIFOAMING/DEFOAMING	LOVELAND
CORVUS HERBICIDE	ISOXAFLUTOLE + THIENCARBAZONE-METHYL	BAYER
CROP OIL CONCENTRATE (COC)		LOVELAND



## HERBICIDES IN REPORT CONTINUED

<u>TRADE NAME</u>	<u>COMMON NAME</u>	<u>COMPANY</u>
DAWN	FOMESAFEN	CHEMINOVA
DESTINY	METHYLATED SEED OIL	WINFIELD
DYNE-AMIC	MODIFIED VEGETABLE OIL SURFACTANT BLEND	HELENA
DUAL II MAGNUM	S-METOLACHLOR + BENOXACOR	SYNGENTA
DURANGO DMA	GLYPHOSATE	DOW AGROSCIENCE
ENVIVE	FLUMIOXAZIN + THIFENSULFURON	DUPONT
EXTREME	IMAZETHAPYR + GLYPHOSATE	BASF
FIRSTRATE	CLORANSULAM	DOW AGROSCIENCE
FLEXSTAR	FOMESAFEN + SURFACTANT	SYNGENTA
FLEXSTAR GT	FOMESAFEN + GLYPHOSATE	SYNGENTA
FREESTYLE	THIFENSULFURON + TRIBENURON + CHLORIMURON	DUPONT
GANGSTER FR	CLORANSULAM	VALENT
GANGSTER V	FLUMIOXAZIN	VALENT
GARDIAN	AMMONIUM SULFATE BLEND/DRIFT AID/DEPOSITION AID/WATER CONDITIONER	VAN DIEST
GARDIAN PLUS	AMMONIUM SULFATE BLEND/DRIFT AID/DEPOSITION AID/WATER CONDITIONER	VAN DIEST
GLYFOS X-TRA	GLYPHOSATE	CHEMINOVA
GRAMOXONE INTEON	PARAQUAT	SYNGENTA
GROUNDED	DEPOSITION AID	HELENA
HALEX GT	GLYPHOSATE (PS) + MESOTRIONE + s-METOLACHLOR	SYNGENTA
HARASS	THIFENSULFURON METHYL	CHEMINOVA
HARNESS	ACETOCHLOR	MONSANTO
HARNESS XTRA	ACETOCHLOR + ATRAZINE + MON13900	MONSANTO
IGNITE 280	GLUFOSINATE AMMONIUM	BAYER
IMPACT	TOPRAMEZONE	AMVAC
INTEGRITY	SAFLUFENACIL + DIMETHENAMID-P	BASF
INSTIGATE	CHLORIMURON + RIMSULFURON + MESOTRIONE	DUPONT
INTERLOCK	MODIFIED VEGETABLE OIL/DEPOSITION AID/CANOPY PENETRANT/DRIFT CONTROL	WINFIELD
INTRRO	ALACHLOR	MONSANTO
INDUCE	SURFACTANT	HELENA
LAUDIS	TEMBOTRIONE	BAYER
LEXAR	S-METOLACHLOR + MESOTRIONE + ATRAZINE	SYNGENTA
LIQUID N	28% NITROGEN	
LOROX	LINURON	DUPONT
LUMAX	S-METOLACHLOR + MESOTRIONE + ATRAZINE	SYNGENTA
MON 63410		MONSANTO
MSO	METHYLATED SEED OIL	LOVELAND

## HERBICIDES IN REPORT CONTINUED

<u>TRADE NAME</u>	<u>COMMON NAME</u>	<u>COMPANY</u>
NPAK AMS LIQUID	AMMONIUM SULFATE	WINFIELD
NIC-IT	NICOSULFURON	CHEMINOVA
OPTILL	SAFLUFENACIL + IMAZETHAPYR	BASF
OPTION	FORAMSULFURON + SAFENER	BAYER
PARALLEL	METOLACHLOR	MANA
PERSIST ULTRA	ADJUVANT	PRECISION LABS
PREFIX	S-METOLACHLOR + BENOXACOR	SYNGENTA
PROWL H2O	PENDIMETHALIN	BASF
PURSUIT PLUS	IMAZETHAPYR + PENDIMETHALIN	BASF
RAGE D-TECH	CARFENTRAZONE-ETHYL + 2,4-D	FMC
REQUEST	AMMONIUM SULFATE/WATER CONDITONER	HELENA
RESOLVE	RIMSULFURON	DUPONT
RESOLVE Q	RIMSULFURON + THIFENSULFURON-METHYL + SAFENER	DUPONT
RHYTHM	FOMESAFEN	CHEMINOVA
ROUNDUP POWERMAX	GLYPHOSATE (POTASSIUM SALT)	MONSANTO
ROUNDUP WEATHER MAX	GLYPHOSATE (POTASSIUM SALT)	MONSANTO
SAMSON	NICOSULFURON	ISK
SCEPTER	IMAZAQUIN	BASF
SENCOR	METRIBUZIN	BAYER
SHARPEN	SAFLUFENACIL	BASF
SONIC	SULFENTRAZONE + CLORANSULAM-METHYL	DOW AGROSCIENCE
SPARTAN	SULFENTRAZONE	FMC
STALWART C	METOLACHLOR	SIPCAM
STALWART XTRA	METOLACHLOR + ATRAZINE	SIPCAM
STATUS	DIFLUFENZOPYR + DICAMBA	BASF
STEADFAST Q	NICOSULFURON + RIMSULFURON + SAFENER	DUPONT
STOUT	NICOSULFURON + THIFENSULFURON-METHYL	DUPONT
SUPERB HC	HIGH SURFACTANT OIL CONCENTRATE	WINFIELD
SUNDANCE II	METHYLATED SOYBEAN OIL	ROSEN'S
SOY-STIK	METHYLATED SOYBEAN OIL	VAN DIEST
SURESTART	ACETOCHLOR + FLUMETSULAM + CLOPYRALID	DOW AGROSCIENCE
SYNCHRONY XP	CHLORIMURON + THIFENSULFURON	DUPONT
TACKLE	GLYPHOSATE + IMAZETHAPYR	CHEMINOVA
TOUCHDOWN TOTAL	GLYPHOSATE	SYNGENTA

## HERBICIDES IN REPORT CONTINUED

<u>TRADE NAME</u>	<u>COMMON NAME</u>	<u>COMPANY</u>
TRIGATE	RIMSULFURON + TRIBENURON-METHYL + MESOTRIONE	DUPONT
UAN 28%	28% NITROGEN	
V-10233		VALENT
VALOR SX	FLUMIOXAZIN (V-53482)	VALENT
VALOR XLT	FLUMIOXAZIN + CHLORIMURON	VALENT
VIDA	PURAFLOFEN ETHYL	GOWAN
WEATHER GARD COMPLETE	DEPOSITION AID/DRIFT CONTROL/ANTI-FOAMING/DEFOAMING/WATER CONDITIONER	LOVELAND
WEEDONE LV4	2,4-D ESTER	NUFARM AMERICAS INC
YUKON	DICAMBA + HALOSULFURON-METHYL	GOWAN

## DEFINITIONS FOR METHODS OF APPLICATION

### PREEMERGENCE

2WK	2 WEEKS BEFORE PLANTING
-1WK, 1WK,	
1 WK EPP	1 WEEK BEFORE PLANTING
PRE	PREEMERGENCE

### POSTEMERGENCE

EP	EARLY POSTEMERGENCE, WEEDS 0-2"
MP	MID-POSTEMERGENCE, WEEDS 2-4"
+MP	MID-POSTEMERGENCE, FOLLOWING A PREEMERGENT
LMP	LATE MID-POSTEMERGENCE 3-5" WEEDS
LP	LATE POSTEMERGENCE, WEEDS 4-6"
3"W	3 INCH WEEDS
4 LFC	4 LEAF CORN
4 COL	4 COLLAR CORN
V2	8 INCH CORN, 4LF
MP, 4"W	MID-POSTEMERGENCE, 4 INCH WEEDS
V3	FOUR NODES WITH 3 UNFOLDED LEAFLETS, 7-9 IN SOYBEAN
V4	12 INCH CORN
V5	16 INCH CORN
V5, 6"W	16 INCH CORN, 6 INCH WEEDS
V6	20 INCH CORN, SEVEN NODES WITH UNFOLDED LEAFLETS, 12-14 IN SOYBEAN
24C	24 INCH CORN
3WAP	3 WEEKS AFTER PLANTING
2TR	TWO TRIFOLIATES
+21D	21 DAYS AFTER PLANTING
+28D	28 DAYS AFTER PLANTING
+45D	45 DAYS AFTER PLANTING
REG	REGROWTH

# ABBREVIATIONS

## Crop and Weed Species

<u>ABB</u>	<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>
AMACH	Smooth Pigweed	<i>Amaranthus hybridus</i>
AMBEL	Common Ragweed	<i>Ambrosia artemisiifolia</i>
AMBTR	Giant Ragweed	<i>Ambrosia trifida</i>
CHEAL	Common Lambsquarters	<i>Chenopodium album</i>
DIGSS	Crabgrass	<i>Digitaria sp.</i>
GLXMA	Soybean	<i>Glycine max</i>
ERICA	Marestail	<i>Conyza canadensis</i>
IPOHE	Ivyleaf Morningglory	<i>Ipomoea hederacea</i>
IPOSS	Morningglory	<i>Ipomoea sp.</i>
LACSE	Prickly Lettuce	<i>Lacutuca serriola</i>
LAMAM	Henbit	<i>Lamium amplexicaule</i>
LAMPU	Purple Deadnettle	<i>Lamium purpureum</i>
SETFA	Giant Foxtail	<i>Setaria faberi</i>
STEME	Common Chickweed	<i>Stellaria media</i>
ZEAMX	Corn	<i>Zea mays</i>

# APRIL CLIMATOLOGICAL DATA

STATION	DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
		MX	MN	AV		MX	MN	MX	MN	MX	MN	
Spindletop	04-01-2009	62	42	52	0.22	94	29	54	49	56	51	
Spindletop	04-02-2009	75	41	58	0.24	94	46	54	49	57	51	
Spindletop	04-03-2009	57	41	49	0.59	97	67	54	51	56	53	
Spindletop	04-04-2009	61	35	48		96	32	54	48	56	49	
Spindletop	04-05-2009	75	42	58	0.36	93	40	55	50	58	52	
Spindletop	04-06-2009	54	34	44	0.13	96	80	55	50	57	51	
Spindletop	04-07-2009	42	32	37	0.03	99	45	50	48	51	48	
Spindletop	04-08-2009	55	33	44		74	36	50	46	52	47	
Spindletop	04-09-2009	63	34	48		87	31	52	46	55	48	
Spindletop	04-10-2009	62	50	56	1.07	99	66	52	50	54	53	
Spindletop	04-11-2009	58	40	49	0.09	98	34	54	51	57	52	
Spindletop	04-12-2009	58	33	46		76	32	53	49	55	51	
Spindletop	04-13-2009	68	47	58	0.29	97	40	52	50	55	52	
Spindletop	04-14-2009	58	44	51	0.17	99	72	54	52	56	54	
Spindletop	04-15-2009	47	43	45		97	83	53	51	54	53	
Spindletop	04-16-2009	61	44	52		99	57	53	50	56	52	
Spindletop	04-17-2009	71	37	54		84	33	56	49	59	52	
Spindletop	04-18-2009	74	43	58		89	31	58	52	61	54	
Spindletop	04-19-2009	62	53	58	0.79	98	47	57	55	60	57	
Spindletop	04-20-2009	57	43	50	0.25	98	62	55	54	57	56	
Spindletop	04-21-2009	51	39	45	0.06	93	53	53	51	56	54	
Spindletop	04-22-2009	62	38	50		84	27	53	49	56	51	
Spindletop	04-23-2009	70	42	56		76	38	55	50	59	53	
Spindletop	04-24-2009	82	60	71		73	31	59	54	63	57	
Spindletop	04-25-2009	83	63	73		64	31	61	57	65	59	
Spindletop	04-26-2009	84	62	73		69	34	63	58	67	60	
Spindletop	04-27-2009	82	63	72		65	30	64	60	67	62	
Spindletop	04-28-2009	72	63	68	0.03	96	43	62	61	65	63	
Spindletop	04-29-2009	78	61	70	0.04	99	53	64	61	68	63	
Spindletop	04-30-2009	72	63	68	0.12	93	68	63	62	66	64	

Summary for Spindletop for the period 4-1-2009 through 4-30-2009:

STATION	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
Spindletop (Deviation from normal)	65	46	55	4.48	89	46	56	52	58	54	
	-0	+1	+0	+0.60							

# MAY CLIMATOLOGICAL DATA

STATION	DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
		MX	MN	AV		MX	MN	MX	MN	MX	MN	
Spindletop	05-01-2009	73	56	64	0.25	97	68	64	62	67	64	
Spindletop	05-02-2009	59	51	55	0.21	98	73	63	61	66	63	
Spindletop	05-03-2009	59	52	56	0.38	98	80	61	59	63	62	
Spindletop	05-04-2009	64	52	58	0.17	99	71	60	58	64	61	
Spindletop	05-05-2009	71	55	63		93	56	62	59	66	62	
Spindletop	05-06-2009	64	56	60	0.64	98	90	61	60	65	63	
Spindletop	05-07-2009	73	58	66	0.01	98	67	64	61	65	63	
Spindletop	05-08-2009	75	57	66	0.94	98	71	65	61	66	63	
Spindletop	05-09-2009	72	54	63		98	48	65	63	66	65	
Spindletop	05-10-2009	70	47	58	0.06	96	43	66	60	66	62	
Spindletop	05-11-2009	69	52	60		93	47	65	62	65	63	
Spindletop	05-12-2009	69	42	56		92	37	65	59	65	61	
Spindletop	05-13-2009	73	51	62	0.20	93	60	63	60	64	62	
Spindletop	05-14-2009	73	59	66	0.21	98	70	65	61	66	63	
Spindletop	05-15-2009	81	53	67	0.03	100	53	67	61	67	63	
Spindletop	05-16-2009	77	58	68	0.01	91	62	68	64	68	65	
Spindletop	05-17-2009	61	47	54		72	34	65	62	66	63	
Spindletop	05-18-2009	65	40	52		75	29	64	58	63	60	
Spindletop	05-19-2009	73	39	56		86	29	65	57	63	59	
Spindletop	05-20-2009	78	47	62		84	29	67	59	64	60	
Spindletop	05-21-2009	83	54	68		83	35	70	62	67	62	
Spindletop	05-22-2009	84	61	72		85	38	73	65	69	64	
Spindletop	05-23-2009	86	60	73		97	39	74	67	70	66	
Spindletop	05-24-2009	80	64	72	T	81	56	72	68	74	73	
Spindletop	05-25-2009 E	78	66	72	0.73	87	68	73	69	74	70	
Spindletop	05-26-2009 E	81	66	74	0.09	90	58	73	70	74	70	
Spindletop	05-27-2009	81	65	73	0.25	98	60	74	70	72	70	
Spindletop	05-28-2009	81	65	73	0.09	98	61	73	70	73	70	
Spindletop	05-29-2009	75	60	68		96	52	74	69	73	70	
Spindletop	05-30-2009	79	58	68	0.50	95	57	72	68	71	68	
Spindletop	05-31-2009	78	59	68	0.28	93	43	75	68	73	69	

Summary for Spindletop for the period 5-1-2009 through 5-31-2009:

STATION	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
Spindletop	74	55	64	5.05	92	54	67	63	68	64	
(Deviation from normal)	-2	+0	-1	+0.58							

## JUNE CLIMATOLOGICAL DATA

STATION	DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
		MX	MN	AV		MX	MN	MX	MN	MX	MN	
Spindletop	06-01-2009	85	56	70		88	47	74	68	73	68	
Spindletop	06-02-2009	89	67	78	0.26	92	45	77	71	76	71	
Spindletop	06-03-2009	77	60	68	0.17	96	69	74	71	74	71	
Spindletop	06-04-2009	59	55	57	0.43	98	95	72	66	73	67	
Spindletop	06-05-2009	76	51	64		96	40	71	64	72	66	
Spindletop	06-06-2009	78	48	63		96	32	73	65	73	66	
Spindletop	06-07-2009	84	58	71		90	40	74	67	74	68	
Spindletop	06-08-2009	84	64	74		92	49	75	70	75	71	
Spindletop	06-09-2009	87	70	78		85	41	77	71	77	72	
Spindletop	06-10-2009	78	66	72	0.70	98	72	74	72	75	72	
Spindletop	06-11-2009	79	66	72	0.57	99	74	73	70	74	71	
Spindletop	06-12-2009	73	64	68	0.06	99	79	73	70	74	71	
Spindletop	06-13-2009	83	58	70		100	48	76	69	76	70	
Spindletop	06-14-2009	84	62	73	0.31	99	48	76	71	76	72	
Spindletop	06-15-2009	82	65	74	0.33	99	61	77	72	77	73	
Spindletop	06-16-2009	82	67	74	0.11	98	68	76	73	76	73	
Spindletop	06-17-2009	89	66	78		95	56	78	72	78	73	
Spindletop	06-18-2009	83	70	76	0.17	97	63	76	74	77	75	
Spindletop	06-19-2009	93	72	82		94	50	80	74	81	75	
Spindletop	06-20-2009	89	69	79	0.30	98	53	80	75	81	76	
Spindletop	06-21-2009	87	68	78		95	57	80	75	80	76	
Spindletop	06-22-2009	85	72	78	0.19	95	65	80	77	81	77	
Spindletop	06-23-2009	86	66	76		98	41	82	75	82	76	
Spindletop	06-24-2009	88	64	76		97	46	82	75	82	76	
Spindletop	06-25-2009	91	68	80	1.29	98	52	82	76	82	77	
Spindletop	06-26-2009	88	67	78	0.52	98	60	81	74	81	75	
Spindletop	06-27-2009 E	90	69	80		90	40	81	74	81	75	
Spindletop	06-28-2009	85	68	76		94	43	81	77	81	78	
Spindletop	06-29-2009	83	62	72		74	38	79	74	79	75	
Spindletop	06-30-2009	77	65	71		81	52	78	73	78	74	

Summary for Spindletop for the period 6-1-2009 through 6-30-2009:

STATION	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
Spindletop (Deviation from normal)	83	64	74	5.41	94	54	77	72	77	73	
	+0	+2	+1	+1.75							



# JULY CLIMATOLOGICAL DATA

STATION	DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
		MX	MN	AV		MX	MN	MX	MN	MX	MN	
Spindletop	07-01-2009	72	62	67		95	62	75	73	76	73	
Spindletop	07-02-2009	70	60	65		91	58	73	71	73	72	
Spindletop	07-03-2009	80	60	70		92	56	75	70	76	71	
Spindletop	07-04-2009	75	60	68	0.28	98	66	73	70	74	71	
Spindletop	07-05-2009	72	64	68	0.44	99	85	71	70	73	71	
Spindletop	07-06-2009	82	59	70		100	45	75	69	77	70	
Spindletop	07-07-2009	83	59	71		97	45	77	70	78	71	
Spindletop	07-08-2009	81	62	72		91	44	76	71	78	72	
Spindletop	07-09-2009	86	65	76		85	44	78	72	80	73	
Spindletop	07-10-2009	86	67	76	0.12	94	62	78	73	78	75	
Spindletop	07-11-2009	83	72	78		93	69	78	74	78	75	
Spindletop	07-12-2009	84	70	77		98	52	78	74	79	75	
Spindletop	07-13-2009	82	63	72		94	42	78	73	80	74	
Spindletop	07-14-2009	84	60	72		95	38	78	72	80	73	
Spindletop	07-15-2009	80	67	74	0.09	94	64	76	73	77	75	
Spindletop	07-16-2009	84	72	78		96	60	77	74	79	75	
Spindletop	07-17-2009	77	61	69	0.36	97	51	76	73	77	75	
Spindletop	07-18-2009	70	57	64		93	57	73	70	74	71	
Spindletop	07-19-2009	75	54	64		99	51	72	67	73	69	
Spindletop	07-20-2009	79	54	66		99	43	73	67	75	69	
Spindletop	07-21-2009	81	55	68		98	45	74	67	76	69	
Spindletop	07-22-2009	70	65	68	0.83	98	79	72	70	74	72	
Spindletop	07-23-2009	78	64	71		97	61	72	69	75	71	
Spindletop	07-24-2009	82	61	72		98	47	74	69	75	71	
Spindletop	07-25-2009	83	66	74	0.83	97	64	73	71	75	73	
Spindletop	07-26-2009	82	67	74	0.28	99	48	75	71	76	73	
Spindletop	07-27-2009	84	61	72		97	46	75	70	77	72	
Spindletop	07-28-2009	82	65	74	0.16	95	71	74	71	75	73	
Spindletop	07-29-2009	81	70	76	0.20	97	66	75	72	76	74	
Spindletop	07-30-2009	82	68	75	0.20	98	71	75	72	77	74	
Spindletop	07-31-2009	82	66	74	2.10	99	54	75	71	77	73	

Summary for Spindletop for the period 7-1-2009 through 7-31-2009:

STATION	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
Spindletop	80	63	71	5.89	96	56	75	71	76	72	
(Deviation from normal)	-6	-2	-4	+0.89							

# AUGUST CLIMATOLOGICAL DATA

STATION	DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
		MX	MN	AV		MX	MN	MX	MN	MX	MN	
Spindletop	08-01-2009	82	63	72	0.07	99	55	75	71	76	73	
Spindletop	08-02-2009	78	62	70	0.40	97	53	74	72	76	74	
Spindletop	08-03-2009	81	58	70		99	53	74	69	76	72	
Spindletop	08-04-2009	73	64	68	2.10	100	79	72	70	74	72	
Spindletop	08-05-2009	80	65	72	0.05	99	67	73	69	75	72	
Spindletop	08-06-2009	83	64	74		99	49	74	71	76	73	
Spindletop	08-07-2009	81	57	69		97	43	73	70	75	72	
Spindletop	08-08-2009	88	65	76		93	55	74	71	76	73	
Spindletop	08-09-2009	90	73	82		86	56	76	73	78	75	
Spindletop	08-10-2009	89	70	80		97	60	77	74	78	76	
Spindletop	08-11-2009	86	68	77	0.20	98	61	76	74	78	76	
Spindletop	08-12-2009	84	65	74	0.10	99	54	76	74	78	76	
Spindletop	08-13-2009	85	62	74		99	43	76	73	78	75	
Spindletop	08-14-2009	86	60	73		98	40	76	72	77	74	
Spindletop	08-15-2009	88	64	76		96	54	76	72	78	74	
Spindletop	08-16-2009	89	70	80		95	46	76	73	78	76	
Spindletop	08-17-2009	88	70	79	0.24	95	51	76	74	77	76	
Spindletop	08-18-2009	83	70	76	0.40	96	70	75	74	77	76	
Spindletop	08-19-2009	87	71	79		98	62	77	74	78	76	
Spindletop	08-20-2009	84	70	77	0.30	96	68	76	74	77	76	
Spindletop	08-21-2009	81	67	74	1.00	99	48	75	73	77	75	
Spindletop	08-22-2009	72	59	66		98	71	74	71	76	74	
Spindletop	08-23-2009	74	59	66		95	59	72	70	74	73	
Spindletop	08-24-2009	78	54	66		99	54	72	69	74	71	
Spindletop	08-25-2009	86	57	72		99	55	74	69	75	71	
Spindletop	08-26-2009	88	64	76		99	50	75	71	76	73	
Spindletop	08-27-2009 E	89	67	78	0.28	97	46	79	76			
Spindletop	08-28-2009	80	69	74	0.17	96	71	74	73	75	74	
Spindletop	08-29-2009	78	62	70	0.07	98	58	74	73	76	74	
Spindletop	08-30-2009	75	56	66		98	41	73	70	75	72	
Spindletop	08-31-2009	73	51	62		95	51	71	69	72	70	

Summary for Spindletop for the period 8-1-2009 through 8-31-2009:

STATION	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
Spindletop (Deviation from normal)	83	64	73	5.38	97	56	75	72	76	74	
	-1	+1	-0	+1.45							

# SEPTEMBER CLIMATOLOGICAL DATA

STATION	DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
		MX	MN	AV		MX	MN	MX	MN	MX	MN	
Spindletop	09-01-2009	75	51	63		91	47	70	67	71	69	
Spindletop	09-02-2009	81	57	69		95	54	71	68	72	69	
Spindletop	09-03-2009	80	60	70		96	39	72	69	73	71	
Spindletop	09-04-2009	81	59	70		93	43	72	69	74	71	
Spindletop	09-05-2009	83	57	70		95	37	72	68	75	70	
Spindletop	09-06-2009	82	60	71		98	60	72	69	74	71	
Spindletop	09-07-2009	79	63	71	0.47	98	62	73	70	75	72	
Spindletop	09-08-2009	80	63	72	0.60	99	67	73	70	76	72	
Spindletop	09-09-2009	82	59	70	0.01	100	50	74	70	76	72	
Spindletop	09-10-2009	78	62	70		100	63	73	70	76	73	
Spindletop	09-11-2009	81	60	70		99	56	74	70	76	72	
Spindletop	09-12-2009	77	55	66		95	48	73	69	75	72	
Spindletop	09-13-2009	78	55	66		98	51	72	69	75	71	
Spindletop	09-14-2009	81	55	68		99	40	72	68	75	70	
Spindletop	09-15-2009	80	56	68		99	56	71	68	74	71	
Spindletop	09-16-2009	81	61	71		99	56	72	69	75	71	
Spindletop	09-17-2009	77	55	66		91	64	71	68	74	71	
Spindletop	09-18-2009	80	64	72		89	69	72	70	74	72	
Spindletop	09-19-2009	78	60	69		87	58	71	69	74	72	
Spindletop	09-20-2009	75	63	69	0.90	99	83	70	69	73	71	
Spindletop	09-21-2009	76	68	72	0.66	98	81	71	70	73	72	
Spindletop	09-22-2009	81	67	74	0.19	97	71	73	70	75	72	
Spindletop	09-23-2009	79	69	74	0.06	98	76	73	71	75	74	
Spindletop	09-24-2009	79	67	73	1.10	99	80	73	72	76	74	
Spindletop	09-25-2009	74	66	70	0.38	99	89	72	71	75	74	
Spindletop	09-26-2009	73	61	67	1.00	100	79	72	71	74	73	
Spindletop	09-27-2009	69	59	64		99	66	71	69	73	71	
Spindletop	09-28-2009	70	53	62		85	40	69	66	71	68	
Spindletop	09-29-2009	57	48	52		86	65	66	64	67	65	
Spindletop	09-30-2009	60	46	53		98	62	64	63	66	65	

Summary for Spindletop for the period 9-1-2009 through 9-30-2009:

STATION	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
Spindletop (Deviation from normal)	77	59	68	5.37	96	60	71	69	74	71	
	-1	+4	+1	+2.17							

# OCTOBER CLIMATOLOGICAL DATA

STATION	DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
		MX	MN	AV		MX	MN	MX	MN	MX	MN	
Spindletop	10-01-2009	68	43	56		100	51	64	61	66	63	
Spindletop	10-02-2009	68	53	60	0.29	96	40	64	63	66	65	
Spindletop	10-03-2009	67	47	57		83	40	63	61	64	63	
Spindletop	10-04-2009	61	45	53		93	56	62	60	64	62	
Spindletop	10-05-2009	69	42	56		100	45	62	59	65	61	
Spindletop	10-06-2009	66	50	58	0.04	97	80	63	60	65	63	
Spindletop	10-07-2009	63	45	54		91	51	63	60	65	63	
Spindletop	10-08-2009	63	45	54	0.47	98	60	61	59	63	62	
Spindletop	10-09-2009	69	55	62	0.94	99	88	63	60	65	63	
Spindletop	10-10-2009	56	43	50		98	70	62	60	65	62	
Spindletop	10-11-2009	61	39	50		100	50	60	57	62	60	
Spindletop	10-12-2009	68	44	56		94	69	60	58	63	60	
Spindletop	10-13-2009	61	49	55		92	66	61	59	63	62	
Spindletop	10-14-2009	49	41	45	0.75	99	79	59	56	62	59	
Spindletop	10-15-2009	50	45	48	0.15	100	90	56	55	59	58	
Spindletop	10-16-2009	48	40	44	0.02	98	77	55	54	58	57	
Spindletop	10-17-2009	48	34	41	0.01	93	53	54	52	57	55	
Spindletop	10-18-2009	54	29	42		98	38	53	50	55	53	
Spindletop	10-19-2009	59	35	47		81	44	53	50	55	52	
Spindletop	10-20-2009	67	46	56		74	39	55	52	57	54	
Spindletop	10-21-2009	69	45	57		86	42	55	52	58	55	
Spindletop	10-22-2009	70	48	59		85	55	56	53	59	56	
Spindletop	10-23-2009	70	55	62	0.41	98	71	58	56	61	58	
Spindletop	10-24-2009	56	42	49		96	57	58	55	60	57	
Spindletop	10-25-2009	61	38	50		97	38	55	52	57	55	
Spindletop	10-26-2009	68	37	52		93	39	54	51	57	54	
Spindletop	10-27-2009	58	45	52	0.69	99	80	54	52	56	54	
Spindletop	10-28-2009	59	55	57	0.04	98	81	55	54	58	56	
Spindletop	10-29-2009	69	48	58		98	62	57	54	59	57	
Spindletop	10-30-2009	79	62	70	0.26	98	56	60	57	62	59	
Spindletop	10-31-2009	61	40	50	0.76	98	76	60	55	62	57	

Summary for Spindletop for the period 10-1-2009 through 10-31-2009:

STATION	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
Spindletop	62	45	54	4.83	95	59	59	56	61	59	
(Deviation from normal)	-5	-1	-3	+2.26							

## APRIL-OCTOBER 2009 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	
2009	Apr	65	46	55	84	32	+0	0	1	56	52	
2009	May	74	55	64	86	39	+0	0	0	67	63	
2009	Jun	83	64	74	93	48	+2	3	0	77	72	
2009	Jul	80	63	71	86	54	-5	0	0	75	71	
2009	Aug	83	64	73	90	51	-2	1	0	75	72	
2009	Sep	77	59	68	83	46	+0	0	0	71	69	
2009	Oct	62	45	54	79	29	-3	0	1	59	56	

----- PRECIPITATION -----										
YEAR	MONTH	DEPARTURE		CUMULATIVE		GREATEST		% RAIN DAYS	NO. DAYS >=.01	
		TOTAL	FROM NORMAL	TOTAL	DEPARTURE	TOTAL	24 HOUR			
2009	Apr	4.48	+0.60	4.48	+0.60	1.07	53	16		
2009	May	5.05	+0.58	9.53	+1.18	0.94	52	16		
2009	Jun	5.41	+1.75	14.94	+2.93	1.29	47	14		
2009	Jul	5.89	+0.89	20.83	+3.82	2.10	39	12		
2009	Aug	5.38	+1.45	26.21	+5.27	2.10	42	13		
2009	Sep	5.37	+2.17	31.58	+7.44	1.10	30	9		
2009	Oct	4.83	+2.26	36.41	+9.70	0.94	39	12		

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

CORN POSTEMERGENCE VARIETIES

Trial ID: C9003      Protocol ID: CHEMINOVA CORN VARIETY  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact:

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
Rating Date	6-12-2009	6-30-2009	7-28-2009	10-6-2009
Rating Type	GROWTH REDU	GROWTH REDU	GROWTH REDU	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1
SE Description				27/FT
Rating Timing	1 WEEK	4 WEEK	8 WEEK	
Days After First/Last Applic.	10 10	28 28	56 56	126 126
Trt-Eval Interval	10 DA-A	28 DA-A	56 DA-A	126 DA-A
Plant-Eval Interval	32 DP-1	50 DP-1	78 DP-1	148 DP-1
Days After Emergence	26 DE-	44 DE-	72 DE-	142 DE
ARM Action Codes	P	P	P	TY1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	7
1	CHA-023	0.035	lb ai/a	4 COL	13	0	0	242
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 60-51							
2	CHA-023	0.070	lb ai/a	4 COL	14	0	0	236
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 60-51							
3	RESOLVE	0.070	lb ai/a	4 COL	19	0	0	236
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 60-51							
4	CHA-024	0.035	lb ai/a	4 COL	8	0	0	236
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 60-51							
5	CHECK UNTREATED				0	0	0	232
	DKC 60-51							
6	CHA-023	0.035	lb ai/a	4 COL	23	0	0	232
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 61-04							

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

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
Rating Date	6-12-2009	6-30-2009	7-28-2009	10-6-2009
Rating Type	GROWTH REDU	GROWTH REDU	GROWTH REDU	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1
SE Description				27/FT
Rating Timing	1 WEEK	4 WEEK	8 WEEK	
Days After First/Last Applic.	10 10	28 28	56 56	126 126
Trt-Eval Interval	10 DA-A	28 DA-A	56 DA-A	126 DA-A
Plant-Eval Interval	32 DP-1	50 DP-1	78 DP-1	148 DP-1
Days After Emergence	26 DE-	44 DE-	72 DE-	142 DE
ARM Action Codes	P	P	P	TY1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	7
7	CHA-023	0.07	lb ai/a	4 COL	20	0	0	244
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 61-04							
8	RESOLVE	0.070	lb ai/a	4 COL	18	0	0	233
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 61-04							
9	CHA-024	0.035	lb ai/a	4 COL	16	0	0	237
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 61-04							
10	CHECK UNTREATED				5	0	0	233
	DKC 61-04							
11	CHA-023	0.035	lb ai/a	4 COL	19	0	0	238
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 61-69							
12	CHA-023	0.07	lb ai/a	4 COL	19	0	0	233
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 61-69							
13	RESOLVE	0.070	lb ai/a	4 COL	18	0	0	242
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 61-69							
14	CHA-024	0.035	lb ai/a	4 COL	14	0	0	240
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 61-69							

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

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
Rating Date	6-12-2009	6-30-2009	7-28-2009	10-6-2009
Rating Type	GROWTH REDU	GROWTH REDU	GROWTH REDU	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1
SE Description				27/FT
Rating Timing	1 WEEK	4 WEEK	8 WEEK	
Days After First/Last Applic.	10 10	28 28	56 56	126 126
Trt-Eval Interval	10 DA-A	28 DA-A	56 DA-A	126 DA-A
Plant-Eval Interval	32 DP-1	50 DP-1	78 DP-1	148 DP-1
Days After Emergence	26 DE-	44 DE-	72 DE-	142 DE
ARM Action Codes	P	P	P	TY1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	7
15	CHECK UNTREATED DKC 61-69				5	0	0	240
16	CHA-023 INDUCE LIQUID N DKC 62-54	0.035 0.25 3	lb ai/a % v/v % v/v	4 COL 4 COL 4 COL	13	0	0	238
17	CHA-023 INDUCE LIQUID N DKC 62-54	0.07 0.25 3	lb ai/a % v/v % v/v	4 COL 4 COL 4 COL	16	0	0	236
18	RESOLVE INDUCE LIQUID N DKC 62-54	0.070 0.25 3	lb ai/a % v/v % v/v	4 COL 4 COL 4 COL	16	0	0	229
19	CHA-024 INDUCE LIQUID N DKC 62-54	0.035 0.25 3	lb ai/a % v/v % v/v	4 COL 4 COL 4 COL	9	0	0	234
20	CHECK UNTREATED DKC 62-54				3	0	0	240
21	CHA-023 INDUCE LIQUID N DKC 63-14	0.035 0.25 3	lb ai/a % v/v % v/v	4 COL 4 COL 4 COL	6	0	0	249
22	CHA-023 INDUCE LIQUID N DKC 63-14	0.07 0.25 3	lb ai/a % v/v % v/v	4 COL 4 COL 4 COL	20	0	0	242



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

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
Rating Date	6-12-2009	6-30-2009	7-28-2009	10-6-2009
Rating Type	GROWTH REDU	GROWTH REDU	GROWTH REDU	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1
SE Description				27/FT
Rating Timing	1 WEEK	4 WEEK	8 WEEK	
Days After First/Last Applic.	10 10	28 28	56 56	126 126
Trt-Eval Interval	10 DA-A	28 DA-A	56 DA-A	126 DA-A
Plant-Eval Interval	32 DP-1	50 DP-1	78 DP-1	148 DP-1
Days After Emergence	26 DE-	44 DE-	72 DE-	142 DE
ARM Action Codes	P	P	P	TY1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	7
23	RESOLVE	0.070	lb ai/a	4 COL	18	0	0	255
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 63-14							
24	CHA-024	0.035	lb ai/a	4 COL	5	0	0	248
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 63-14							
25	CHECK UNTREATED				1	0	0	258
	DKC 63-14							
26	CHA-023	0.035	lb ai/a	4 COL	13	0	0	246
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 63-42							
27	CHA-023	0.07	lb ai/a	4 COL	21	0	0	238
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 63-42							
28	RESOLVE	0.070	lb ai/a	4 COL	20	0	0	246
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 63-42							
29	CHA-024	0.035	lb ai/a	4 COL	11	0	0	242
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 63-42							
30	CHECK UNTREATED				6	0	0	251
	DKC 63-42							

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

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
Rating Date	6-12-2009	6-30-2009	7-28-2009	10-6-2009
Rating Type	GROWTH REDU	GROWTH REDU	GROWTH REDU	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1
SE Description				27/FT
Rating Timing	1 WEEK	4 WEEK	8 WEEK	
Days After First/Last Applic.	10 10	28 28	56 56	126 126
Trt-Eval Interval	10 DA-A	28 DA-A	56 DA-A	126 DA-A
Plant-Eval Interval	32 DP-1	50 DP-1	78 DP-1	148 DP-1
Days After Emergence	26 DE-	44 DE-	72 DE-	142 DE
ARM Action Codes	P	P	P	TY1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	7
31	CHA-023	0.035	lb ai/a	4 COL	13	0	0	250
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 63-84							
32	CHA-023	0.07	lb ai/a	4 COL	10	0	0	245
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 63-84							
33	RESOLVE	0.070	lb ai/a	4 COL	9	0	0	246
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 63-84							
34	CHA-024	0.035	lb ai/a	4 COL	11	0	0	231
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 63-84							
35	CHECK UNTREATED				8	0	0	225
	DKC 63-84							
36	CHA-023	0.035	lb ai/a	4 COL	13	0	0	228
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 65-44							
37	CHA-023	0.07	lb ai/a	4 COL	19	0	0	225
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 65-44							
38	RESOLVE	0.070	lb ai/a	4 COL	15	0	0	228
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 65-44							

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

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
Rating Date	6-12-2009	6-30-2009	7-28-2009	10-6-2009
Rating Type	GROWTH REDU	GROWTH REDU	GROWTH REDU	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1
SE Description				27/FT
Rating Timing	1 WEEK	4 WEEK	8 WEEK	
Days After First/Last Applic.	10 10	28 28	56 56	126 126
Trt-Eval Interval	10 DA-A	28 DA-A	56 DA-A	126 DA-A
Plant-Eval Interval	32 DP-1	50 DP-1	78 DP-1	148 DP-1
Days After Emergence	26 DE-	44 DE-	72 DE-	142 DE
ARM Action Codes	P	P	P	TY1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	7
39	CHA-024	0.035	lb ai/a	4 COL	13	0	0	232
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 65-44							
40	CHECK UNTREATED				3	0	0	228
	DKC 65-44							
41	CHA-023	0.035	lb ai/a	4 COL	13	0	0	239
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 65-63							
42	CHA-023	0.07	lb ai/a	4 COL	23	0	0	235
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 65-63							
43	RESOLVE	0.070	lb ai/a	4 COL	13	0	0	241
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 65-63							
44	CHA-024	0.035	lb ai/a	4 COL	8	0	0	233
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 65-63							
45	CHECK UNTREATED				5	0	0	239
	DKC 65-63							
46	CHA-023	0.035	lb ai/a	4 COL	25	0	0	234
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 66-94							

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

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
Rating Date	6-12-2009	6-30-2009	7-28-2009	10-6-2009
Rating Type	GROWTH REDU	GROWTH REDU	GROWTH REDU	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1
SE Description				27/FT
Rating Timing	1 WEEK	4 WEEK	8 WEEK	
Days After First/Last Applic.	10 10	28 28	56 56	126 126
Trt-Eval Interval	10 DA-A	28 DA-A	56 DA-A	126 DA-A
Plant-Eval Interval	32 DP-1	50 DP-1	78 DP-1	148 DP-1
Days After Emergence	26 DE-	44 DE-	72 DE-	142 DE
ARM Action Codes	P	P	P	TY1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	7
47	CHA-023	0.07	lb ai/a	4 COL	25	0	0	234
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 66-94							
48	RESOLVE	0.070	lb ai/a	4 COL	25	0	0	238
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 66-94							
49	CHA-024	0.035	lb ai/a	4 COL	20	0	0	238
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 66-94							
50	CHECK UNTREATED				10	0	0	233
	DKC 66-94							
51	CHA-023	0.035	lb ai/a	4 COL	23	0	0	245
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 66-96							
52	CHA-023	0.07	lb ai/a	4 COL	28	0	0	247
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 66-96							
53	RESOLVE	0.070	lb ai/a	4 COL	28	0	0	255
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 66-96							
54	CHA-024	0.035	lb ai/a	4 COL	25	0	0	254
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	DKC 66-96							

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

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	7
55	CHECK UNTREATED DKC 66-96				8	0	0	249
56	CHA-023 INDUCE LIQUID N 33 M 57	0.035 0.25 3	lb ai/a % v/v % v/v	4 COL 4 COL 4 COL	18	0	0	258
57	CHA-023 INDUCE LIQUID N 33 M 57	0.07 0.25 3	lb ai/a % v/v % v/v	4 COL 4 COL 4 COL	16	0	0	250
58	RESOLVE INDUCE LIQUID N 33 M 57	0.070 0.25 3	lb ai/a % v/v % v/v	4 COL 4 COL 4 COL	25	0	0	249
59	CHA-024 INDUCE LIQUID N 33 M 57	0.035 0.25 3	lb ai/a % v/v % v/v	4 COL 4 COL 4 COL	18	0	0	247
60	CHECK UNTREATED 33 M 57				11	0	0	271
61	CHA-023 INDUCE LIQUID N 34 F 96	0.035 0.25 3	lb ai/a % v/v % v/v	4 COL 4 COL 4 COL	26	0	0	241
62	CHA-023 INDUCE LIQUID N 34 F 96	0.07 0.25 3	lb ai/a % v/v % v/v	4 COL 4 COL 4 COL	28	0	0	239

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

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
Rating Date	6-12-2009	6-30-2009	7-28-2009	10-6-2009
Rating Type	GROWTH REDU	GROWTH REDU	GROWTH REDU	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1
SE Description				27/FT
Rating Timing	1 WEEK	4 WEEK	8 WEEK	
Days After First/Last Applic.	10 10	28 28	56 56	126 126
Trt-Eval Interval	10 DA-A	28 DA-A	56 DA-A	126 DA-A
Plant-Eval Interval	32 DP-1	50 DP-1	78 DP-1	148 DP-1
Days After Emergence	26 DE-	44 DE-	72 DE-	142 DE
ARM Action Codes	P	P	P	TY1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	7
63	RESOLVE	0.070	lb ai/a	4 COL	20	0	0	241
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	34 F 96							
64	CHA-024	0.035	lb ai/a	4 COL	18	0	0	234
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	34 F 96							
65	CHECK UNTREATED				10	0	0	234
	34 F 96							
66	CHA-023	0.035	lb ai/a	4 COL	15	0	0	248
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	W 7251							
67	CHA-023	0.07	lb ai/a	4 COL	16	0	0	244
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	W 7251							
68	RESOLVE	0.070	lb ai/a	4 COL	26	0	0	251
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	W 7251							
69	CHA-024	0.035	lb ai/a	4 COL	15	0	0	249
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N	3	% v/v	4 COL				
	W 7251							
70	CHECK UNTREATED				5	0	0	241
	W 7251							

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

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
Rating Date		6-12-2009	6-30-2009	7-28-2009	10-6-2009
Rating Type		GROWTH REDU	GROWTH REDU	GROWTH REDU	YIELD
Rating Unit		PERCENT	PERCENT	PERCENT	BU
Number of Subsamples		1	1	1	1
SE Description					27/FT
Rating Timing		1 WEEK	4 WEEK	8 WEEK	
Days After First/Last Applic.		10 10	28 28	56 56	126 126
Trt-Eval Interval		10 DA-A	28 DA-A	56 DA-A	126 DA-A
Plant-Eval Interval		32 DP-1	50 DP-1	78 DP-1	148 DP-1
Days After Emergence		26 DE-	44 DE-	72 DE-	142 DE
ARM Action Codes		P	P	P	TY1
Number of Decimals		0	0	0	0

  

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	7
71	CHA-023	0.035	lb ai/a	4 COL	28	0	0	225
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N W 7642	3	% v/v	4 COL				
72	CHA-023	0.07	lb ai/a	4 COL	33	0	0	226
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N W 7642	3	% v/v	4 COL				
73	RESOLVE	0.070	lb ai/a	4 COL	28	0	0	227
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N W 7642	3	% v/v	4 COL				
74	CHA-024	0.035	lb ai/a	4 COL	23	0	0	224
	INDUCE	0.25	% v/v	4 COL				
	LIQUID N W 7642	3	% v/v	4 COL				
75	CHECK UNTREATED W 7642				0	0	0	230
LSD (P=.05)					10.3	0.0	0.0	14.4
Standard Deviation					7.4	0.0	0.0	10.4
CV					48.75	0.0	0.0	4.32
Bartlett's X2					75.669	0.0	0.0	51.706
P(Bartlett's X2)					0.33	.	.	0.977
Replicate F					4.108	0.000	0.000	129.403
Replicate Prob(F)					0.0073	1.0000	1.0000	0.0001
Treatment F					4.286	0.000	0.000	3.147
Treatment Prob(F)					0.0001	1.0000	1.0000	0.0001

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

### CORN POSTEMERGENCE VARIETIES

Trial ID: C9003      Protocol ID: CHEMINOVA CORN VARIETY  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact:

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Type

YIELD = yield

#### Rating Unit

PERCENT = percent

BU = bushel

#### Plant-Eval Interval

32 DP-1 = 1 5-11-2009

50 DP-1 = 1 5-11-2009

78 DP-1 = 1 5-11-2009

148 DP-1 = 1 5-11-2009

#### ARM Action Codes

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

TY1 =  $5.761905 * [C5] * (100 - [C6]) / 84.5$



# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE VARIETIES

Trial ID: C9003      Protocol ID: CHEMINOVA CORN VARIETY  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact:

### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-11-2009

### Trial Location

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

### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

### Crop Description

Crop	Description
<b>Crop 1:</b>	<b>Corn</b>
<b>Variety:</b> ZEAMX Zea mays	<b>Description:</b> VT3
<b>Variety:</b> DEKALB DKC 60-51	<b>Planting Date:</b> 5-11-2009
<b>BBCH Scale:</b> BCOR	<b>Rate, Unit:</b> 30000 S/A
<b>Planting Method:</b> ROW	
<b>Depth, Unit:</b> 1.5 IN	
<b>Row Spacing, Unit:</b> 30 IN	
<b>Seed Bed:</b> FINE fine	<b>Soil Temperature, Unit:</b> 64 F
<b>Soil Moisture:</b> NORMAL normal	<b>Emergence Date:</b> 5-17-2009
<b>Harvest Date:</b> 10-6-2009	<b>Harvest Equipment:</b> COMBINE
<b>Harvested Width, Unit:</b> 5 FT	<b>Harvested Length, Unit:</b> 27 FT
<b>Crop 2:</b>	<b>Corn</b>
<b>Variety:</b> ZEAMX Zea mays	

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

**Variety:** DEKALB DKC 61-04  
**BBCH Scale:** BCOR  
**Planting Method:** ROW  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** FINE fine  
**Soil Moisture:** NORMAL normal  
**Harvest Date:** 10-6-2009  
**Harvested Width, Unit:** 5 FT

**Description:** VT3  
**Planting Date:** 5-11-2009  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 64 F  
**Emergence Date:** 5-17-2009  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 27 FT

**Crop 3:** ZEAMX Zea mays  
**Variety:** DEKALB DKC 61-69  
**BBCH Scale:** BCOR  
**Planting Method:** ROW  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** FINE fine  
**Soil Moisture:** NORMAL normal  
**Harvest Date:** 10-6-2009  
**Harvested Width, Unit:** 5 FT

Corn  
**Description:** VT3  
**Planting Date:** 5-11-2009  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 64 F  
**Emergence Date:** 5-17-2009  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 27 FT

**Crop 4:** ZEAMX Zea mays  
**Variety:** DEKALB DKC 62-54  
**BBCH Scale:** BCOR  
**Planting Method:** ROW  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** FINE fine  
**Soil Moisture:** NORMAL normal  
**Harvest Date:** 10-6-2009  
**Harvested Width, Unit:** 5 FT

Corn  
**Description:** VT3  
**Planting Date:** 5-11-2009  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 64 F  
**Emergence Date:** 5-17-2009  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 27 FT

**Crop 5:** ZEAMX Zea mays  
**Variety:** DEKALB DKC 63-14  
**BBCH Scale:** BCOR  
**Planting Method:** ROW  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** FINE fine  
**Soil Moisture:** NORMAL normal  
**Harvest Date:** 10-6-2009  
**Harvested Width, Unit:** 5 FT

Corn  
**Description:** VT3  
**Planting Date:** 5-11-2009  
**Rate, Unit:** 30000 S/A

**Soil Temperature, Unit:** 64 F  
**Emergence Date:** 5-17-2009  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 27 FT

**Crop 6:** ZEAMX Zea mays  
**Variety:** DEKALB DKC 63-42  
**BBCH Scale:** BCOR  
**Planting Method:** ROW  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

Corn  
**Description:** VT3  
**Planting Date:** 5-11-2009  
**Rate, Unit:** 30000 S/A

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

<p><b>Seed Bed:</b> FINE      fine  <b>Soil Moisture:</b> NORMAL      normal  <b>Harvest Date:</b> 10-6-2009  <b>Harvested Width, Unit:</b> 5      FT</p>	<p><b>Soil Temperature, Unit:</b> 64      F  <b>Emergence Date:</b> 5-17-2009  <b>Harvest Equipment:</b> COMBINE  <b>Harvested Length, Unit:</b> 27      FT</p>
<p><b>Crop 7:</b>      ZEAMX      Zea mays  <b>Variety:</b> DEKALB DKC 63-84  <b>BBCH Scale:</b> BCOR  <b>Planting Method:</b> ROW  <b>Depth, Unit:</b> 1.5      IN  <b>Row Spacing, Unit:</b> 30      IN  <b>Seed Bed:</b> FINE      fine  <b>Soil Moisture:</b> NORMAL      normal  <b>Harvest Date:</b> 10-6-2009  <b>Harvested Width, Unit:</b> 5      FT</p>	<p>Corn  <b>Description:</b> VT3  <b>Planting Date:</b> 5-11-2009  <b>Rate, Unit:</b> 30000      S/A</p> <p><b>Soil Temperature, Unit:</b> 64      F  <b>Emergence Date:</b> 5-17-2009  <b>Harvest Equipment:</b> COMBINE  <b>Harvested Length, Unit:</b> 27      FT</p>
<p><b>Crop 8:</b>      ZEAMX      Zea mays  <b>Variety:</b> DEKALB DKC 65-44  <b>BBCH Scale:</b> BCOR  <b>Planting Method:</b> ROW  <b>Depth, Unit:</b> 1.5      IN  <b>Row Spacing, Unit:</b> 30      IN  <b>Seed Bed:</b> FINE      fine  <b>Soil Moisture:</b> NORMAL      normal  <b>Harvest Date:</b> 10-6-2009  <b>Harvested Width, Unit:</b> 5      FT</p>	<p>Corn  <b>Description:</b> VT3  <b>Planting Date:</b> 5-11-2009  <b>Rate, Unit:</b> 30000      S/A</p> <p><b>Soil Temperature, Unit:</b> 64      F  <b>Emergence Date:</b> 5-17-2009  <b>Harvest Equipment:</b> COMBINE  <b>Harvested Length, Unit:</b> 27      FT</p>
<p><b>Crop 9:</b>      ZEAMX      Zea mays  <b>Variety:</b> DEKALB DKC 65-63  <b>BBCH Scale:</b> BCOR  <b>Planting Method:</b> ROW  <b>Depth, Unit:</b> 1.5      IN  <b>Row Spacing, Unit:</b> 30      IN  <b>Seed Bed:</b> FINE      fine  <b>Soil Moisture:</b> NORMAL      normal  <b>Harvest Date:</b> 10-6-2009  <b>Harvested Width, Unit:</b> 5      FT</p>	<p>Corn  <b>Description:</b> VT3  <b>Planting Date:</b> 5-11-2009  <b>Rate, Unit:</b> 30000      S/A</p> <p><b>Soil Temperature, Unit:</b> 64      F  <b>Emergence Date:</b> 5-17-2009  <b>Harvest Equipment:</b> COMBINE  <b>Harvested Length, Unit:</b> 27      FT</p>
<p><b>Crop 10:</b>      ZEAMX      Zea mays  <b>Variety:</b> DEKALB DKC 66-94  <b>BBCH Scale:</b> BCOR  <b>Planting Method:</b> ROW  <b>Depth, Unit:</b> 1.5      IN  <b>Row Spacing, Unit:</b> 30      IN  <b>Seed Bed:</b> FINE      fine  <b>Soil Moisture:</b> NORMAL      normal  <b>Harvest Date:</b> 10-6-2009  <b>Harvested Width, Unit:</b> 5      FT</p>	<p>Corn  <b>Description:</b> RR  <b>Planting Date:</b> 5-11-2009  <b>Rate, Unit:</b> 30000      S/A</p> <p><b>Soil Temperature, Unit:</b> 64      F  <b>Emergence Date:</b> 5-17-2009  <b>Harvest Equipment:</b> COMBINE  <b>Harvested Length, Unit:</b> 27      FT</p>

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

**Crop 11:** ZEAMX Zea mays  
**Variety:** DEKALB DKC 66-96  
**BBCH Scale:** BCOR  
**Planting Method:** ROW  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** FINE fine  
**Soil Moisture:** NORMAL normal  
**Harvest Date:** 10-6-2009  
**Harvested Width, Unit:** 5 FT

**Corn**  
**Description:** VT3 Pro  
**Planting Date:** 5-11-2009  
**Rate, Unit:** 30000 S/A  
  
**Soil Temperature, Unit:** 64 F  
**Emergence Date:** 5-17-2009  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 27 FT

**Crop 12:** ZEAMX Zea mays  
**Variety:** PIONEER 33 M 57  
**BBCH Scale:** BCOR  
**Planting Method:** ROW  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** FINE fine  
**Soil Moisture:** NORMAL normal  
**Harvest Date:** 10-6-2009  
**Harvested Width, Unit:** 5 FT

**Corn**  
**Description:** HX1/LL/RR2  
**Planting Date:** 5-11-2009  
**Rate, Unit:** 30000 S/A  
  
**Soil Temperature, Unit:** 64 F  
**Emergence Date:** 5-17-2009  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 27 FT

**Crop 13:** ZEAMX Zea mays  
**Variety:** PIONEER 34 F 96  
**BBCH Scale:** BCOR  
**Planting Method:** ROW  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** FINE fine  
**Soil Moisture:** NORMAL normal  
**Harvest Date:** 10-6-2009  
**Harvested Width, Unit:** 5 FT

**Corn**  
**Description:** HX1/LL/RR2  
**Planting Date:** 5-11-2009  
**Rate, Unit:** 30000 S/A  
  
**Soil Temperature, Unit:** 64 F  
**Emergence Date:** 5-17-2009  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 27 FT

**Crop 14:** ZEAMX Zea mays  
**Variety:** WYFFELS W7251  
**BBCH Scale:** BCOR  
**Planting Method:** ROW  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** FINE fine  
**Soil Moisture:** NORMAL normal  
**Harvest Date:** 10-6-2009  
**Harvested Width, Unit:** 5 FT

**Corn**  
**Description:** VT3  
**Planting Date:** 5-11-2009  
**Rate, Unit:** 30000 S/A  
  
**Soil Temperature, Unit:** 64 F  
**Emergence Date:** 5-17-2009  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 27 FT

**Crop 15:** ZEAMX Zea mays  
**Variety:** WYFFELS W7642  
**BBCH Scale:** BCOR  
**Planting Method:** ROW  
**Depth, Unit:** 1.5 IN

**Corn**  
**Description:** HX1/LL/RR2  
**Planting Date:** 5-11-2009  
**Rate, Unit:** 30000 S/A

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**Row Spacing, Unit:** 30 IN  
**Seed Bed:** FINE fine  
**Soil Moisture:** NORMAL normal  
**Harvest Date:** 10-6-2009  
**Harvested Width, Unit:** 5 FT  
**Soil Temperature, Unit:** 64 F  
**Emergence Date:** 5-17-2009  
**Harvest Equipment:** COMBINE  
**Harvested Length, Unit:** 27 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:** 17  
**Texture:** SIL silt loam  
**Soil Name:** MAURY SILT LOAM  
**Fert. Level:** E excellent  
**Soil Drainage:** E excellent

## Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP  
**Distance, Unit:** 1 MI

## Application Description

**A**  
**Application Date:** 6-2-2009  
**Time of Day:** 1 PM  
**Application Method:** SPRAY  
**Application Timing:** V4  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 89 F  
**% Relative Humidity:** 50  
**Wind Velocity, Unit:** 6 MPH  
**Wind Direction:** SW  
**Soil Temperature, Unit:** 74 F  
**Soil Moisture:** GOOD  
**% Cloud Cover:** 20

## Crop Stage At Each Application

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

### A

**Crop 1 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V4  
**Crop 2 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V4  
**Crop 3 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V4  
**Crop 4 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V4  
**Crop 5 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V4  
**Crop 6 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V4  
**Crop 7 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V4  
**Crop 8 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V4  
**Crop 9 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V4  
**Crop10 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V4  
**Crop11 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V4  
**Crop12 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V4  
**Crop13 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V4  
**Crop14 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V4  
**Crop15 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V4

### Application Equipment

#### A

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

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

NO TILL CORN PREEMERGENCE & POSTEMERGENCE

Trial ID: C9004      Protocol ID: SYNGENTA HMS016X4 NT  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact: SCOTT CULLEY

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMAM	AMBTR	CHEAL	SETFA	AMBTR	
Pest Scientific Name	Stellaria media	Lamium amplexi>	Ambrosia trifi>	Chenopodium al>	Setaria faberi	Ambrosia trifi>	
Pest Name	Common chickwe>	Henbit	Giant ragweed	Common lambsqu>	Giant foxtail	Giant ragweed	
Crop Code					ZEAMX		
BBCH Scale					BCOR		
Crop Scientific Name					Zea mays		
Crop Name					Corn		
Rating Date	5-12-2009	5-12-2009	5-12-2009	5-12-2009	6-2-2009	6-2-2009	6-2-2009
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1	1	1
SE Description							
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	AT POST APPL	AT POST APPL	AT POST APPL
Days After First/Last Applic.	14 14	14 14	14 14	14 14	35 35	35 35	35 35
Plant-Eval Interval	14 DP-1	14 DP-1	14 DP-1	14 DP-1	35 DP-1	35 DP-1	35 DP-1
Days After Emergence	8 DE-1	8 DE-1	8 DE-1	8 DE-1	29 DE-	29 DE-	29 DE-
ARM Action Codes	P	P	P	P	P	P	P
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
1	CHECK UNTREATED				0	0	0	0	0	0	0
2	BICEP II MAGNUM	1.2	qt/a	PRE	99	99	99	99	0	93	92
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	A16907	20	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
3	GRAMOXONE INTEON	48	fl oz/a	PRE	99	99	99	99	0	60	70
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	A16907	20	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							

## 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	STEME	LAMAM	AMBTR	CHEAL	SETFA	AMBTR					
Pest Scientific Name	Stellaria media	Lamium amplexi>	Ambrosia trifi>	Chenopodium al>	Setaria faberi	Ambrosia trifi>					
Pest Name	Common chickwe>	Henbit	Giant ragweed	Common lambsqu>	Giant foxtail	Giant ragweed					
Crop Code					ZEAMX						
BBCH Scale					BCOR						
Crop Scientific Name					Zea mays						
Crop Name					Corn						
Rating Date	5-12-2009	5-12-2009	5-12-2009	5-12-2009	6-2-2009	6-2-2009	6-2-2009				
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1				
SE Description											
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	AT POST APPL	AT POST APPL	AT POST APPL				
Days After First/Last Applic.	14 14	14 14	14 14	14 14	35 35	35 35	35 35				
Plant-Eval Interval	14 DP-1	14 DP-1	14 DP-1	14 DP-1	35 DP-1	35 DP-1	35 DP-1				
Days After Emergence	8 DE-1	8 DE-1	8 DE-1	8 DE-1	29 DE-	29 DE-	29 DE-				
ARM Action Codes	P	P	P	P	P	P	P				
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
4	GRAMOXONE INTEON	48	fl oz/a	PRE	99	99	99	99	0	60	73
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	LAUDIS	2	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
5	GRAMOXONE INTEON	48	fl oz/a	PRE	99	99	99	99	0	63	83
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	IMPACT	0.5	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
6	GRAMOXONE INTEON	48	fl oz/a	PRE	99	99	99	99	3	47	80
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	STATUS	2.5	oz wt/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
7	LEXAR	3	qt/a	PRE	99	99	99	99	0	98	99
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
8	LEXAR	1.5	qt/a	PRE	99	99	99	99	0	98	96
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	LEXAR	1.5	qt/a	MP							



## 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	STEME	LAMAM	AMBTR	CHEAL	SETFA	AMBTR					
Pest Scientific Name	Stellaria media	Lamium amplexi>	Ambrosia trifi>	Chenopodium al>	Setaria faberi	Ambrosia trifi>					
Pest Name	Common chickwe>	Henbit	Giant ragweed	Common lambsqu>	Giant foxtail	Giant ragweed					
Crop Code					ZEAMX						
BBCH Scale					BCOR						
Crop Scientific Name					Zea mays						
Crop Name					Corn						
Rating Date	5-12-2009	5-12-2009	5-12-2009	5-12-2009	6-2-2009	6-2-2009	6-2-2009				
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1				
SE Description											
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	AT POST APPL	AT POST APPL	AT POST APPL				
Days After First/Last Applic.	14 14	14 14	14 14	14 14	35 35	35 35	35 35				
Plant-Eval Interval	14 DP-1	14 DP-1	14 DP-1	14 DP-1	35 DP-1	35 DP-1	35 DP-1				
Days After Emergence	8 DE-1	8 DE-1	8 DE-1	8 DE-1	29 DE-	29 DE-	29 DE-				
ARM Action Codes	P	P	P	P	P	P	P				
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
9	BICEP II MAGNUM	1.25	qt/a	PRE	99	99	99	99	0	96	93
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	HALEX GT	3.6	pt/a	MP							
	INDUCE	0.25	% v/v	MP							
10	LEXAR	2	qt/a	PRE	99	99	99	99	0	99	98
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	TOUCHDOWN TOTAL	30	fl oz/a	MP							
11	BICEP II MAGNUM	2.1	qt/a	PRE	99	99	99	99	0	99	94
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	A16907	1.5	pt/a	MP							
	COC	1	% v/v	MP							
	LIQUID N	1	% v/v	MP							
12	GRAMOXONE INTEON	48	fl oz/a	PRE	99	99	99	99	0	72	75
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	A16907	1.5	pt/a	MP							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	TOUCHDOWN TOTAL	30	fl oz/a	MP							

## 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	STEME	LAMAM	AMBTR	CHEAL	SETFA	AMBTR					
Pest Scientific Name	Stellaria media	Lamium amplexi>	Ambrosia trifi>	Chenopodium al>	Setaria faberi	Ambrosia trifi>					
Pest Name	Common chickwe>	Henbit	Giant ragweed	Common lambsqu>	Giant foxtail	Giant ragweed					
Crop Code					ZEAMX						
BBCH Scale					BCOR						
Crop Scientific Name					Zea mays						
Crop Name					Corn						
Rating Date	5-12-2009	5-12-2009	5-12-2009	5-12-2009	6-2-2009	6-2-2009	6-2-2009				
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1				
SE Description											
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	AT POST APPL	AT POST APPL	AT POST APPL				
Days After First/Last Applic.	14 14	14 14	14 14	14 14	35 35	35 35	35 35				
Plant-Eval Interval	14 DP-1	14 DP-1	14 DP-1	14 DP-1	35 DP-1	35 DP-1	35 DP-1				
Days After Emergence	8 DE-1	8 DE-1	8 DE-1	8 DE-1	29 DE-	29 DE-	29 DE-				
ARM Action Codes	P	P	P	P	P	P	P				
Number of Decimals	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	1	2	3	4	5	6	7
13	GRAMOXONE INTEON	48	fl oz/a	PRE	99	99	99	99	0	73	79
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	AMS	2.5	% v/v	MP							
	HALEX GT	3.6	pt/a	MP							
	AATREX	32	fl oz/a	MP							
	INDUCE	0.25	% v/v	MP							
14	CORVUS HERBICIDE	3.3	fl oz/a	PRE	99	99	99	99	0	98	99
	AATREX	1	qt/a	PRE							
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
15	BALANCE FLEXX HERBICIDE	5	fl oz/a	PRE	99	99	99	99	0	90	96
	AATREX	1.5	qt/a	PRE							
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							

## 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	STEME	LAMAM	AMBTR	CHEAL	SETFA	AMBTR				
Pest Scientific Name	Stellaria media	Lamium amplexi>	Ambrosia trifi>	Chenopodium al>	Setaria faberi	Ambrosia trifi>				
Pest Name	Common chickwe>	Henbit	Giant ragweed	Common lambsqu>	Giant foxtail	Giant ragweed				
Crop Code					ZEAMX					
BBCH Scale					BCOR					
Crop Scientific Name					Zea mays					
Crop Name					Corn					
Rating Date	5-12-2009	5-12-2009	5-12-2009	5-12-2009	6-2-2009	6-2-2009	6-2-2009			
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
Number of Subsamples	1	1	1	1	1	1	1			
SE Description										
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	AT POST APPL	AT POST APPL	AT POST APPL			
Days After First/Last Applic.	14 14	14 14	14 14	14 14	35 35	35 35	35 35			
Plant-Eval Interval	14 DP-1	14 DP-1	14 DP-1	14 DP-1	35 DP-1	35 DP-1	35 DP-1			
Days After Emergence	8 DE-1	8 DE-1	8 DE-1	8 DE-1	29 DE-	29 DE-	29 DE-			
ARM Action Codes	P	P	P	P	P	P	P			
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
16 INTEGRITY	20	fl oz/a	PRE	99	99	99	99	0	98	99
GRAMOXONE INTEON	48	fl oz/a	PRE							
WEEDONE LV4	1	pt/a	PRE							
COC	1	% v/v	PRE							
LSD (P=.05)				0.0	0.0	0.0	0.0	2.2	8.3	7.9
Standard Deviation				0.0	0.0	0.0	0.0	1.3	5.0	4.8
CV				0.0	0.0	0.0	0.0	692.82	6.39	5.74
Bartlett's X2				0.0	0.0	0.0	0.0	0.0	15.252	6.766
P(Bartlett's X2)				.	.	.	.	.	0.123	0.661
Replicate F				0.000	0.000	0.000	0.000	1.000	0.550	0.545
Replicate Prob(F)				1.0000	1.0000	1.0000	1.0000	0.3798	0.5828	0.5857
Treatment F				0.000	0.000	0.000	0.000	1.000	90.183	78.288
Treatment Prob(F)				1.0000	1.0000	1.0000	1.0000	0.4801	0.0001	0.0001

## 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	CHEAL	SETFA	SETFA	AMBTR	CHEAL	SETFA					
Pest Scientific Name	Chenopodium al>	Setaria faberi	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Setaria faberi					
Pest Name	Common lambsqu>	Giant foxtail	Giant foxtail	Giant ragweed	Common lambsqu>	Giant foxtail					
Crop Code		ZEAMX				ZEAMX					
BBCH Scale		BCOR				BCOR					
Crop Scientific Name		Zea mays				Zea mays					
Crop Name		Corn				Corn					
Rating Date	6-2-2009	6-16-2009	6-16-2009	6-16-2009	6-16-2009	6-30-2009					
Rating Type	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY					
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT					
Number of Subsamples	1	1	1	1	1	1					
SE Description		2WK AFT POST	2WK AFT POST	2WK AFT POST	2WK AFT POST	4WK AFT POST					
Rating Timing	AT POST APPL	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK					
Days After First/Last Applic.	35 35	49 14	49 14	49 14	49 14	63 28					
Plant-Eval Interval	35 DP-1	49 DP-1	49 DP-1	49 DP-1	49 DP-1	63 DP-1					
Days After Emergence	29 DE-	43 DE-	43 DE-	43 DE-	43 DE-	57 DE-					
ARM Action Codes	P	P	P	P	P	P					
Number of Decimals	0	0	0	0	0	0					
Trt No.	Treatment Name	Rate	Unit	Growth Stage	8	9	10	11	12	13	14
1	CHECK UNTREATED				0	0	0	0	0	0	0
2	BICEP II MAGNUM	1.2	qt/a	PRE	95	0	99	99	99	0	99
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	A16907	20	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
3	GRAMOXONE INTEON	48	fl oz/a	PRE	77	0	98	98	99	0	98
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	A16907	20	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							

## 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	CHEAL	SETFA	AMBTR	CHEAL	SETFA	SETFA					
Pest Scientific Name	Chenopodium al>	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Setaria faberi	Setaria faberi					
Pest Name	Common lambsqu>	Giant foxtail	Giant ragweed	Common lambsqu>	Giant foxtail	Giant foxtail					
Crop Code		ZEAMX			ZEAMX						
BBCH Scale		BCOR			BCOR						
Crop Scientific Name		Zea mays			Zea mays						
Crop Name		Corn			Corn						
Rating Date	6-2-2009	6-16-2009	6-16-2009	6-16-2009	6-16-2009	6-30-2009					
Rating Type	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY					
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT					
Number of Subsamples	1	1	1	1	1	1					
SE Description		2WK AFT POST	2WK AFT POST	2WK AFT POST	2WK AFT POST	4WK AFT POST					
Rating Timing	AT POST APPL	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK					
Days After First/Last Applic.	35 35	49 14	49 14	49 14	49 14	63 28					
Plant-Eval Interval	35 DP-1	49 DP-1	49 DP-1	49 DP-1	49 DP-1	63 DP-1					
Days After Emergence	29 DE-	43 DE-	43 DE-	43 DE-	43 DE-	57 DE-					
ARM Action Codes	P	P	P	P	P	P					
Number of Decimals	0	0	0	0	0	0					
Trt No.	Treatment Name	Rate	Unit	Growth Stage	8	9	10	11	12	13	14
4	GRAMOXONE INTEON	48	fl oz/a	PRE	77	0	99	99	99	0	99
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	LAUDIS	2	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
5	GRAMOXONE INTEON	48	fl oz/a	PRE	78	0	95	99	99	0	95
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	IMPACT	0.5	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
6	GRAMOXONE INTEON	48	fl oz/a	PRE	86	3	99	98	99	3	99
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	STATUS	2.5	oz wt/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
7	LEXAR	3	qt/a	PRE	95	0	98	99	99	0	98
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
8	LEXAR	1.5	qt/a	PRE	99	0	99	99	99	0	98
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	LEXAR	1.5	qt/a	MP							

## 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	CHEAL	SETFA	AMBTR	CHEAL	SETFA	SETFA					
Pest Scientific Name	Chenopodium al>	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Setaria faberi	Setaria faberi					
Pest Name	Common lambsqu>	Giant foxtail	Giant ragweed	Common lambsqu>	Giant foxtail	Giant foxtail					
Crop Code		ZEAMX			ZEAMX						
BBCH Scale		BCOR			BCOR						
Crop Scientific Name		Zea mays			Zea mays						
Crop Name		Corn			Corn						
Rating Date	6-2-2009	6-16-2009	6-16-2009	6-16-2009	6-16-2009	6-30-2009					
Rating Type	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY					
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT					
Number of Subsamples	1	1	1	1	1	1					
SE Description		2WK AFT POST	2WK AFT POST	2WK AFT POST	2WK AFT POST	4WK AFT POST					
Rating Timing	AT POST APPL	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK					
Days After First/Last Applic.	35 35	49 14	49 14	49 14	49 14	63 28					
Plant-Eval Interval	35 DP-1	49 DP-1	49 DP-1	49 DP-1	49 DP-1	63 DP-1					
Days After Emergence	29 DE-	43 DE-	43 DE-	43 DE-	43 DE-	57 DE-					
ARM Action Codes	P	P	P	P	P	P					
Number of Decimals	0	0	0	0	0	0					
Trt No.	Treatment Name	Rate	Unit	Growth Stage	8	9	10	11	12	13	14
9	BICEP II MAGNUM	1.25	qt/a	PRE	98	0	99	99	99	0	99
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	HALEX GT	3.6	pt/a	MP							
	INDUCE	0.25	% v/v	MP							
10	LEXAR	2	qt/a	PRE	99	0	99	99	99	0	98
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	TOUCHDOWN TOTAL	30	fl oz/a	MP							
11	BICEP II MAGNUM	2.1	qt/a	PRE	98	0	99	99	99	0	98
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	A16907	1.5	pt/a	MP							
	COC	1	% v/v	MP							
	LIQUID N	1	% v/v	MP							
12	GRAMOXONE INTEON	48	fl oz/a	PRE	80	0	99	93	99	0	99
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	A16907	1.5	pt/a	MP							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	TOUCHDOWN TOTAL	30	fl oz/a	MP							

## 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	CHEAL	SETFA	AMBTR	CHEAL	SETFA	SETFA					
Pest Scientific Name	Chenopodium al>	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Setaria faberi	Setaria faberi					
Pest Name	Common lambsqu>	Giant foxtail	Giant ragweed	Common lambsqu>	Giant foxtail	Giant foxtail					
Crop Code		ZEAMX			ZEAMX						
BBCH Scale		BCOR			BCOR						
Crop Scientific Name		Zea mays			Zea mays						
Crop Name		Corn			Corn						
Rating Date	6-2-2009	6-16-2009	6-16-2009	6-16-2009	6-16-2009	6-30-2009					
Rating Type	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY					
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT					
Number of Subsamples	1	1	1	1	1	1					
SE Description		2WK AFT POST	2WK AFT POST	2WK AFT POST	2WK AFT POST	4WK AFT POST					
Rating Timing	AT POST APPL	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK					
Days After First/Last Applic.	35 35	49 14	49 14	49 14	49 14	63 28					
Plant-Eval Interval	35 DP-1	49 DP-1	49 DP-1	49 DP-1	49 DP-1	63 DP-1					
Days After Emergence	29 DE-	43 DE-	43 DE-	43 DE-	43 DE-	57 DE-					
ARM Action Codes	P	P	P	P	P	P					
Number of Decimals	0	0	0	0	0	0					
Trt No.	Treatment Name	Rate	Unit	Growth Stage	8	9	10	11	12	13	14
13	GRAMOXONE INTEON	48	fl oz/a	PRE	88	0	95	99	99	0	93
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	AMS	2.5	% v/v	MP							
	HALEX GT	3.6	pt/a	MP							
	AATREX	32	fl oz/a	MP							
	INDUCE	0.25	% v/v	MP							
14	CORVUS HERBICIDE	3.3	fl oz/a	PRE	99	0	94	96	99	0	90
	AATREX	1	qt/a	PRE							
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
15	BALANCE FLEXX HERBICIDE	5	fl oz/a	PRE	96	0	83	91	96	0	80
	AATREX	1.5	qt/a	PRE							
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							

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

Pest Type	W Weed		W Weed		W Weed		W Weed		W Weed		
Pest Code	CHEAL		SETFA		AMBTR		CHEAL		SETFA		
Pest Scientific Name	Chenopodium al>		Setaria faberi		Ambrosia trifi>		Chenopodium al>		Setaria faberi		
Pest Name	Common lambsqu>		Giant foxtail		Giant ragweed		Common lambsqu>		Giant foxtail		
Crop Code	ZEAMX		ZEAMX		ZEAMX		ZEAMX		ZEAMX		
BBCH Scale	BCOR		BCOR		BCOR		BCOR		BCOR		
Crop Scientific Name	Zea mays		Zea mays		Zea mays		Zea mays		Zea mays		
Crop Name	Corn		Corn		Corn		Corn		Corn		
Rating Date	6-2-2009		6-16-2009		6-16-2009		6-16-2009		6-30-2009		
Rating Type	CONTROL		INJURY		CONTROL		CONTROL		INJURY		
Rating Unit	PERCENT		PERCENT		PERCENT		PERCENT		PERCENT		
Number of Subsamples	1		1		1		1		1		
SE Description	2WK AFT POST		2WK AFT POST		2WK AFT POST		2WK AFT POST		4WK AFT POST		
Rating Timing	AT POST APPL		2 WEEK		2 WEEK		2 WEEK		4 WEEK		
Days After First/Last Applic.	35 35		49 14		49 14		49 14		63 28		
Plant-Eval Interval	35 DP-1		49 DP-1		49 DP-1		49 DP-1		63 DP-1		
Days After Emergence	29 DE-		43 DE-		43 DE-		43 DE-		57 DE-		
ARM Action Codes	P		P		P		P		P		
Number of Decimals	0		0		0		0		0		
Trt No.	Treatment Name	Rate	Unit	Growth Stage	8	9	10	11	12	13	14
16	INTEGRITY	20	fl oz/a	PRE	98	0	93	96	99	0	84
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	LSD (P=.05)				8.2	2.2	7.7	4.7	2.2	2.2	9.3
	Standard Deviation				4.9	1.3	4.6	2.8	1.3	1.3	5.6
	CV				5.77	692.82	5.14	3.06	1.4	692.82	6.25
	Bartlett's X2				10.075	0.0	9.288	4.29	0.0	0.0	19.658
	P(Bartlett's X2)				0.524	.	0.158	0.508	.	.	0.02*
	Replicate F				0.127	1.000	2.195	1.325	1.000	1.000	1.500
	Replicate Prob(F)				0.8813	0.3798	0.1290	0.2810	0.3798	0.3798	0.2393
	Treatment F				73.237	1.000	83.224	230.742	1085.600	1.000	57.743
	Treatment Prob(F)				0.0001	0.4801	0.0001	0.0001	0.0001	0.4801	0.0001



## 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	AMBTR	CHEAL	SETFA	AMBTR	CHEAL						
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	Setaria faberi	Ambrosia trifi>	Chenopodium al>						
Pest Name	Giant ragweed	Common lambsqu>	Giant foxtail	Giant ragweed	Common lambsqu>						
Crop Code			ZEAMX			ZEAMX					
BBCH Scale			BCOR			BCOR					
Crop Scientific Name			Zea mays			Zea mays					
Crop Name			Corn			Corn					
Rating Date	6-30-2009	6-30-2009	7-29-2009	7-29-2009	7-29-2009	7-29-2009					
Rating Type	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL					
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT					
Number of Subsamples	1	1	1	1	1	1					
SE Description	4WK AFT POST	4WK AFT POST	8WK AFT POST	8WK AFT POST	8WK AFT POST	8WK AFT POST					
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK					
Days After First/Last Applic.	63 28	63 28	92 57	92 57	92 57	92 57					
Plant-Eval Interval	63 DP-1	63 DP-1	92 DP-1	92 DP-1	92 DP-1	92 DP-1					
Days After Emergence	57 DE-	57 DE-	86 DE-	86 DE-	86 DE-	86 DE-					
ARM Action Codes	P	P	P	P	P	P					
Number of Decimals	0	0	0	0	0	0					
Trt No.	Treatment Name	Rate	Unit	Growth Stage	15	16	17	18	19	20	24
1	CHECK UNTREATED				0	0	0	0	0	0	6
2	BICEP II MAGNUM	1.2	qt/a	PRE	99	99	0	99	99	99	226
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	A16907	20	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
3	GRAMOXONE INTEON	48	fl oz/a	PRE	98	99	0	98	98	99	215
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	A16907	20	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							

## 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	AMBTR	CHEAL		SETFA	AMBTR	CHEAL					
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>		Setaria faberi	Ambrosia trifi>	Chenopodium al>					
Pest Name	Giant ragweed	Common lambsqu>		Giant foxtail	Giant ragweed	Common lambsqu>					
Crop Code											
BBCH Scale											
Crop Scientific Name											
Crop Name											
Rating Date	6-30-2009	6-30-2009	7-29-2009	7-29-2009	7-29-2009	7-29-2009	9-28-2009				
Rating Type	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	YIELD				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU				
Number of Subsamples	1	1	1	1	1	1	1				
SE Description	4WK AFT POST	4WK AFT POST	8WK AFT POST	8WK AFT POST	8WK AFT POST	8WK AFT POST	36FT, 15.5%				
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK					
Days After First/Last Applic.	63 28	63 28	92 57	92 57	92 57	92 57	153 118				
Plant-Eval Interval	63 DP-1	63 DP-1	92 DP-1	92 DP-1	92 DP-1	92 DP-1	153 DP-1				
Days After Emergence	57 DE-	57 DE-	86 DE-	86 DE-	86 DE-	86 DE-	147 DE				
ARM Action Codes	P	P	P	P	P	P	TY1				
Number of Decimals	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	15	16	17	18	19	20	24
4	GRAMOXONE INTEON	48	fl oz/a	PRE	99	99	0	99	99	99	218
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	LAUDIS	2	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
5	GRAMOXONE INTEON	48	fl oz/a	PRE	99	96	0	95	99	96	213
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	IMPACT	0.5	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
6	GRAMOXONE INTEON	48	fl oz/a	PRE	98	99	3	99	98	99	221
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	N-PAK AMS LIQUID	2.5	% v/v	MP							
	STATUS	2.5	oz wt/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
7	LEXAR	3	qt/a	PRE	95	99	0	98	95	99	207
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
8	LEXAR	1.5	qt/a	PRE	98	99	0	98	98	99	212
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	LEXAR	1.5	qt/a	MP							

## 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	AMBTR	CHEAL		SETFA	AMBTR	CHEAL			
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>		Setaria faberi	Ambrosia trifi>	Chenopodium al>			
Pest Name	Giant ragweed	Common lambsqu>		Giant foxtail	Giant ragweed	Common lambsqu>			
Crop Code									
BBCH Scale									
Crop Scientific Name									
Crop Name									
Rating Date	6-30-2009	6-30-2009	7-29-2009	7-29-2009	7-29-2009	7-29-2009	9-28-2009		
Rating Type	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	YIELD		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU		
Number of Subsamples	1	1	1	1	1	1	1		
SE Description	4WK AFT POST	4WK AFT POST	8WK AFT POST	8WK AFT POST	8WK AFT POST	8WK AFT POST	36FT, 15.5%		
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK			
Days After First/Last Applic.	63 28	63 28	92 57	92 57	92 57	92 57	153 118		
Plant-Eval Interval	63 DP-1	63 DP-1	92 DP-1	92 DP-1	92 DP-1	92 DP-1	153 DP-1		
Days After Emergence	57 DE-	57 DE-	86 DE-	86 DE-	86 DE-	86 DE-	147 DE		
ARM Action Codes	P	P	P	P	P	P	TY1		
Number of Decimals	0	0	0	0	0	0	0		
Trt Treatment	Rate	Growth	15	16	17	18	19	20	24
No. Name	Rate Unit	Stage							
9 BICEP II MAGNUM	1.25 qt/a	PRE	99	99	0	99	99	99	217
GRAMOXONE INTEON	48 fl oz/a	PRE							
WEEDONE LV4	1 pt/a	PRE							
COC	1 % v/v	PRE							
N-PAK AMS LIQUID	2.5 % v/v	MP							
HALEX GT	3.6 pt/a	MP							
INDUCE	0.25 % v/v	MP							
10 LEXAR	2 qt/a	PRE	99	99	0	98	99	99	216
GRAMOXONE INTEON	48 fl oz/a	PRE							
WEEDONE LV4	1 pt/a	PRE							
COC	1 % v/v	PRE							
N-PAK AMS LIQUID	2.5 % v/v	MP							
TOUCHDOWN TOTAL	30 fl oz/a	MP							
11 BICEP II MAGNUM	2.1 qt/a	PRE	99	99	0	98	99	99	224
GRAMOXONE INTEON	48 fl oz/a	PRE							
WEEDONE LV4	1 pt/a	PRE							
COC	1 % v/v	PRE							
A16907	1.5 pt/a	MP							
COC	1 % v/v	MP							
LIQUID N	1 % v/v	MP							
12 GRAMOXONE INTEON	48 fl oz/a	PRE	95	99	0	99	95	99	225
WEEDONE LV4	1 pt/a	PRE							
COC	1 % v/v	PRE							
A16907	1.5 pt/a	MP							
N-PAK AMS LIQUID	2.5 % v/v	MP							
TOUCHDOWN TOTAL	30 fl oz/a	MP							

## 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	AMBTR	CHEAL		SETFA	AMBTR	CHEAL					
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>		Setaria faberi	Ambrosia trifi>	Chenopodium al>					
Pest Name	Giant ragweed	Common lambsqu>		Giant foxtail	Giant ragweed	Common lambsqu>					
Crop Code											
BBCH Scale											
Crop Scientific Name											
Crop Name											
Rating Date	6-30-2009	6-30-2009	7-29-2009	7-29-2009	7-29-2009	7-29-2009	9-28-2009				
Rating Type	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	YIELD				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU				
Number of Subsamples	1	1	1	1	1	1	1				
SE Description	4WK AFT POST	4WK AFT POST	8WK AFT POST	8WK AFT POST	8WK AFT POST	8WK AFT POST	36FT, 15.5%				
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK					
Days After First/Last Applic.	63 28	63 28	92 57	92 57	92 57	92 57	153 118				
Plant-Eval Interval	63 DP-1	63 DP-1	92 DP-1	92 DP-1	92 DP-1	92 DP-1	153 DP-1				
Days After Emergence	57 DE-	57 DE-	86 DE-	86 DE-	86 DE-	86 DE-	147 DE				
ARM Action Codes	P	P	P	P	P	P	TY1				
Number of Decimals	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	15	16	17	18	19	20	24
13	GRAMOXONE INTEON	48	fl oz/a	PRE	99	99	0	93	99	99	219
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
	AMS	2.5	% v/v	MP							
	HALEX GT	3.6	pt/a	MP							
	AATREX	32	fl oz/a	MP							
	INDUCE	0.25	% v/v	MP							
14	CORVUS HERBICIDE	3.3	fl oz/a	PRE	95	99	0	90	95	99	209
	AATREX	1	qt/a	PRE							
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							
15	BALANCE FLEXX HERBICIDE	5	fl oz/a	PRE	86	96	0	80	86	96	190
	AATREX	1.5	qt/a	PRE							
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	WEEDONE LV4	1	pt/a	PRE							
	COC	1	% v/v	PRE							

## 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	AMBTR	CHEAL		SETFA	AMBTR	CHEAL	
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>		Setaria faberi	Ambrosia trifi>	Chenopodium al>	
Pest Name	Giant ragweed	Common lambsqu>		Giant foxtail	Giant ragweed	Common lambsqu>	
Crop Code			ZEAMX				ZEAMX
BBCH Scale			BCOR				BCOR
Crop Scientific Name			Zea mays				Zea mays
Crop Name			Corn				Corn
Rating Date	6-30-2009	6-30-2009	7-29-2009	7-29-2009	7-29-2009	7-29-2009	9-28-2009
Rating Type	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1	1	1	1
SE Description	4WK AFT POST	4WK AFT POST	8WK AFT POST	8WK AFT POST	8WK AFT POST	8WK AFT POST	36FT, 15.5%
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.	63 28	63 28	92 57	92 57	92 57	92 57	153 118
Plant-Eval Interval	63 DP-1	63 DP-1	92 DP-1	92 DP-1	92 DP-1	92 DP-1	153 DP-1
Days After Emergence	57 DE-	57 DE-	86 DE-	86 DE-	86 DE-	86 DE-	147 DE
ARM Action Codes	P	P	P	P	P	P	TY1
Number of Decimals	0	0	0	0	0	0	0
Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	15	16	17	18	19
16 INTEGRITY	20 fl oz/a	PRE	86	99	0	84	86
GRAMOXONE INTEON	48 fl oz/a	PRE					99
WEEDONE LV4	1 pt/a	PRE					208
COC	1 % v/v	PRE					
LSD (P=.05)			6.3	3.0	2.2	9.3	6.3
Standard Deviation			3.8	1.8	1.3	5.6	3.8
CV			4.19	1.92	692.82	6.25	4.19
Bartlett's X2			8.118	0.0	0.0	19.658	8.118
P(Bartlett's X2)			0.23	.	.	0.02*	0.23
Replicate F			2.098	2.143	1.000	1.500	2.098
Replicate Prob(F)			0.1403	0.1349	0.3798	0.2393	0.1403
Treatment F			124.971	579.679	1.000	57.743	124.971
Treatment Prob(F)			0.0001	0.0001	0.4801	0.0001	0.0001

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

## NO TILL CORN PREEMERGENCE & POSTEMERGENCE

Trial ID: C9004                      Protocol ID: SYNGENTA HMS016X4 NT  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:                              Investigator: Charles H Slack  
Sponsor Contact: SCOTT CULLEY

### Pest Type

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

### Pest Code

STEME, Stellaria media, = US  
LAMAM, Lamium amplexicaule, = US  
AMBTR, Ambrosia trifida, = US  
CHEAL, Chenopodium album, = US  
SETFA, Setaria faberi, = US

### Crop Code

ZEAMX, BCOR, Zea mays, = US

### Rating Type

YIELD = yield

### Rating Unit

PERCENT = percent

BU = bushel

### Plant-Eval Interval

14 DP-1 = 1 4-28-2009  
35 DP-1 = 1 4-28-2009  
49 DP-1 = 1 4-28-2009  
63 DP-1 = 1 4-28-2009  
92 DP-1 = 1 4-28-2009  
153 DP-1 = 1 4-28-2009

### ARM Action Codes

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

TY1 = 3.96344\*22

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

NO TILL CORN PREEMERGENCE & POSTEMERGENCE

Trial ID: C9004                      Protocol ID: SYNGENTA HMS016X4 NT  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: SCOTT CULLEY

### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-28-2009

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

### Trial Location

### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

### Crop Description

<b>Crop 1:</b> ZEAMX      Zea mays	Corn
<b>Variety:</b> DKC 62-54	
<b>BBCH Scale:</b> BCOR	<b>Planting Date:</b> 4-28-2009
<b>Planting Method:</b> ROWS	<b>Rate, Unit:</b> 30000 S/A
<b>Depth, Unit:</b> 1.5      IN	
<b>Row Spacing, Unit:</b> 30      IN	
<b>Seed Bed:</b> MEDTRA      medium/trashy	<b>Soil Temperature, Unit:</b> 61      F
<b>Soil Moisture:</b> NORMAL      normal	<b>Emergence Date:</b> 5-4-2009
<b>Harvest Date:</b> 9-28-2009	<b>Harvest Equipment:</b> COMBINE
<b>Harvested Width, Unit:</b> 5      FT	<b>Harvested Length, Unit:</b> 36      FT
<b>% Standard Moisture:</b> 15.5	

### Pest Description

# Plant and Soil Science, U of KY

## Weed Science Research

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

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

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

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

**Pest 5 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

### Site and Design

**Plot Width, Unit:** 10 FT      **Site Type:** FIELD    field  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 440 FT<sup>2</sup>    **Tillage Type:** 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:** 17      **Fert. Level:** E            excellent  
**Soil Drainage:** E            excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP      **Distance, Unit:** 1.5 MI

### Application Description

	A	B
<b>Application Date:</b>	4-28-2009	6-2-2009
<b>Time of Day:</b>	4 PM	5 PM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	MP
<b>Application Placement:</b>	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	68 F	89 F
<b>% Relative Humidity:</b>	78	50
<b>Wind Velocity, Unit:</b>	6 MPH	6 MPH
<b>Wind Direction:</b>	WSW	SW
<b>Soil Temperature, Unit:</b>	61 F	74 F
<b>Soil Moisture:</b>	ADEQUATE	GOOD
<b>% Cloud Cover:</b>	90	20



# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Stage At Each Application

	A	B
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>	V5	
<b>Height, Unit:</b>	15 IN	

### Pest Stage At Each Application

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

### Application Equipment

	A	B
<b>Appl. Equipment:</b>	ATV	ATV
<b>Operating Pressure, Unit:</b>	30 PSI	30 PSI
<b>Nozzle Type:</b>	FLAT FAN	FLAT FAN
<b>Nozzle Size:</b>	8003 DG	8003 DG
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN
<b>Boom Length, Unit:</b>	10 FT	10 FT
<b>Boom Height, Unit:</b>	30 IN	30 IN
<b>Ground Speed, Unit:</b>	4 MPH	4 MPH
<b>Carrier:</b>	WATER	WATER
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA
<b>Propellant:</b>	CO2	CO2



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

		W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
		SETFA	AMBTR	CHEAL	IPOSS	SETFA	AMBTR	CHEAL					
		Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	Setaria faberi	Ambrosia trifi>	Chenopodium al>					
		Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory	Giant foxtail	Giant ragweed	Common lambsqu>					
Pest Type													
Pest Code													
Pest Scientific Name													
Pest Name													
Crop Code	ZEAMX												
BBCH Scale	BCOR												
Crop Scientific Name	Zea mays												
Crop Name	Corn												
Rating Date													
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1	1	1				
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK				
Days After First/Last Applic.													
Plant-Eval Interval													
Days After Emergence													
ARM Action Codes	P	P	P	P	P	P	P	P	P				
Number of Decimals	0	0	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4	5	6	7	8	9
6	STALWART XTRA	2	qt/a	4LFC	0	99	95	99	87	0	99	95	99
	ROUNDUP POWERMAX	22	fl oz/a	4LFC									
	AMS	3.75	% v/v	4LFC									
LSD (P=.05)					0.0	0.0	6.0	3.9	7.7	0.0	0.0	5.2	3.9
Standard Deviation					0.0	0.0	3.3	2.1	4.2	0.0	0.0	2.9	2.1
CV					0.0	0.0	4.33	2.59	5.77	0.0	0.0	3.64	2.59
Bartlett's X2					0.0	0.0	3.502	0.0	2.215	0.0	0.0	0.924	0.0
P(Bartlett's X2)					.	.	0.478	.	0.529	.	.	0.82	.
Replicate F					0.000	0.000	0.126	1.000	0.609	0.000	0.000	0.170	1.000
Replicate Prob(F)					1.0000	1.0000	0.8833	0.4019	0.5630	1.0000	1.0000	0.8464	0.4019
Treatment F					0.000	0.000	388.371	1076.800	219.655	0.000	0.000	546.324	1076.800
Treatment Prob(F)					1.0000	1.0000	0.0001	0.0001	0.0001	1.0000	1.0000	0.0001	0.0001

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

Trt No.	Treatment Name	Rate	Unit	Growth Stage	10	11	12	13	14	15	20
1	CHECK UNTREATED				0	0	0	0	0	0	83
2	LUMAX	80	fl oz/a	PRE	93	0	99	99	99	94	223
	ROUNDUP POWERMAX	22	fl oz/a	24C							
	INDUCE	0.25	% v/v	24C							
	AMS	3.7	% v/v	24C							
3	INTEGRITY	20	fl oz/a	PRE	93	0	98	93	99	95	215
	ROUNDUP POWERMAX	22	fl oz/a	24C							
	INDUCE	0.25	% v/v	24C							
	AMS	3.7	% v/v	24C							
4	HARNESS XTRA	48	fl oz/a	PRE	85	0	99	92	99	80	211
	ROUNDUP POWERMAX	22	fl oz/a	24C							
	INDUCE	0.25	% v/v	24C							
	AMS	3.7	% v/v	24C							
5	INTEGRITY	13	fl oz/a	PRE	93	0	99	96	96	93	220
	ROUNDUP POWERMAX	22	fl oz/a	24C							
	STATUS	2.5	oz wt/a	24C							
	INDUCE	0.25	% v/v	24C							
	AMS	3.7	% v/v	24C							

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

Pest Type		W Weed		W Weed		W Weed		W Weed		W Weed		
Pest Code		IPOSS		SETFA		AMBTR		CHEAL		IPOSS		
Pest Scientific Name		Ipomoea sp.		Setaria faberi		Ambrosia trifi>		Chenopodium al>		Ipomoea sp.		
Pest Name		Morning glory		Giant foxtail		Giant ragweed		Common lambsqu>		Morning glory		
Crop Code				ZEAMX						ZEAMX		
BBCH Scale				BCOR						BCOR		
Crop Scientific Name				Zea mays						Zea mays		
Crop Name				Corn						Corn		
Rating Date										9-30-2009		
Rating Type		CONTROL	INJURY	CONTROL		CONTROL		CONTROL	CONTROL	YIELD		
Rating Unit		PERCENT	PERCENT	PERCENT		PERCENT		PERCENT	PERCENT	BU		
Number of Subsamples		1	1	1		1		1	1	1		
Rating Timing		4 WEEK	8 WEEK	8 WEEK		8 WEEK		8 WEEK	8 WEEK			
Days After First/Last Applic.										156 107		
Plant-Eval Interval										157 DP-1		
Days After Emergence										151 DE		
ARM Action Codes		P	P	P		P		P	P	TY1		
Number of Decimals		0	0	0		0		0	0	0		
Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	10	11	12	13	14	15	20	
6	STALWART XTRA	2	qt/a	4LFC	89	0	99	90		99	86	213
	ROUNDUP POWERMAX	22	fl oz/a	4LFC								
	AMS	3.75	% v/v	4LFC								
LSD (P=.05)					7.8	0.0	1.7	5.5		3.9	6.5	13.3
Standard Deviation					4.3	0.0	0.9	3.0		2.1	3.6	7.3
CV					5.65	0.0	1.15	3.84		2.59	4.76	3.78
Bartlett's X2					5.336	0.0	0.0	1.308		0.0	2.575	2.675
P(Bartlett's X2)					0.255	.	.	0.727		.	0.462	0.75
Replicate F					0.204	0.000	1.000	0.190		1.000	0.320	1.077
Replicate Prob(F)					0.8189	1.0000	0.4019	0.8297		0.4019	0.7330	0.3771
Treatment F					226.982	0.000	5484.363	492.036		1076.800	325.595	167.766
Treatment Prob(F)					0.0001	1.0000	0.0001	0.0001		0.0001	0.0001	0.0001

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

### CORN POSTEMERGENCE

Trial ID: C9005      Protocol ID: BASF C9F-B-02  
Location: LEXINGTON, KY      Study Director: CHARLES H. 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

CHEAL, Chenopodium album, = US

IPOSS, Ipomoea sp., = US

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Type

YIELD = yield

#### Rating Unit

PERCENT = percent

BU = bushel

#### Plant-Eval Interval

157 DP-1 = 1 4-26-2009

#### ARM Action Codes

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

TY1 = 4.014582\*18

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE

Trial ID: C9005      Protocol ID: BASF C9F-B-02  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact: GREG STAPLETON

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-26-2009

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

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

<b>Crop 1:</b> ZEAMX      Zea mays      Corn	
<b>Variety:</b> DKC 62-54	
<b>BBCH Scale:</b> BCOR	<b>Planting Date:</b> 4-26-2009
<b>Planting Method:</b> ROWS	<b>Rate, Unit:</b> 30000 S/A
<b>Depth, Unit:</b> 1.5      IN	
<b>Row Spacing, Unit:</b> 30      IN	
<b>Seed Bed:</b> MEDIUM	<b>Soil Temperature, Unit:</b> 64      F
<b>Soil Moisture:</b> NORMAL	<b>Emergence Date:</b> 5-2-2009
<b>Harvest Date:</b> 9-30-2009	<b>Harvest Equipment:</b> COMBINE
<b>Harvested Width, Unit:</b> 5      FT	<b>Harvested Length, Unit:</b> 37      FT
<b>% Standard Moisture:</b> 15.5	

### General Trial Information

#### Trial Location

#### Personnel

#### Other Personnel

#### Crop Description

#### Pest Description

# Plant and Soil Science, U of KY

## Weed Science Research

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

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

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

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

### Site and Design

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 17 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI

### Application Description

	A	B	C
<b>Application Date:</b>	4-27-2009	5-18-2009	6-15-2009
<b>Time of Day:</b>	4 PM	11 AM	11 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	4LC	24C
<b>Application Placement:</b>	BROSOI	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	SARA CARTER	SARA CARTER
<b>Air Temperature, Unit:</b>	82 F	80 F	76 F
<b>% Relative Humidity:</b>	35	40	74
<b>Wind Velocity, Unit:</b>	8 MPH	4 MPH	2 MPH
<b>Wind Direction:</b>	W	SW	SW
<b>Soil Temperature, Unit:</b>	65 F	62 F	75 F
<b>Soil Moisture:</b>	ADEQUATE	NORMAL	EXCELL
<b>% Cloud Cover:</b>	10	10	10

### Crop Stage At Each Application



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

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>		4LC	24C
<b>Height, Unit:</b>			24 IN

### Pest Stage At Each Application

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

### Application Equipment

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

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

CORN POSTEMERGENCE II

Trial ID: C9006      Protocol ID: MANA 2009-MEC-01  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	SETFA	AMBTR	CHEAL	IPOSS	SETFA	AMBTR	CHEAL						
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	Setaria faberi	Ambrosia trifi>	Chenopodium al>						
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory	Giant foxtail	Giant ragweed	Common lambsqu>						
Crop Code	ZEAMX				ZEAMX								
BBCH Scale	BCOR				BCOR								
Crop Scientific Name	Zea mays				Zea mays								
Crop Name	Corn				Corn								
Rating Date													
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1	1	1				
Rating Timing	2 WEEK	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	P				
Number of Decimals	0	0	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Appl Code	1	2	3	4	5	6	7	8	9
1	PARALLEL	1 pt/a	A		0	99	92	99	89	0	99	92	99
	ROUNDUP WeatherMAX	22 fl oz/a	A										
2	DUAL II MAGNUM	1 pt/a	A		0	99	93	99	88	0	99	93	99
	ROUNDUP WeatherMAX	22 fl oz/a	A										
3	PARALLEL	1.5 pt/a	A		0	99	93	99	89	0	99	93	99
	ROUNDUP WeatherMAX	22 fl oz/a	A										
4	DUAL II MAGNUM	1.5 pt/a	A		0	99	92	99	84	0	99	92	99
	ROUNDUP WeatherMAX	22 fl oz/a	A										
5	PARALLEL	2 pt/a	A		0	99	95	99	87	0	99	95	99
	ROUNDUP WeatherMAX	22 fl oz/a	A										
6	DUAL II MAGNUM	2 pt/a	A		0	99	93	99	89	0	99	92	99
	ROUNDUP WeatherMAX	22 fl oz/a	A										
7	PARALLEL	4 pt/a	A		0	99	89	99	87	0	99	89	99
	ROUNDUP WeatherMAX	22 fl oz/a	A										
8	DUAL II MAGNUM	4 pt/a	A		0	99	93	99	91	0	99	90	99
	ROUNDUP WeatherMAX	22 fl oz/a	A										
9	ROUNDUP WeatherMAX	22 fl oz/a	A		0	99	95	99	86	0	99	95	99

## 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	W Weed	W Weed			
Pest Code	SETFA	AMBTR	CHEAL	IPOSS	SETFA	AMBTR	CHEAL					
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	Setaria faberi	Ambrosia trifi>	Chenopodium al>					
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory	Giant foxtail	Giant ragweed	Common lambsqu>					
Crop Code	ZEAMX				ZEAMX							
BBCH Scale	BCOR				BCOR							
Crop Scientific Name	Zea mays				Zea mays							
Crop Name	Corn				Corn							
Rating Date												
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
Number of Subsamples	1	1	1	1	1	1	1	1	1			
Rating Timing	2 WEEK	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	P			
Number of Decimals	0	0	0	0	0	0	0	0	0			
Trt Treatment	Rate	Rate	Appl	1	2	3	4	5	6	7	8	9
No. Name	Rate	Unit	Code									
10 PARALLEL	1.5	pt/a	A	0	99	93	99	98	0	99	93	99
ROUNDUP WeatherMAX	22	fl oz/a	A									
AATREX	1.5	qt/a	A									
11 DUAL II MAGNUM	1.5	pt/a	A	0	99	95	99	95	0	99	94	99
ROUNDUP WeatherMAX	22	fl oz/a	A									
AATREX	1.5	qt/a	A									
12 CHECK UNTREATED				0	0	0	0	0	0	0	0	0
LSD (P=.05)				0.0	0.0	8.3	0.0	4.6	0.0	0.0	8.1	0.0
Standard Deviation				0.0	0.0	4.9	0.0	2.7	0.0	0.0	4.8	0.0
CV				0.0	0.0	5.77	0.0	3.31	0.0	0.0	5.65	0.0
Bartlett's X2				0.0	0.0	10.917	0.0	11.268	0.0	0.0	10.245	0.0
P(Bartlett's X2)				.	.	0.364	.	0.337	.	.	0.331	.
Replicate F				0.000	0.000	1.367	0.000	2.568	0.000	0.000	0.815	0.000
Replicate Prob(F)				1.0000	1.0000	0.2757	1.0000	0.0995	1.0000	1.0000	0.4555	1.0000
Treatment F				0.000	0.000	89.683	0.000	277.369	0.000	0.000	93.441	0.000
Treatment Prob(F)				1.0000	1.0000	0.0001	1.0000	0.0001	1.0000	1.0000	0.0001	1.0000

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

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	IPOSS	SETFA	AMBTR	CHEAL	IPOSS					
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.					
Pest Name	Morning glory	Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory					
Crop Code		ZEAMX								
BBCH Scale		BCOR								
Crop Scientific Name		Zea mays								
Crop Name		Corn								
Rating Date						9-30-2009				
Rating Type	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1				
Rating Timing	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK				
Days After First/Last Applic.						124 124				
Trt-Eval Interval						124 DA-A				
Plant-Eval Interval						157 DP-1				
Days After Emergence						151 DE				
ARM Action Codes	P	P	P	P	P	P				
Number of Decimals	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Appl Code	10	11	12	13	14	15	20
1	PARALLEL	1 pt/a	A	83	0	99	92	99	82	191
	ROUNDUP WeatherMAX	22 fl oz/a	A							
2	DUAL II MAGNUM	1 pt/a	A	84	0	99	88	99	85	204
	ROUNDUP WeatherMAX	22 fl oz/a	A							
3	PARALLEL	1.5 pt/a	A	87	0	99	92	99	85	209
	ROUNDUP WeatherMAX	22 fl oz/a	A							
4	DUAL II MAGNUM	1.5 pt/a	A	78	0	99	92	99	80	203
	ROUNDUP WeatherMAX	22 fl oz/a	A							
5	PARALLEL	2 pt/a	A	85	0	99	95	99	83	199
	ROUNDUP WeatherMAX	22 fl oz/a	A							
6	DUAL II MAGNUM	2 pt/a	A	88	0	99	88	99	83	211
	ROUNDUP WeatherMAX	22 fl oz/a	A							
7	PARALLEL	4 pt/a	A	85	0	99	88	99	83	201
	ROUNDUP WeatherMAX	22 fl oz/a	A							
8	DUAL II MAGNUM	4 pt/a	A	88	0	99	89	99	83	214
	ROUNDUP WeatherMAX	22 fl oz/a	A							
9	ROUNDUP WeatherMAX	22 fl oz/a	A	83	0	99	91	99	78	208

## 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	IPOSS	SETFA	AMBTR	CHEAL	IPOSS					
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trif>	Chenopodium al>	Ipomoea sp.					
Pest Name	Morning glory	Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory					
Crop Code		ZEAMX								
BBCH Scale		BCOR								
Crop Scientific Name		Zea mays								
Crop Name		Corn								
Rating Date							9-30-2009			
Rating Type	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	YIELD			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU			
Number of Subsamples	1	1	1	1	1	1	1			
Rating Timing	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK				
Days After First/Last Applic.							124 124			
Trt-Eval Interval							124 DA-A			
Plant-Eval Interval							157 DP-1			
Days After Emergence							151 DE			
ARM Action Codes	P	P	P	P	P	P	TY1			
Number of Decimals	0	0	0	0	0	0	0			
Trt Treatment	Rate	Rate	Appl							
No. Name	Rate	Unit	Code	10	11	12	13	14	15	20
10 PARALLEL	1.5	pt/a	A	93	0	99	93	99	93	200
ROUNDUP WeatherMAX	22	fl oz/a	A							
AATREX	1.5	qt/a	A							
11 DUAL II MAGNUM	1.5	pt/a	A	92	0	99	93	99	90	201
ROUNDUP WeatherMAX	22	fl oz/a	A							
AATREX	1.5	qt/a	A							
12 CHECK UNTREATED				0	0	0	0	0	0	63
LSD (P=.05)				6.0	0.0	0.0	9.8	0.0	7.7	24.4
Standard Deviation				3.6	0.0	0.0	5.8	0.0	4.6	14.4
CV				4.51	0.0	0.0	6.98	0.0	5.93	7.5
Bartlett's X2				6.252	0.0	0.0	12.103	0.0	3.711	7.826
P(Bartlett's X2)				0.794	.	.	0.278	.	0.929	0.729
Replicate F				5.444	0.000	0.000	0.395	0.000	0.410	3.696
Replicate Prob(F)				0.0120	1.0000	1.0000	0.6783	1.0000	0.6684	0.0413
Treatment F				150.025	0.000	0.000	61.556	0.000	86.757	24.574
Treatment Prob(F)				0.0001	1.0000	1.0000	0.0001	1.0000	0.0001	0.0001

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

## CORN POSTEMERGENCE II

Trial ID: C9006      Protocol ID: MANA 2009-MEC-01  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact:

### Pest Type

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

### Pest Code

SETFA, Setaria faberi, = US

AMBTR, Ambrosia trifida, = US

CHEAL, Chenopodium album, = US

IPOSS, Ipomoea sp., = US

### Crop Code

ZEAMX, BCOR, Zea mays, = US

### Rating Type

YIELD = yield

### Rating Unit

PERCENT = percent

BU = bushel

### Plant-Eval Interval

157 DP-1 = 1 4-26-2009

### ARM Action Codes

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

TY1 =  $4.204633 \cdot 18 \cdot (100 - 19) / 84.5$

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE II

Trial ID: C9006      Protocol ID: MANA 2009-MEC-01  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact:

### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-26-2009

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

### Trial Location

### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

### Crop Description

<b>Crop 1:</b> ZEAMX      Zea mays      Corn	
<b>Variety:</b> DKC 62-54	
<b>BBCH Scale:</b> BCOR	<b>Planting Date:</b> 4-26-2009
<b>Planting Method:</b> ROWS	<b>Rate, Unit:</b> 30000 S/A
<b>Depth, Unit:</b> 1.5      IN	
<b>Row Spacing, Unit:</b> 30      IN	
<b>Seed Bed:</b> MEDIUM      medium	<b>Soil Temperature, Unit:</b> 64      F
<b>Soil Moisture:</b> NORMAL      normal	<b>Emergence Date:</b> 5-2-2009
<b>Harvest Date:</b> 9-30-2009	<b>Harvest Equipment:</b> COMBINE
<b>Harvested Width, Unit:</b> 5      FT	<b>Harvested Length, Unit:</b> 37      FT
<b>% Standard Moisture:</b> 15.5	

### Pest Description

# Plant and Soil Science, U of KY

## Weed Science Research

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

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

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

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

### Site and Design

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6            **% OM:** 2.6            **Texture:** SIL            silt loam  
**% Silt:** 62            **pH:** 6.4            **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32            **CEC:** 17            **Fert. Level:** E            excellent  
**Soil Drainage:** E            excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP      **Distance, Unit:** 1.5 MI

### Application Description

**A**  
**Application Date:** 5-29-2009  
**Time of Day:** 10 AM  
**Application Method:** SPRAY  
**Application Timing:** LP  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 65 F  
**% Relative Humidity:** 40  
**Wind Velocity, Unit:** 6 MPH  
**Wind Direction:** NW  
**Soil Temperature, Unit:** 72 F  
**Soil Moisture:** GOOD  
**% Cloud Cover:** 0

### Crop Stage At Each Application



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

**A**

**Crop 1 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V5  
**Height, Unit:** 12 IN

### Pest Stage At Each Application

**A**

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

### Application Equipment

**A**

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





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

Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code		SETFA	AMBTR	CHEAL	IPOSS	SETFA	AMBTR	CHEAL					
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	Setaria faberi	Ambrosia trifi>	Chenopodium al>					
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory	Giant foxtail	Giant ragweed	Common lambsqu>					
Crop Code	ZEAMX					ZEAMX							
BBCH Scale	BCOR					BCOR							
Crop Scientific Name	Zea mays					Zea mays							
Crop Name	Corn					Corn							
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL					
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT					
Number of Subsamples	1	1	1	1	1	1	1	1					
SE Description	AFT APPL	AFT APPL	AFT APPL	AFT APPL	AFT APPL	AFT APPL	AFT APPL	AFT APPL					
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK					
ARM Action Codes	P	P	P	P	P	P	P	P					
Number of Decimals	0	0	0	0	0	0	0	0					
Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4	5	6	7	8	9
15	SURESTART	1.75	pt/a	MP	0	99	95	99	89	0	99	91	99
	DURANGO DMA	24	fl oz/a	MP									
	AMS	2	% w/w	MP									
16	STALWART XTRA	2.1	qt/a	PRE	0	99	95	99	95	0	99	93	99
	ROUNDUP POWERMAX	22	fl oz/a	LP									
	AMS	3.75	% v/v	LP									
	LSD (P=.05)				0.0	6.5	9.1	1.4	7.2	0.0	8.7	9.6	3.0
	Standard Deviation				0.0	3.9	5.5	0.8	4.3	0.0	5.2	5.8	1.8
	CV				0.0	4.24	6.33	0.9	5.12	0.0	5.78	6.99	1.92
	Bartlett's X2				0.0	3.684	10.196	0.0	30.475	0.0	5.41	25.345	2.83
	P(Bartlett's X2)				.	0.159	0.678	.	0.001*	.	0.368	0.021*	0.243
	Replicate F				0.000	0.022	0.687	0.484	1.030	0.000	0.320	0.438	1.198
	Replicate Prob(F)				1.0000	0.9781	0.5108	0.6211	0.3694	1.0000	0.7285	0.6493	0.3159
	Treatment F				0.000	121.134	55.118	2658.934	84.893	0.000	66.254	47.056	579.592
	Treatment Prob(F)				1.0000	0.0001	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001	0.0001

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

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	IPOSS	SETFA	AMBTR	CHEAL	IPOSS
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifida	Chenopodium albidum	Ipomoea sp.
Pest Name	Morning glory	Giant foxtail	Giant ragweed	Common lambsquarters	Morning glory
Crop Code		ZEAMX			ZEAMX
BBCH Scale		BCOR			BCOR
Crop Scientific Name		Zea mays			Zea mays
Crop Name		Corn			Corn
Rating Type	CONTROL	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1
SE Description	AFT APPL	AFT APPL	AFT APPL	AFT APPL	AFT APPL
Rating Timing	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	10	11	12	13	14	15	20
1	CHECK UNTREATED				0	0	0	0	0	0	54
2	BICEP II MAGNUM	1.05	qt/a	PRE	69	0	98	65	98	66	121
3	BICEP II MAGNUM	1.05	qt/a	PRE	78	0	99	81	99	75	200
	IMPACT	0.016	lb ai/a	V4							
	AATREX	0.5	lb ai/a	V4							
	MSO	1	% v/v	V4							
	LIQUID N	2.5	% v/v	V4							
4	BICEP II MAGNUM	1.05	qt/a	PRE	86	0	99	92	99	80	214
	LAUDIS	0.082	lb ai/a	V4							
	AATREX	0.5	lb ai/a	V4							
	MSO	1	% v/v	V4							
	LIQUID N	2.5	% v/v	V4							
5	IMPACT	0.016	lb ai/a	V4	85	0	92	80	95	82	216
	AATREX	0.5	lb ai/a	V4							
	MSO	1	% v/v	V4							
	LIQUID N	2.5	% v/v	V4							
6	LAUDIS	0.082	lb ai/a	V4	88	0	86	87	99	85	211
	AATREX	0.5	lb ai/a	V4							
	MSO	1	% v/v	V4							
	LIQUID N	2.5	% v/v	V4							

## 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	IPOSS	SETFA	AMBTR	CHEAL	IPOSS		
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.		
Pest Name	Morning glory	Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory		
Crop Code		ZEAMX				ZEAMX	
BBCH Scale		BCOR				BCOR	
Crop Scientific Name		Zea mays				Zea mays	
Crop Name		Corn				Corn	
Rating Type	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU 15.5%
Number of Subsamples	1	1	1	1	1	1	1
SE Description	AFT APPL	AFT APPL	AFT APPL	AFT APPL	AFT APPL	AFT APPL	
Rating Timing	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
ARM Action Codes	P	P	P	P	P	P	TY1
Number of Decimals	0	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	10	11	12	13	14	15	20
7	IMPACT	0.022	lb ai/a	V4	87	0	85	87	99	83	214
	AATREX	0.5	lb ai/a	V4							
	MSO	1	% v/v	V4							
	LIQUID N	2.5	% v/v	V4							
8	CAPRENO HERBICIDE	0.081	lb ai/a	V6	96	0	99	96	99	96	204
	AATREX	0.5	lb ai/a	V6							
	MSO	1	% v/v	V6							
	LIQUID N	2.5	% v/v	V6							
9	BICEP II MAGNUM	1.05	qt/a	PRE	90	0	99	87	99	86	210
	IMPACT	0.011	lb ai/a	V6							
	ROUNDUP POWERMAX	0.94	lb ai/a	V6							
	AMS	3.75	% v/v	V6							
10	BICEP II MAGNUM	1.05	qt/a	PRE	92	0	96	93	99	91	218
	IMPACT	0.011	lb ai/a	V6							
	ROUNDUP POWERMAX	0.94	lb ai/a	V6							
	ATRAZINE	0.5	lb ai/a	V6							
	AMS	3.75	% v/v	V6							
11	BICEP II MAGNUM	1.05	qt/a	PRE	88	0	99	80	99	85	207
	ROUNDUP POWERMAX	0.94	lb ai/a	V6							
	AMS	3.75	% v/v	V6							
12	SURESTART	1.75	pt/a	PRE	84	0	92	88	98	82	220
	DURANGO DMA	24	fl oz/a	LP							
	AMS	2	% w/w	LP							
13	SURESTART	2.5	pt/a	PRE	88	0	99	87	99	86	208
	DURANGO DMA	24	fl oz/a	LP							
	AMS	2	% w/w	LP							
14	SURESTART	2.0	pt/a	PRE	86	0	94	83	99	82	209
	AATREX	1	lb ai/a	PRE							
	DURANGO DMA	24	fl oz/a	LP							
	AMS	2	% w/w	LP							

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

Pest Type		W Weed		W Weed	W Weed	W Weed	W Weed	
Pest Code		IPOSS		SETFA	AMBTR	CHEAL	IPOSS	
Pest Scientific Name		Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	
Pest Name		Morning glory		Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory	
Crop Code			ZEAMX					ZEAMX
BBCH Scale			BCOR					BCOR
Crop Scientific Name			Zea mays					Zea mays
Crop Name			Corn					Corn
Rating Type		CONTROL	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit		PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU 15.5%
Number of Subsamples		1	1	1	1	1	1	1
SE Description		AFT APPL	AFT APPL	AFT APPL	AFT APPL	AFT APPL	AFT APPL	
Rating Timing		4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
ARM Action Codes		P	P	P	P	P	P	TY1
Number of Decimals		0	0	0	0	0	0	0

  

Trt No.	Treatment Name	Rate	Unit	Growth Stage	10	11	12	13	14	15	20
15	SURESTART	1.75	pt/a	MP	90	0	99	89	99	88	204
	DURANGO DMA	24	fl oz/a	MP							
	AMS	2	% w/w	MP							
16	STALWART XTRA	2.1	qt/a	PRE	88	0	99	86	99	85	215
	ROUNDUP POWERMAX	22	fl oz/a	LP							
	AMS	3.75	% v/v	LP							
	LSD (P=.05)				10.9	0.0	8.9	10.6	3.0	12.0	36.3
	Standard Deviation				6.5	0.0	5.3	6.4	1.8	7.2	21.8
	CV				8.06	0.0	5.92	7.95	1.92	9.21	11.15
	Bartlett's X2				25.532	0.0	6.254	19.634	2.83	27.179	57.319
	P(Bartlett's X2)				0.03*	.	0.395	0.105	0.243	0.012*	0.001*
	Replicate F				0.286	0.000	0.120	1.502	1.198	1.194	0.459
	Replicate Prob(F)				0.7529	1.0000	0.8872	0.2389	0.3159	0.3171	0.6362
	Treatment F				35.347	0.000	63.030	37.395	579.592	27.690	12.297
	Treatment Prob(F)				0.0001	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001

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

### CORN POSTEMERGENCE III

Trial ID: C9007      Protocol ID: AMVAC TPZ-H-100  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact: BILL ONEAL

#### Pest Type

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

#### Pest Code

SETFA, *Setaria faberi*, = US

AMBTR, *Ambrosia trifida*, = US

CHEAL, *Chenopodium album*, = US

IPOSS, *Ipomoea* sp., = US

#### Crop Code

ZEAMX, BCOR, *Zea mays*, = US

#### Rating Type

YIELD = yield

#### Rating Unit

PERCENT = percent

#### ARM Action Codes

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

TY1 = 3.85632\*18



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

CORN POSTEMERGENCE III

Trial ID: C9007      Protocol ID: AMVAC TPZ-H-100  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact: BILL ONEAL

**General Trial Information**

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-27-2009

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

**Trial Location**

**Personnel**

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

**Other Personnel**

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

**Crop Description**

<b>Crop 1:</b> ZEAMX      Zea mays      Corn	
<b>Variety:</b> DKC 62-54	
<b>BBCH Scale:</b> BCOR	<b>Planting Date:</b> 4-26-2009
<b>Planting Method:</b> ROWS	<b>Rate, Unit:</b> 30000 S/A
<b>Depth, Unit:</b> 1.5      IN	
<b>Row Spacing, Unit:</b> 30      IN	
<b>Seed Bed:</b> MEDIUM      medium	<b>Soil Temperature, Unit:</b> 64      F
<b>Soil Moisture:</b> NORMAL      normal	<b>Emergence Date:</b> 5-2-2009
<b>Harvest Date:</b> 9-30-2009	<b>Harvest Equipment:</b> COMBINE
<b>Harvested Width, Unit:</b> 5      FT	<b>Harvested Length, Unit:</b> 37      FT
<b>% Standard Moisture:</b> 15.5	

**Pest Description**

# Plant and Soil Science, U of KY

## Weed Science Research

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

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

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

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

### Site and Design

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6            **% OM:** 2.6            **Texture:** SIL            silt loam  
**% Silt:** 62            **pH:** 6.4            **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32            **CEC:** 17            **Fert. Level:** E            excellent  
**Soil Drainage:** E            excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET    slightly wet  
**Closest Weather Station:** SPINDLETOP    **Distance, Unit:** 1.5 MI

### Application Description

	A	B	C
<b>Application Date:</b>	4-27-2009	5-21-2009	5-29-2009
<b>Time of Day:</b>	4 PM	3 PM	10 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	MP, V4	LP, V6
<b>Application Placement:</b>	BROSOI	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	82 F	81 F	65 F
<b>% Relative Humidity:</b>	35	34	40
<b>Wind Velocity, Unit:</b>	8 MPH	4 MPH	6 MPH
<b>Wind Direction:</b>	W	SE	NW
<b>Soil Temperature, Unit:</b>	65 F	65 F	72 F
<b>Soil Moisture:</b>	ADEQUATE	NORMAL	GOOD
<b>% Cloud Cover:</b>	10	5	0

### Crop Stage At Each Application

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

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>	V4	V4	V6

### Pest Stage At Each Application

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

### Application Equipment

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

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

CORN POSTEMERGENCE IV

Trial ID: C9008      Protocol ID: SYNGENTA HMS016A4  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
                                  Sponsor Contact: SCOTT CULLEY

Pest Type		W Weed	W Weed	W Weed	W Weed		W Weed
Pest Code		SETFA	AMBTR	CHEAL	IPOSS		SETFA
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.		Setaria faberi
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory		Giant foxtail
Crop Code	ZEAMX					ZEAMX	
BBCH Scale	BCOR					BCOR	
Crop Scientific Name	Zea mays					Zea mays	
Crop Name	Corn					Corn	
Description							
Rating Date	5-21-2009	5-21-2009	5-21-2009	5-21-2009	5-21-2009	6-12-2009	6-12-2009
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1	1	1
SE Description						2 WK AFT POST	2 WK AFT POST
Rating Timing	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	2 WEEK	2 WEEK
Days After First/Last Applic.	24 24	24 24	24 24	24 24	24 24	46 14	46 14
Plant-Eval Interval	25 DP-1	25 DP-1	25 DP-1	25 DP-1	25 DP-1	47 DP-1	47 DP-1
Days After Emergence	19 DE-	19 DE-	19 DE-	19 DE-	19 DE-	41 DE-	41 DE-
ARM Action Codes	P	P	P	P	P	P	P
Number of Decimals	0	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	1	2	3	4	5	6	7
1	CHECK UNTREATED				0	0	0	0	0	0	0
2	BICEP II MAGNUM	1.2	qt/a	PRE	0	99	73	98	77	0	99
	AMS	2.5	% v/v	+MP							
	A16907	20	fl oz/a	+MP							
	TOUCHDOWN TOTAL	24	fl oz/a	+MP							
3	AMS	2.5	% v/v	MP						0	93
	A16907	20	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
4	AMS	2.5	% v/v	MP						0	91
	LAUDIS	2	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
5	AMS	2.5	% v/v	MP						0	86
	IMPACT	0.5	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
6	AMS	2.5	% v/v	MP						0	82
	STATUS	2.5	oz wt/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
7	LEXAR	3	qt/a	PRE	0	99	99	99	93	0	99

## 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	CHEAL	IPOSS	SETFA	SETFA
Pest Scientific Name		Setaria faberi	Ambrosia trif>	Chenopodium al>	Ipomoea sp.	Setaria faberi	Setaria faberi
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory	Giant foxtail	Giant foxtail
Crop Code	ZEAMX					ZEAMX	
BBCH Scale	BCOR					BCOR	
Crop Scientific Name	Zea mays					Zea mays	
Crop Name	Corn					Corn	
Description							
Rating Date	5-21-2009	5-21-2009	5-21-2009	5-21-2009	5-21-2009	6-12-2009	6-12-2009
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1	1	1
SE Description						2 WK AFT POST	2 WK AFT POST
Rating Timing	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	2 WEEK	2 WEEK
Days After First/Last Applic.	24 24	24 24	24 24	24 24	24 24	46 14	46 14
Plant-Eval Interval	25 DP-1	25 DP-1	25 DP-1	25 DP-1	25 DP-1	47 DP-1	47 DP-1
Days After Emergence	19 DE-	19 DE-	19 DE-	19 DE-	19 DE-	41 DE-	41 DE-
ARM Action Codes	P	P	P	P	P	P	P
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	LEXAR	1.5	qt/a	PRE	0	99	91	99	93	0	99
	LEXAR	1.5	qt/a	+MP							
9	BICEP II MAGNUM	1.25	qt/a	PRE	0	99	70	96	75	0	99
	AMS	2.5	% v/v	+MP							
	HALEX GT	3.6	pt/a	+MP							
	INDUCE	0.25	% v/v	+MP							
10	LEXAR	2.0	qt/a	PRE	0	99	95	99	96	0	99
	AMS	2.5	% v/v	+MP							
	TOUCHDOWN TOTAL	30	fl oz/a	+MP							
11	BICEP II MAGNUM	2.1	qt/a	PRE	0	99	86	98	89	0	99
	A16907	1.5	pt/a	+MP							
	COC	1	% v/v	+MP							
	LIQUID N	1	% v/v	+MP							
12	A16907	1.5	pt/a	MP						0	89
	AMS	2.5	% v/v	MP							
	TOUCHDOWN TOTAL	30	fl oz/a	MP							
13	AMS	2.5	% v/v	MP						0	99
	HALEX GT	3.6	pt/a	MP							
	AATREX	32	fl oz/a	MP							
	INDUCE	0.25	% v/v	MP							
14	CORVUS HERBICIDE	3.3	fl oz/a	PRE	0	99	93	98	96	0	95
	AATREX	1	qt/a	PRE							
15	BALANCE FLEXX HERBICIDE	5	fl oz/a	PRE	0	99	66	99	96	0	91
	AATREX	1.5	qt/a	PRE							

## 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	CHEAL	IPOSS	SETFA	SETFA
Pest Scientific Name		Setaria faberi	Ambrosia trifida	Chenopodium album	Ipomoea sp.	Setaria faberi	Setaria faberi
Pest Name		Giant foxtail	Giant ragweed	Common lambsquarters	Morning glory	Giant foxtail	Giant foxtail
Crop Code	ZEAMX					ZEAMX	
BBCH Scale	BCOR					BCOR	
Crop Scientific Name	Zea mays					Zea mays	
Crop Name	Corn					Corn	
Description							
Rating Date	5-21-2009	5-21-2009	5-21-2009	5-21-2009	5-21-2009	6-12-2009	6-12-2009
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1	1	1
SE Description						2 WK AFT POST	2 WK AFT POST
Rating Timing	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	2 WEEK	2 WEEK
Days After First/Last Applic.	24 24	24 24	24 24	24 24	24 24	46 14	46 14
Plant-Eval Interval	25 DP-1	25 DP-1	25 DP-1	25 DP-1	25 DP-1	47 DP-1	47 DP-1
Days After Emergence	19 DE-	19 DE-	19 DE-	19 DE-	19 DE-	41 DE-	41 DE-
ARM Action Codes	P	P	P	P	P	P	P
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
16	INTEGRITY	20	fl oz/a	PRE	0	99	99	99	99	0	98
	LSD (P=.05)				0.0	0.0	32.2	3.4	12.8	0.0	7.2
	Standard Deviation				0.0	0.0	18.8	2.0	7.5	0.0	4.3
	CV				0.0	0.0	24.33	2.23	9.15	0.0	4.87
	Bartlett's X2				0.0	0.0	28.371	2.275	17.635	0.0	8.612
	P(Bartlett's X2)				.	.	0.001*	0.517	0.014*	.	0.282
	Replicate F				0.000	0.000	0.663	2.026	3.179	0.000	0.847
	Replicate Prob(F)				1.0000	1.0000	0.5274	0.1609	0.0657	1.0000	0.4386
	Treatment F				0.000	0.000	7.488	742.883	47.961	0.000	94.681
	Treatment Prob(F)				1.0000	1.0000	0.0002	0.0001	0.0001	1.0000	0.0001

# 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	CHEAL	IPOSS	SETFA	AMBTR	CHEAL	IPOSS
Pest Scientific Name	Chenopodium al>	Ipomoea sp.	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.
Pest Name	Common lambsqu>	Morning glory	Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory
Crop Code			ZEAMX			
BBCH Scale			BCOR			
Crop Scientific Name			Zea mays			
Crop Name			Corn			
Description						
Rating Date	6-12-2009	6-12-2009	6-26-2009	6-26-2009	6-26-2009	6-26-2009
Rating Type	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1	1
SE Description	2 WK AFT POST	2 WK AFT POST	4 WK AFT POST	4 WK AFT POST	4 WK AFT POST	4 WK AFT POST
Rating Timing	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	46 14	46 14	60 28	60 28	60 28	60 28
Plant-Eval Interval	47 DP-1	47 DP-1	61 DP-1	61 DP-1	61 DP-1	61 DP-1
Days After Emergence	41 DE-	41 DE-	55 DE-	55 DE-	55 DE-	55 DE-
ARM Action Codes	P	P	P	P	P	P
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	8	9	10	11	12	13	14
1	CHECK UNTREATED				0	0	0	0	0	0	0
2	BICEP II MAGNUM	1.2	qt/a	PRE	99	99	0	99	99	99	99
	AMS	2.5	% v/v	+MP							
	A16907	20	fl oz/a	+MP							
	TOUCHDOWN TOTAL	24	fl oz/a	+MP							
3	AMS	2.5	% v/v	MP	98	93	0	92	91	98	93
	A16907	20	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
4	AMS	2.5	% v/v	MP	95	85	0	88	73	95	82
	LAUDIS	2	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
5	AMS	2.5	% v/v	MP	96	84	0	84	80	96	84
	IMPACT	0.5	fl oz/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
6	AMS	2.5	% v/v	MP	99	84	0	77	90	98	80
	STATUS	2.5	oz wt/a	MP							
	TOUCHDOWN TOTAL	24	fl oz/a	MP							
7	LEXAR	3	qt/a	PRE	98	92	0	99	91	98	88

## 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	CHEAL	IPOSS	SETFA	AMBTR	CHEAL	IPOSS					
Pest Scientific Name	Chenopodium al>	Ipomoea sp.	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.					
Pest Name	Common lambsqu>	Morning glory	Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory					
Crop Code											
BBCH Scale											
Crop Scientific Name											
Crop Name											
Description											
Rating Date	6-12-2009	6-12-2009	6-26-2009	6-26-2009	6-26-2009	6-26-2009	6-26-2009				
Rating Type	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1				
SE Description	2 WK AFT POST	2 WK AFT POST	4 WK AFT POST	4 WK AFT POST	4 WK AFT POST	4 WK AFT POST	4 WK AFT POST				
Rating Timing	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK				
Days After First/Last Applic.	46 14	46 14	60 28	60 28	60 28	60 28	60 28				
Plant-Eval Interval	47 DP-1	47 DP-1	61 DP-1	61 DP-1	61 DP-1	61 DP-1	61 DP-1				
Days After Emergence	41 DE-	41 DE-	55 DE-	55 DE-	55 DE-	55 DE-	55 DE-				
ARM Action Codes	P	P	P	P	P	P	P				
Number of Decimals	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	8	9	10	11	12	13	14
8	LEXAR	1.5	qt/a	PRE	99	99	0	99	99	99	99
	LEXAR	1.5	qt/a	+MP							
9	BICEP II MAGNUM	1.25	qt/a	PRE	99	99	0	99	99	98	99
	AMS	2.5	% v/v	+MP							
	HALEX GT	3.6	pt/a	+MP							
	INDUCE	0.25	% v/v	+MP							
10	LEXAR	2.0	qt/a	PRE	99	98	0	99	99	98	93
	AMS	2.5	% v/v	+MP							
	TOUCHDOWN TOTAL	30	fl oz/a	+MP							
11	BICEP II MAGNUM	2.1	qt/a	PRE	99	98	0	99	99	99	95
	A16907	1.5	pt/a	+MP							
	COC	1	% v/v	+MP							
	LIQUID N	1	% v/v	+MP							
12	A16907	1.5	pt/a	MP	99	98	0	87	99	99	96
	AMS	2.5	% v/v	MP							
	TOUCHDOWN TOTAL	30	fl oz/a	MP							
13	AMS	2.5	% v/v	MP	99	98	0	99	99	99	96
	HALEX GT	3.6	pt/a	MP							
	AATREX	32	fl oz/a	MP							
	INDUCE	0.25	% v/v	MP							
14	CORVUS HERBICIDE	3.3	fl oz/a	PRE	98	93	0	95	85	98	89
	AATREX	1	qt/a	PRE							
15	BALANCE FLEXX HERBICIDE	5	fl oz/a	PRE	99	85	0	89	96	99	83
	AATREX	1.5	qt/a	PRE							





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

Pest Type		W Weed	W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	CHEAL	IPOSS	
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory	
Crop Code	ZEAMX					ZEAMX
BBCH Scale	BCOR					BCOR
Crop Scientific Name	Zea mays					Zea mays
Crop Name	Corn					Corn
Description						
Rating Date	7-27-2009	7-27-2009	7-27-2009	7-27-2009	7-27-2009	9-28-2009
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1	1	1
SE Description	8 WK AFT POST	8 WK AFT POST	8 WK AFT POST	8 WK AFT POST	8 WK AFT POST	
Rating Timing	8 WEWEK	8 WEWEK	8 WEWEK	8 WEWEK	8 WEWEK	
Days After First/Last Applic.	91 59	91 59	91 59	91 59	91 59	154 122
Plant-Eval Interval	92 DP-1	92 DP-1	92 DP-1	92 DP-1	92 DP-1	155 DP-1
Days After Emergence	86 DE-	86 DE-	86 DE-	86 DE-	86 DE-	149 DE
ARM Action Codes	P	P	P	P	P	TY2
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	15	16	17	18	19	23
1	CHECK UNTREATED				0	0	0	0	0	25
2	BICEP II MAGNUM	1.2	qt/a	PRE	0	99	99	99	95	219
	AMS	2.5	% v/v	+MP						
	A16907	20	fl oz/a	+MP						
	TOUCHDOWN TOTAL	24	fl oz/a	+MP						
3	AMS	2.5	% v/v	MP	0	90	90	98	91	210
	A16907	20	fl oz/a	MP						
	TOUCHDOWN TOTAL	24	fl oz/a	MP						
4	AMS	2.5	% v/v	MP	0	88	71	95	78	201
	LAUDIS	2	fl oz/a	MP						
	TOUCHDOWN TOTAL	24	fl oz/a	MP						
5	AMS	2.5	% v/v	MP	0	83	77	96	82	208
	IMPACT	0.5	fl oz/a	MP						
	TOUCHDOWN TOTAL	24	fl oz/a	MP						
6	AMS	2.5	% v/v	MP	0	77	77	98	80	215
	STATUS	2.5	oz wt/a	MP						
	TOUCHDOWN TOTAL	24	fl oz/a	MP						
7	LEXAR	3	qt/a	PRE	0	99	91	98	86	210

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

Pest Type		W Weed	W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	CHEAL	IPOSS	
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory	
Crop Code	ZEAMX					ZEAMX
BBCH Scale	BCOR					BCOR
Crop Scientific Name	Zea mays					Zea mays
Crop Name	Corn					Corn
Description						
Rating Date	7-27-2009	7-27-2009	7-27-2009	7-27-2009	7-27-2009	9-28-2009
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1	1	1
SE Description	8 WK AFT POST	8 WK AFT POST	8 WK AFT POST	8 WK AFT POST	8 WK AFT POST	
Rating Timing	8 WEWEK	8 WEWEK	8 WEWEK	8 WEWEK	8 WEWEK	
Days After First/Last Applic.	91 59	91 59	91 59	91 59	91 59	154 122
Plant-Eval Interval	92 DP-1	92 DP-1	92 DP-1	92 DP-1	92 DP-1	155 DP-1
Days After Emergence	86 DE-	86 DE-	86 DE-	86 DE-	86 DE-	149 DE
ARM Action Codes	P	P	P	P	P	TY2
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	15	16	17	18	19	23
8	LEXAR	1.5	qt/a	PRE	0	99	99	99	99	218
	LEXAR	1.5	qt/a	+MP						
9	BICEP II MAGNUM	1.25	qt/a	PRE	0	99	99	98	95	221
	AMS	2.5	% v/v	+MP						
	HALEX GT	3.6	pt/a	+MP						
	INDUCE	0.25	% v/v	+MP						
10	LEXAR	2.0	qt/a	PRE	0	99	96	98	92	212
	AMS	2.5	% v/v	+MP						
	TOUCHDOWN TOTAL	30	fl oz/a	+MP						
11	BICEP II MAGNUM	2.1	qt/a	PRE	0	99	99	99	92	223
	A16907	1.5	pt/a	+MP						
	COC	1	% v/v	+MP						
	LIQUID N	1	% v/v	+MP						
12	A16907	1.5	pt/a	MP	0	85	99	99	96	222
	AMS	2.5	% v/v	MP						
	TOUCHDOWN TOTAL	30	fl oz/a	MP						
13	AMS	2.5	% v/v	MP	0	99	99	99	94	218
	HALEX GT	3.6	pt/a	MP						
	AATREX	32	fl oz/a	MP						
	INDUCE	0.25	% v/v	MP						
14	CORVUS HERBICIDE	3.3	fl oz/a	PRE	0	95	82	98	88	206
	AATREX	1	qt/a	PRE						
15	BALANCE FLEXX HERBICIDE	5	fl oz/a	PRE	0	89	93	99	80	200
	AATREX	1.5	qt/a	PRE						

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

Pest Type		W Weed	W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	CHEAL	IPOSS	
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory	
Crop Code	ZEAMX					ZEAMX
BBCH Scale	BCOR					BCOR
Crop Scientific Name	Zea mays					Zea mays
Crop Name	Corn					Corn
Description						
Rating Date	7-27-2009	7-27-2009	7-27-2009	7-27-2009	7-27-2009	9-28-2009
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1	1	1
SE Description	8 WK AFT POST	8 WK AFT POST	8 WK AFT POST	8 WK AFT POST	8 WK AFT POST	
Rating Timing	8 WEWEK	8 WEWEK	8 WEWEK	8 WEWEK	8 WEWEK	
Days After First/Last Applic.	91 59	91 59	91 59	91 59	91 59	154 122
Plant-Eval Interval	92 DP-1	92 DP-1	92 DP-1	92 DP-1	92 DP-1	155 DP-1
Days After Emergence	86 DE-	86 DE-	86 DE-	86 DE-	86 DE-	149 DE
ARM Action Codes	P	P	P	P	P	TY2
Number of Decimals	0	0	0	0	0	0

  

Trt No.	Treatment Name	Rate	Unit	Growth Stage	15	16	17	18	19	23
16	INTEGRITY	20	fl oz/a	PRE	0	96	93	99	95	206
	LSD (P=.05)				0.0	6.9	11.7	3.1	6.1	22.2
	Standard Deviation				0.0	4.2	7.0	1.9	3.6	13.3
	CV				0.0	4.77	8.22	2.04	4.35	6.63
	Bartlett's X2				0.0	3.553	6.953	1.981	5.587	20.269
	P(Bartlett's X2)				.	0.83	0.542	0.961	0.899	0.162
	Replicate F				0.000	1.649	0.681	1.405	1.372	0.752
	Replicate Prob(F)				1.0000	0.2092	0.5140	0.2612	0.2690	0.4803
	Treatment F				0.000	102.405	36.965	513.490	122.379	38.365
	Treatment Prob(F)				1.0000	0.0001	0.0001	0.0001	0.0001	0.0001

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

### CORN POSTEMERGENCE IV

Trial ID: C9008                      Protocol ID: SYNGENTA HMS016A4  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:                              Investigator: Charles H Slack  
Sponsor Contact: SCOTT CULLEY

#### Pest Type

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

#### Pest Code

SETFA, Setaria faberi, = US

AMBTR, Ambrosia trifida, = US

CHEAL, Chenopodium album, = US

IPOSS, Ipomoea sp., = US

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Type

YIELD = yield

#### Rating Unit

PERCENT = percent

BU = bushel

#### Plant-Eval Interval

25 DP-1 = 1 4-26-2009

47 DP-1 = 1 4-26-2009

61 DP-1 = 1 4-26-2009

92 DP-1 = 1 4-26-2009

155 DP-1 = 1 4-26-2009

#### ARM Action Codes

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

TY2 = 3.85632\*21

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE IV

Trial ID: C9008      Protocol ID: SYNGENTA HMS016A4  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact: SCOTT CULLEY

### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final

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

### Trial Location

### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

### Crop Description

**Crop 1:** ZEAMX      Zea mays      Corn  
**Variety:** DKC 62-54  
**BBCH Scale:** BCOR      **Planting Date:** 4-26-2009  
**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:** 64 F  
**Soil Moisture:** NORMAL normal      **Emergence Date:** 5-2-2009  
**Harvest Date:** 9-28-2009      **Harvest Equipment:** COMBINE  
**Harvested Width, Unit:** 5 FT      **Harvested Length, Unit:** 37 FT  
**% Standard Moisture:** 15.5

### Pest Description

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

# Plant and Soil Science, U of KY

## Weed Science Research

**Common Name:** Giant foxtail

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

**Pest 3 Type:** W **Code:** CHEAL Chenopodium album  
**Common Name:** Common lambsquarters

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

### Site and Design

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 17 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI

### Application Description

	A	B	C
<b>Application Date:</b>	4-27-2009	5-21-2009	5-29-2009
<b>Time of Day:</b>	4 PM	3 PM	10 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	MP	+MP
<b>Application Placement:</b>	BROSOI	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	82 F	81 F	65 F
<b>% Relative Humidity:</b>	35	34	40
<b>Wind Velocity, Unit:</b>	8 MPH	4 MPH	6 MPH
<b>Wind Direction:</b>	W	SE	NW
<b>Soil Temperature, Unit:</b>	64 F	65 F	72 F
<b>Soil Moisture:</b>	ADEQUATE	NORMAL	GOOD
<b>% Cloud Cover:</b>	10	5	0

### Crop Stage At Each Application

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

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

### Pest Stage At Each Application

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

### Application Equipment

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







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

Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code		SETFA	AMBTR	CHEAL	IPOSS	SETFA	AMBTR					
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	Setaria faberi	Ambrosia trifi>					
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory	Giant foxtail	Giant ragweed					
Crop Code	ZEAMX					ZEAMX						
BBCH Scale	BCOR					BCOR						
Crop Scientific Name	Zea mays					Zea mays						
Crop Name	Corn					Corn						
Rating Date	5-28-2009	5-28-2009	5-28-2009	5-28-2009	5-28-2009	6-4-2009	6-4-2009					
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL					
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT					
Number of Subsamples	1	1	1	1	1	1	1					
Rating Timing	1 WEEK	1 WEEK	1 WEEK	1 WEEK	1 WEEK	2 WEEK	2 WEEK					
Days After First/Last Applic.	7 7	7 7	7 7	7 7	7 7	14 14	14 14					
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A	7 DA-A	14 DA-A	14 DA-A					
Plant-Eval Interval	32 DP-1	32 DP-1	32 DP-1	32 DP-1	32 DP-1	39 DP-1	39 DP-1					
Days After Emergence	26 DE-	26 DE-	26 DE-	26 DE-	26 DE-	33 DE-	33 DE-					
ARM Action Codes	P	P	P	P	P	P	P					
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
10	LAUDIS	3 oz/a		MP, 4W	0	89	99	95	96	0	87	95
	AATREX	1 pt/a		MP, 4W								
	MSO	1 % v/v		MP, 4W								
	AMS	8.5 lb/100 gal		MP, 4W								
	BORDER EG	10 oz/100 gal		MP, 4W								
	LSD (P=.05)				0.0	8.5	3.2	2.4	12.2	0.0	7.6	6.8
	Standard Deviation				0.0	4.9	1.9	1.4	7.1	0.0	4.4	4.0
	CV				0.0	5.96	2.12	1.61	8.54	0.0	5.58	4.7
	Bartlett's X2				0.0	7.349	0.0	0.0	9.647	0.0	12.176	3.93
	P(Bartlett's X2)				.	0.50	1.00	.	0.291	.	0.144	0.863
	Replicate F				0.000	5.366	0.153	1.000	3.446	0.000	2.364	0.988
	Replicate Prob(F)				1.0000	0.0149	0.8596	0.3874	0.0541	1.0000	0.1226	0.3915
	Treatment F				0.000	105.040	821.789	1434.754	51.610	0.000	120.765	168.642
	Treatment Prob(F)				1.0000	0.0001	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001





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

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	CHEAL	IPOSS		SETFA	AMBTR	CHEAL	IPOSS					
Pest Scientific Name	Chenopodium al>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.					
Pest Name	Common lambsqu>	Morning glory		Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory					
Crop Code			ZEAMX					ZEAMX				
BBCH Scale			BCOR					BCOR				
Crop Scientific Name			Zea mays					Zea mays				
Crop Name			Corn					Corn				
Rating Date	6-4-2009	6-4-2009	6-18-2009	6-18-2009	6-18-2009	6-18-2009	6-18-2009	7-20-2009				
Rating Type	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1	1				
Rating Timing	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK				
Days After First/Last Applic.	14 14	14 14	28 28	28 28	28 28	28 28	28 28	60 60				
Trt-Eval Interval	14 DA-A	14 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A				
Plant-Eval Interval	39 DP-1	39 DP-1	53 DP-1	53 DP-1	53 DP-1	53 DP-1	53 DP-1	85 DP-1				
Days After Emergence	33 DE-	33 DE-	47 DE-	47 DE-	47 DE-	47 DE-	47 DE-	79 DE-				
ARM Action Codes	P	P	P	P	P	P	P	P				
Number of Decimals	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
10	LAUDIS	3 oz/a	MP, 4W		99	90	0	80	93	99	90	0
	AATREX	1 pt/a	MP, 4W									
	MSO	1 % v/v	MP, 4W									
	AMS	8.5 lb/100 gal	MP, 4W									
	BORDER EG	10 oz/100 gal	MP, 4W									
	LSD (P=.05)				1.3	10.8	0.0	11.4	8.5	1.3	6.7	0.0
	Standard Deviation				0.7	6.3	0.0	6.7	4.9	0.7	3.9	0.0
	CV				0.82	7.87	0.0	8.67	5.95	0.82	4.93	0.0
	Bartlett's X2				0.0	19.578	0.0	12.721	3.692	0.0	3.901	0.0
	P(Bartlett's X2)				.	0.007*	.	0.079	0.884	.	0.69	.
	Replicate F				1.000	1.364	0.000	3.347	1.346	1.000	1.794	0.000
	Replicate Prob(F)				0.3874	0.2808	1.0000	0.0581	0.2852	0.3874	0.1948	1.0000
	Treatment F				5497.563	61.161	0.000	52.283	105.977	5497.563	154.869	0.000
	Treatment Prob(F)				0.0001	0.0001	1.0000	0.0001	0.0001	0.0001	0.0001	1.0000

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

Pest Type	W Weed	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	CHEAL	IPOSS	
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory	
Crop Code					ZEAMX
BBCH Scale					BCOR
Crop Scientific Name					Zea mays
Crop Name					Corn
Rating Date	7-20-2009	7-20-2009	7-20-2009	7-20-2009	9-29-2009
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	BU 15.5%
Number of Subsamples	1	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.	60 60	60 60	60 60	60 60	131 131
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	28 DA-A	131 DA-A
Plant-Eval Interval	85 DP-1	85 DP-1	85 DP-1	85 DP-1	156 DP-1
Days After Emergence	79 DE-	79 DE-	79 DE-	79 DE-	150 DE
ARM Action Codes	P	P	P	P	TY1
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	17	18	19	20	25
1	CHECK UNTREATED				0	0	0	0	38
2	LAUDIS	3 oz/a		MP, 4W	86	95	98	87	222
	AATREX	1 pt/a		MP, 4W					
	MSO	1 % v/v		MP, 4W					
	AMS	8.5 lb/100 gal		MP, 4W					
3	IMPACT	0.75 oz/a		MP, 4W	69	80	99	73	209
	AATREX	1 pt/a		MP, 4W					
	MSO	1 % v/v		MP, 4W					
	AMS	8.5 lb/100 gal		MP, 4W					
4	CAPRENO HERBICIDE	3 oz/a		MP, 4W	93	92	99	93	219
	AATREX	1 pt/a		MP, 4W					
	MSO	0.5 % v/v		MP, 4W					
	AMS	8.5 lb/100 gal		MP, 4W					
5	LAUDIS	3 oz/a		MP, 4W	91	80	99	80	205
	AATREX	1 pt/a		MP, 4W					
	MSO	1 % v/v		MP, 4W					
	AMS	8.5 lb/100 gal		MP, 4W					
	COMPADRE	1 pt/100 gal		MP, 4W					

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

Pest Type	W Weed	W Weed	W Weed	W Weed					
Pest Code	SETFA	AMBTR	CHEAL	IPOSS					
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.					
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory					
Crop Code					ZEAMX				
BBCH Scale					BCOR				
Crop Scientific Name					Zea mays				
Crop Name					Corn				
Rating Date	7-20-2009	7-20-2009	7-20-2009	7-20-2009	9-29-2009				
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	YIELD				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	BU 15.5%				
Number of Subsamples	1	1	1	1	1				
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK					
Days After First/Last Applic.	60 60	60 60	60 60	60 60	131 131				
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	28 DA-A	131 DA-A				
Plant-Eval Interval	85 DP-1	85 DP-1	85 DP-1	85 DP-1	156 DP-1				
Days After Emergence	79 DE-	79 DE-	79 DE-	79 DE-	150 DE				
ARM Action Codes	P	P	P	P	TY1				
Number of Decimals	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	17	18	19	20	25
6	LAUDIS	3	oz/a	MP, 4W	88	91	99	84	213
	AATREX	1	pt/a	MP, 4W					
	MSO	1	% v/v	MP, 4W					
	AMS	8.5	lb/100 gal	MP, 4W					
	INTERLOCK	4	oz/a	MP, 4W					
7	LAUDIS	3	oz/a	MP, 4W	85	85	99	83	217
	AATREX	1	pt/a	MP, 4W					
	MSO	1	% v/v	MP, 4W					
	AMS	8.5	lb/100 gal	MP, 4W					
	GROUNDED	1	gal/100 gal	MP, 4W					
8	LAUDIS	3	oz/a	MP, 4W	86	85	99	77	210
	AATREX	1	pt/a	MP, 4W					
	MSO	1	% v/v	MP, 4W					
	ARRAY	9	lb/100 gal	MP, 4W					
9	LAUDIS	3	oz/a	MP, 4W	89	95	99	84	207
	AATREX	1	pt/a	MP, 4W					
	MSO	1	% v/v	MP, 4W					
	AMS	8.5	lb/100 gal	MP, 4W					
	GARDIAN	2	qt/100 gal	MP, 4W					



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

Pest Type	W Weed	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	CHEAL	IPOSS	
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory	
Crop Code					ZEAMX
BBCH Scale					BCOR
Crop Scientific Name					Zea mays
Crop Name					Corn
Rating Date	7-20-2009	7-20-2009	7-20-2009	7-20-2009	9-29-2009
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	BU 15.5%
Number of Subsamples	1	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.	60 60	60 60	60 60	60 60	131 131
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	28 DA-A	131 DA-A
Plant-Eval Interval	85 DP-1	85 DP-1	85 DP-1	85 DP-1	156 DP-1
Days After Emergence	79 DE-	79 DE-	79 DE-	79 DE-	150 DE
ARM Action Codes	P	P	P	P	TY1
Number of Decimals	0	0	0	0	0

  

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	17	18	19	20	25
10	LAUDIS	3	oz/a	MP, 4W	80	88	99	85	206
	AATREX	1	pt/a	MP, 4W					
	MSO	1	% v/v	MP, 4W					
	AMS	8.5	lb/100 gal	MP, 4W					
	BORDER EG	10	oz/100 gal	MP, 4W					
	LSD (P=.05)				11.4	11.1	1.3	10.3	10.9
	Standard Deviation				6.7	6.5	0.7	6.0	6.4
	CV				8.67	8.16	0.82	8.01	3.27
	Bartlett's X2				12.721	4.4	0.0	5.462	8.429
	P(Bartlett's X2)				0.079	0.623	.	0.486	0.492
	Replicate F				3.347	1.856	1.000	0.594	4.244
	Replicate Prob(F)				0.0581	0.1849	0.3874	0.5626	0.0309
	Treatment F				52.283	57.822	5497.563	60.213	227.027
	Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001

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

### CORN POSTEMERGENCE V

Trial ID: C9009      Protocol ID: BAYER HP09NARDLX  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact: DAVE LAMORE

#### Pest Type

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

#### Pest Code

SETFA, Setaria faberi, = US

AMBTR, Ambrosia trifida, = US

CHEAL, Chenopodium album, = US

IPOSS, Ipomoea sp., = US

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Type

YIELD = yield

#### Rating Unit

PERCENT = percent

#### Plant-Eval Interval

32 DP-1 = 1 4-26-2009

39 DP-1 = 1 4-26-2009

53 DP-1 = 1 4-26-2009

85 DP-1 = 1 4-26-2009

156 DP-1 = 1 4-26-2009

#### ARM Action Codes

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

TY1 = 3.85632\*23

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

CORN POSTEMERGENCE V

Trial ID: C9009                      Protocol ID: BAYER HP09NARDLX  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: DAVE LAMORE

**General Trial Information**

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-26-2009

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

**Trial Location**

**Personnel**

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

**Other Personnel**

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

**Crop Description**

<b>Crop 1:</b> ZEAMX      Zea mays	Corn
<b>Variety:</b> DKC 62-54	
<b>BBCH Scale:</b> BCOR	<b>Planting Date:</b> 4-26-2009
<b>Planting Method:</b> ROWS	<b>Rate, Unit:</b> 30000 S/A
<b>Depth, Unit:</b> 1.5      IN	
<b>Row Spacing, Unit:</b> 30      IN	
<b>Seed Bed:</b> MEDIUM      medium	<b>Soil Temperature, Unit:</b> 64      f
<b>Soil Moisture:</b> NORMAL      normal	<b>Emergence Date:</b> 5-2-2009
<b>Harvest Date:</b> 9-29-2009	<b>Harvest Equipment:</b> COMBINE
<b>Harvested Width, Unit:</b> 5      FT	<b>Harvested Length, Unit:</b> 37      FT
<b>% Standard Moisture:</b> 15.5	

**Pest Description**

# Plant and Soil Science, U of KY

## Weed Science Research

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

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

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

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

### Site and Design

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6            **% OM:** 2.6            **Texture:** SIL            silt loam  
**% Silt:** 62            **pH:** 6.4            **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32            **CEC:** 17            **Fert. Level:** E            excellent  
**Soil Drainage:** E            excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP      **Distance, Unit:** 1.5 MI

### Application Description

**A**

**Application Date:** 5-21-2009  
**Time of Day:** 3 PM  
**Application Method:** SPRAY  
**Application Timing:** MP  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 81 F  
**% Relative Humidity:** 34  
**Wind Velocity, Unit:** 4 MPH  
**Wind Direction:** SE  
**Soil Temperature, Unit:** 65 F  
**Soil Moisture:** NORMAL  
**% Cloud Cover:** 5

### Crop Stage At Each Application

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

**Crop 1 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V3

### Pest Stage At Each Application

**Pest 1 Code, Type, Scale:** SETFA W  
**Height, Unit:** 3 IN

**Pest 2 Code, Type, Scale:** AMBTR W  
**Height, Unit:** 4 IN

**Pest 3 Code, Type, Scale:** CHEAL W  
**Height, Unit:** 3 IN

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

### Application Equipment

**Appl. Equipment:** ATV

**Operating Pressure, Unit:** 30 PSI

**Nozzle Type:** FLAT FAN

**Nozzle Size:** 8004 DG

**Nozzle Spacing, Unit:** 20 IN

**Boom Length, Unit:** 10 FT

**Boom Height, Unit:** 30 IN

**Ground Speed, Unit:** 4 MPH

**Carrier:** WATER

**Spray Volume, Unit:** 24 GPA

**Propellant:** CO2





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

Pest Type		W Weed	W Weed	W Weed	W Weed		W Weed	W Weed										
Pest Code		SETFA	AMBTR	CHEAL	IPOSS		SETFA	AMBTR										
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>										
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory		Giant foxtail	Giant ragweed										
Crop Code	ZEAMX					ZEAMX												
BBCH Scale	BCOR					BCOR												
Crop Scientific Name	Zea mays					Zea mays												
Crop Name	Corn					Corn												
Rating Date	5-28-2009	5-28-2009	5-28-2009	5-28-2009	5-28-2009	6-4-2009	6-4-2009	6-4-2009										
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL										
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT										
Number of Subsamples	1	1	1	1	1	1	1	1										
Rating Timing	1 WEEK	1 WEEK	1 WEEK	1 WEEK	1 WEEK	2 WEEK	2 WEEK	2 WEEK										
Days After First/Last Applic.	7 7	7 7	7 7	7 7	7 7	14 14	14 14	14 14										
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A	7 DA-A	14 DA-A	14 DA-A	14 DA-A										
Plant-Eval Interval	32 DP-1	32 DP-1	32 DP-1	32 DP-1	32 DP-1	39 DP-1	39 DP-1	39 DP-1										
Days After Emergence	26 DE-	26 DE-	26 DE-	26 DE-	26 DE-	33 DE-	33 DE-	33 DE-										
ARM Action Codes	P	P	P	P	P	P	P	P										
Number of Decimals	0	0	0	0	0	0	0	0										
Trt Treatment	Rate	Growth	1		2		3		4		5		6		7		8	
No. Name	Rate Unit	Stage	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
10 LAUDIS	3 oz/a	MP, 4W	0	88	98		99	98	0	87	93							
AATREX	1 pt/a	MP, 4W																
PERSIST ULTRA	1.5 pt/a	MP, 4W																
BORDER XTRA 8L	2.5 gal/100 gal	MP, 4W																
LSD (P=.05)			0.0	10.3	5.2		0.0	6.5	0.0	8.1	7.7							
Standard Deviation			0.0	6.0	3.0		0.0	3.8	0.0	4.7	4.5							
CV			0.0	7.42	3.48		0.0	4.47	0.0	5.92	5.28							
Bartlett's X2			0.0	3.816	2.937		0.0	7.437	0.0	5.908	5.758							
P(Bartlett's X2)			.	0.801	0.568		.	0.49	.	0.434	0.451							
Replicate F			0.000	0.628	2.345		0.000	2.521	0.000	0.113	1.257							
Replicate Prob(F)			1.0000	0.5452	0.1245		1.0000	0.1084	1.0000	0.8935	0.3084							
Treatment F			0.000	69.117	308.061		0.000	189.148	0.000	107.054	134.248							
Treatment Prob(F)			1.0000	0.0001	0.0001		1.0000	0.0001	1.0000	0.0001	0.0001							







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

Pest Type		W Weed	W Weed		W Weed	W Weed		W Weed	W Weed		W Weed	W Weed		
Pest Code		CHEAL	IPOSS		SETFA	AMBTR		CHEAL	IPOSS		CHEAL	IPOSS		
Pest Scientific Name		Chenopodium al>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>		Chenopodium al>	Ipomoea sp.		Chenopodium al>	Ipomoea sp.		
Pest Name		Common lambsqu>	Morning glory		Giant foxtail	Giant ragweed		Common lambsqu>	Morning glory		Common lambsqu>	Morning glory		
Crop Code														
BBCH Scale														
Crop Scientific Name														
Crop Name														
Rating Date		6-4-2009	6-4-2009		6-18-2009	6-18-2009		6-18-2009	6-18-2009		6-18-2009	6-18-2009		7-20-2009
Rating Type		CONTROL	CONTROL		INJURY	CONTROL		CONTROL	CONTROL		CONTROL	CONTROL		INJURY
Rating Unit		PERCENT	PERCENT		PERCENT	PERCENT		PERCENT	PERCENT		PERCENT	PERCENT		PERCENT
Number of Subsamples		1	1		1	1		1	1		1	1		1
Rating Timing		2 WEEK	2 WEEK		4 WEEK	4 WEEK		4 WEEK	4 WEEK		4 WEEK	4 WEEK		8 WEEK
Days After First/Last Applic.		14 14	14 14		28 28	28 28		28 28	28 28		28 28	28 28		60 60
Trt-Eval Interval		14 DA-A	14 DA-A		28 DA-A	28 DA-A		28 DA-A	28 DA-A		28 DA-A	28 DA-A		28 DA-A
Plant-Eval Interval		39 DP-1	39 DP-1		53 DP-1	53 DP-1		53 DP-1	53 DP-1		53 DP-1	53 DP-1		85 DP-1
Days After Emergence		33 DE-	33 DE-		47 DE-	47 DE-		47 DE-	47 DE-		47 DE-	47 DE-		79 DE-
ARM Action Codes		P	P		P	P		P	P		P	P		P
Number of Decimals		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		
10 LAUDIS		3 oz/a		MP, 4W	99	93	0	83	91	99	89	0		
AATREX		1 pt/a		MP, 4W										
PERSIST ULTRA		1.5 pt/a		MP, 4W										
BORDER XTRA 8L		2.5 gal/100 gal		MP, 4W										
LSD (P=.05)					0.0	4.6	0.0	9.0	12.3	0.0	5.8	0.0		
Standard Deviation					0.0	2.7	0.0	5.2	7.2	0.0	3.4	0.0		
CV					0.0	3.31	0.0	6.8	8.67	0.0	4.2	0.0		
Bartlett's X2					0.0	3.649	0.0	3.683	8.203	0.0	8.006	0.0		
P(Bartlett's X2)					.	0.601	.	0.885	0.315	.	0.332	.		
Replicate F					0.000	0.783	0.000	2.032	1.287	0.000	1.992	0.000		
Replicate Prob(F)					1.0000	0.4722	1.0000	0.1601	0.3002	1.0000	0.1654	1.0000		
Treatment F					0.000	343.451	0.000	82.105	50.152	0.000	211.953	0.000		
Treatment Prob(F)					1.0000	0.0001	1.0000	0.0001	0.0001	1.0000	0.0001	1.0000		

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

Trt No.	Treatment Name	Rate	Unit	Growth Stage	17	18	19	20	25
1	CHECK UNTREATED				0	0	0	0	29
2	LAUDIS	3 oz/a		MP, 4W	86	91	99	87	216
	AATREX	1 pt/a		MP, 4W					
	MSO	1 % v/v		MP, 4W					
	AMS	8.5 lb/100 gal		MP, 4W					
3	IMPACT	0.75 oz/a		MP, 4W	90	78	99	80	217
	AATREX	1 pt/a		MP, 4W					
	MSO	1 % v/v		MP, 4W					
	AMS	8.5 lb/100 gal		MP, 4W					
4	CAPRENO HERBICIDE	3 oz/a		MP, 4W	93	94	99	91	213
	AATREX	1 pt/a		MP, 4W					
	MSO	0.5 % v/v		MP, 4W					
	AMS	8.5 lb/100 gal		MP, 4W					
5	LAUDIS	3 oz/a		MP, 4W	85	81	99	84	210
	AATREX	1 pt/a		MP, 4W					
	MSO	1 % v/v		MP, 4W					
	WEATHER GARD COMPLETE	2 qt/100 gal		MP, 4W					

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	IPOSS
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Rating Date	7-20-2009	7-20-2009	7-20-2009	7-20-2009 9-29-2009
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT BU 15.5%
Number of Subsamples	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	60 60	60 60	60 60	60 60 131 131
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	28 DA-A 131 DA-A
Plant-Eval Interval	85 DP-1	85 DP-1	85 DP-1	85 DP-1 156 DP-1
Days After Emergence	79 DE-	79 DE-	79 DE-	79 DE- 150 DE
ARM Action Codes	P	P	P	P TY1
Number of Decimals	0	0	0	0

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

Pest Type	W Weed	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	CHEAL	IPOSS	
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory	
Crop Code					ZEAMX
BBCH Scale					BCOR
Crop Scientific Name					Zea mays
Crop Name					Corn
Rating Date	7-20-2009	7-20-2009	7-20-2009	7-20-2009	9-29-2009
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	BU 15.5%
Number of Subsamples	1	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.	60 60	60 60	60 60	60 60	131 131
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	28 DA-A	131 DA-A
Plant-Eval Interval	85 DP-1	85 DP-1	85 DP-1	85 DP-1	156 DP-1
Days After Emergence	79 DE-	79 DE-	79 DE-	79 DE-	150 DE
ARM Action Codes	P	P	P	P	TY1
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	17	18	19	20	25
6	LAUDIS	3	oz/a	MP, 4W	79	93	99	87	205
	AATREX	1	pt/a	MP, 4W					
	DESTINY HC	0.5	% v/v	MP, 4W					
	CLASS ACT NG	5	qt/100 gal	MP, 4W					
	INTERLOCK	4	oz/a	MP, 4W					
7	LAUDIS	3	oz/a	MP, 4W	85	93	99	85	211
	AATREX	1	pt/a	MP, 4W					
	DYNE-AMIC	2	qt/100 gal	MP, 4W					
	GROUNDED	1	gal/100 gal	MP, 4W					
	REQUEST	2	qt/100 gal	MP, 4W					
8	LAUDIS	3	oz/a	MP, 4W	86	92	99	84	211
	AATREX	1	pt/a	MP, 4W					
	SUNDANCE II	1.5	pt/a	MP, 4W					
	ARRAY	9	lb/100 gal	MP, 4W					
9	LAUDIS	3	oz/a	MP, 4W	80	93	99	86	210
	AATREX	1	pt/a	MP, 4W					
	SOY-STIK	1.5	pt/a	MP, 4W					
	GARDIAN PLUS	2	qt/100 gal	MP, 4W					

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

Pest Type	W Weed	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	CHEAL	IPOSS	
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory	
Crop Code					ZEAMX
BBCH Scale					BCOR
Crop Scientific Name					Zea mays
Crop Name					Corn
Rating Date	7-20-2009	7-20-2009	7-20-2009	7-20-2009	9-29-2009
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	BU 15.5%
Number of Subsamples	1	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.	60 60	60 60	60 60	60 60	131 131
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	28 DA-A	131 DA-A
Plant-Eval Interval	85 DP-1	85 DP-1	85 DP-1	85 DP-1	156 DP-1
Days After Emergence	79 DE-	79 DE-	79 DE-	79 DE-	150 DE
ARM Action Codes	P	P	P	P	TY1
Number of Decimals	0	0	0	0	0

  

Trt No.	Treatment Name	Rate	Unit	Growth Stage	17	18	19	20	25
10	LAUDIS	3	oz/a	MP, 4W	83	89	99	83	213
	AATREX	1	pt/a	MP, 4W					
	PERSIST ULTRA	1.5	pt/a	MP, 4W					
	BORDER XTRA 8L	2.5	gal/100 gal	MP, 4W					
	LSD (P=.05)				9.0	16.1	0.0	7.7	12.6
	Standard Deviation				5.2	9.4	0.0	4.5	7.4
	CV				6.8	11.69	0.0	5.86	3.81
	Bartlett's X2				3.683	9.74	0.0	2.588	6.949
	P(Bartlett's X2)				0.885	0.284	.	0.92	0.642
	Replicate F				2.032	1.801	0.000	0.209	0.303
	Replicate Prob(F)				0.1601	0.1937	1.0000	0.8132	0.7426
	Treatment F				82.105	28.070	0.000	108.881	185.951
	Treatment Prob(F)				0.0001	0.0001	1.0000	0.0001	0.0001

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

### CORN POSTEMERGENCE VI

Trial ID: C9010      Protocol ID: BAYER HPO9NARDLZ  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact: DAVE LAMORE

#### Pest Type

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

#### Pest Code

SETFA, Setaria faberi, = US

AMBTR, Ambrosia trifida, = US

CHEAL, Chenopodium album, = US

IPOSS, Ipomoea sp., = US

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Type

YIELD = yield

#### Rating Unit

PERCENT = percent

#### Plant-Eval Interval

32 DP-1 = 1 4-26-2009

39 DP-1 = 1 4-26-2009

53 DP-1 = 1 4-26-2009

85 DP-1 = 1 4-26-2009

156 DP-1 = 1 4-26-2009

#### ARM Action Codes

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

TY1 = 3.85632\*23

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

CORN POSTEMERGENCE VI

Trial ID: C9010                      Protocol ID: BAYER HPO9NARDLZ  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: DAVE LAMORE

**General Trial Information**

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-26-2009

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

**Trial Location**

**Personnel**

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

**Other Personnel**

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

**Crop Description**

<b>Crop 1:</b> ZEAMX      Zea mays	Corn
<b>Variety:</b> DKC 62-54	
<b>BBCH Scale:</b> BCOR	<b>Planting Date:</b> 4-26-2009
<b>Planting Method:</b> ROWS	<b>Rate, Unit:</b> 30000 S/A
<b>Depth, Unit:</b> 1.5    IN	
<b>Row Spacing, Unit:</b> 30    IN	
<b>Seed Bed:</b> MEDIUM    medium	<b>Soil Temperature, Unit:</b> 64    F
<b>Soil Moisture:</b> NORMAL    normal	<b>Emergence Date:</b> 5-2-2009
<b>Harvest Date:</b> 9-29-2009	<b>Harvest Equipment:</b> COMBINE
<b>Harvested Width, Unit:</b> 5    FT	<b>Harvested Length, Unit:</b> 37    FT
<b>% Standard Moisture:</b> 15.5	

**Pest Description**



# Plant and Soil Science, U of KY

## Weed Science Research

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

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

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

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

### Site and Design

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6            **% OM:** 2.6            **Texture:** SIL            silt loam  
**% Silt:** 62            **pH:** 6.4            **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32            **CEC:** 17            **Fert. Level:** E            excellent  
**Soil Drainage:** E            excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP      **Distance, Unit:** 1.5 MI

### Application Description

**A**

**Application Date:** 5-21-2009  
**Time of Day:** 3 PM  
**Application Method:** SPRAY  
**Application Timing:** MP  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 81 F  
**% Relative Humidity:** 34  
**Wind Velocity, Unit:** 4 MPH  
**Wind Direction:** SE  
**Soil Temperature, Unit:** 65 F  
**Soil Moisture:** NORMAL  
**% Cloud Cover:** 5

### Crop Stage At Each Application

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

**Crop 1 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V3

### Pest Stage At Each Application

**Pest 1 Code, Type, Scale:** SETFA W  
**Height, Unit:** 2 IN

**Pest 2 Code, Type, Scale:** AMBTR W  
**Height, Unit:** 4 IN

**Pest 3 Code, Type, Scale:** CHEAL W  
**Height, Unit:** 3 IN

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

### Application Equipment

**Appl. Equipment:** ATV

**Operating Pressure, Unit:** 30 PSI

**Nozzle Type:** FLAT FAN

**Nozzle Size:** 8004 DG

**Nozzle Spacing, Unit:** 20 IN

**Boom Length, Unit:** 10 FT

**Boom Height, Unit:** 30 IN

**Ground Speed, Unit:** 4 MPH

**Carrier:** WATER

**Spray Volume, Unit:** 24 GPA

**Propellant:** CO2



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

Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code		SETFA	AMBTR	CHEAL	IPOSS	SETFA	AMBTR	CHEAL					
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	Setaria faberi	Ambrosia trifi>	Chenopodium al>					
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory	Giant foxtail	Giant ragweed	Common lambsqu>					
Crop Code	ZEAMX					ZEAMX							
BBCH Scale	BCOR					BCOR							
Crop Scientific Name	Zea mays					Zea mays							
Crop Name	Corn					Corn							
Rating Date	5-28-2009	5-28-2009	5-28-2009	5-28-2009	5-28-2009	6-4-2009	6-4-2009	6-4-2009	6-4-2009				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1	1	1				
Rating Timing	1 WEEK	1 WEEK	1 WEEK	1 WEEK	1 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK				
Days After First/Last Applic.	7 7	7 7	7 7	7 7	7 7	14 14	14 14	14 14	14 14				
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A	7 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A				
Plant-Eval Interval	32 DP-1	32 DP-1	32 DP-1	32 DP-1	32 DP-1	39 DP-1	39 DP-1	39 DP-1	39 DP-1				
Days After Emergence	26 DE-	26 DE-	26 DE-	26 DE-	26 DE-	33 DE-	33 DE-	33 DE-	33 DE-				
ARM Action Codes	P	P	P	P	P	P	P	P	P				
Number of Decimals	0	0	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4	5	6	7	8	9
6	LAUDIS	3 oz/a		MP, 4W	0	92	99	99	98	0	91	95	99
	AATREX	1 pt/a		MP, 4W									
	DYNE-AMIC	0.5 % v/v		MP, 4W									
	AMS	8.5 lb/100 gal		MP, 4W									
7	LAUDIS	3 oz/a		MP, 4W	0	99	99	99	99	0	93	95	99
	AATREX	1 pt/a		MP, 4W									
	SUNDANCE II	1 % v/v		MP, 4W									
	AMS	8.5 lb/100 gal		MP, 4W									
8	LAUDIS	3 oz/a		MP, 4W	0	93	99	99	99	0	92	95	99
	AATREX	1 pt/a		MP, 4W									
	SOY-STIK	1 % v/v		MP, 4W									
	AMS	8.5 lb/100 gal		MP, 4W									
9	LAUDIS	3 oz/a		MP, 4W	0	92	99	99	98	0	89	91	99
	AATREX	1 pt/a		MP, 4W									
	PERSIST ULTRA	1 % v/v		MP, 4W									
	AMS	8.5 lb/100 gal		MP, 4W									
10	CHECK UNTREATED				0	0	0	0	0	0	0	0	0
	LSD (P=.05)				0.0	9.2	1.3	0.0	3.9	0.0	6.1	4.6	0.0
	Standard Deviation				0.0	5.4	0.7	0.0	2.3	0.0	3.5	2.7	0.0
	CV				0.0	7.23	0.92	0.0	2.88	0.0	4.9	3.59	0.0
	Bartlett's X2				0.0	1.42	0.0	0.0	2.527	0.0	5.938	0.609	0.0
	P(Bartlett's X2)				.	0.965	.	.	0.64	.	0.547	0.988	.
	Replicate F				0.000	6.649	1.000	0.000	3.500	0.000	3.076	2.523	0.000
	Replicate Prob(F)				1.0000	0.0069	0.3874	1.0000	0.0520	1.0000	0.0709	0.1082	1.0000
	Treatment F				0.000	160.102	9769.001	0.000	1003.491	0.000	347.715	647.205	0.000
	Treatment Prob(F)				1.0000	0.0001	0.0001	1.0000	0.0001	1.0000	0.0001	0.0001	1.0000



## 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	IPOSS		SETFA		AMBTR		CHEAL		IPOSS		SETFA		AMBTR	
Pest Scientific Name	Ipomoea sp.		Setaria faberi		Ambrosia trifi>		Chenopodium al>		Ipomoea sp.		Setaria faberi		Ambrosia trifi>	
Pest Name	Morning glory		Giant foxtail		Giant ragweed		Common lambsqu>		Morning glory		Giant foxtail		Giant ragweed	
Crop Code	ZEAMX		ZEAMX		ZEAMX		ZEAMX		ZEAMX		ZEAMX		ZEAMX	
BBCH Scale	BCOR		BCOR		BCOR		BCOR		BCOR		BCOR		BCOR	
Crop Scientific Name	Zea mays		Zea mays		Zea mays		Zea mays		Zea mays		Zea mays		Zea mays	
Crop Name	Corn		Corn		Corn		Corn		Corn		Corn		Corn	
Rating Date	6-4-2009		6-18-2009		6-18-2009		6-18-2009		6-18-2009		7-20-2009		7-20-2009	
Rating Type	CONTROL		INJURY		CONTROL		CONTROL		CONTROL		INJURY		CONTROL	
Rating Unit	PERCENT		PERCENT		PERCENT		PERCENT		PERCENT		PERCENT		PERCENT	
Number of Subsamples	1		1		1		1		1		1		1	
Rating Timing	2 WEEK		4 WEEK		4 WEEK		4 WEEK		4 WEEK		8 WEEK		8 WEEK	
Days After First/Last Applic.	14 14		28 28		28 28		28 28		28 28		60 60		60 60	
Trt-Eval Interval	14 DA-A		28 DA-A		28 DA-A		28 DA-A		28 DA-A		28 DA-A		28 DA-A	
Plant-Eval Interval	39 DP-1		53 DP-1		53 DP-1		53 DP-1		53 DP-1		85 DP-1		85 DP-1	
Days After Emergence	33 DE-		47 DE-		47 DE-		47 DE-		47 DE-		79 DE-		79 DE-	
ARM Action Codes	P		P		P		P		P		P		P	
Number of Decimals	0		0		0		0		0		0		0	
Trt No.	Treatment Name	Rate	Unit	Growth Stage	10	11	12	13	14	15	16	17	18	
6	LAUDIS	3 oz/a		MP, 4W	89	0	89	91	99	84	0	89	91	
	AATREX	1 pt/a		MP, 4W										
	DYNE-AMIC	0.5 % v/v		MP, 4W										
	AMS	8.5 lb/100 gal		MP, 4W										
7	LAUDIS	3 oz/a		MP, 4W	93	0	91	93	98	90	0	91	91	
	AATREX	1 pt/a		MP, 4W										
	SUNDANCE II	1 % v/v		MP, 4W										
	AMS	8.5 lb/100 gal		MP, 4W										
8	LAUDIS	3 oz/a		MP, 4W	95	0	91	93	99	89	0	91	93	
	AATREX	1 pt/a		MP, 4W										
	SOY-STIK	1 % v/v		MP, 4W										
	AMS	8.5 lb/100 gal		MP, 4W										
9	LAUDIS	3 oz/a		MP, 4W	91	0	89	89	99	85	0	89	85	
	AATREX	1 pt/a		MP, 4W										
	PERSIST ULTRA	1 % v/v		MP, 4W										
	AMS	8.5 lb/100 gal		MP, 4W										
10	CHECK UNTREATED				0	0	0	0	0	0	0	0	0	
	LSD (P=.05)				4.8	0.0	5.6	7.6	1.3	5.8	0.0	6.2	8.2	
	Standard Deviation				2.8	0.0	3.3	4.4	0.7	3.4	0.0	3.6	4.8	
	CV				3.81	0.0	4.59	6.17	0.92	4.84	0.0	5.07	6.82	
	Bartlett's X2				3.422	0.0	9.741	3.163	0.0	5.694	0.0	11.303	3.186	
	P(Bartlett's X2)				0.754	.	0.204	0.87	.	0.576	.	0.126	0.867	
	Replicate F				0.068	0.000	3.835	4.452	1.000	0.056	0.000	4.112	3.006	
	Replicate Prob(F)				0.9341	1.0000	0.0410	0.0269	0.3874	0.9458	1.0000	0.0338	0.0748	
	Treatment F				575.561	0.000	396.122	219.316	9769.001	356.512	0.000	324.432	180.254	
	Treatment Prob(F)				0.0001	1.0000	0.0001	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001	

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

Pest Type			W Weed	W Weed		
Pest Code			CHEAL	IPOSS		
Pest Scientific Name			Chenopodium al>	Ipomoea sp.		
Pest Name			Common lambsqu>	Morning glory		
Crop Code						
BBCH Scale						
Crop Scientific Name						
Crop Name						
Rating Date			7-20-2009	7-20-2009	9-29-2009	
Rating Type			CONTROL	CONTROL	YIELD	
Rating Unit			PERCENT	PERCENT	BU	
Number of Subsamples			1	1	1	
Rating Timing			8 WEEK	8 WEEK		
Days After First/Last Applic.			60 60	60 60	131 131	
Trt-Eval Interval			28 DA-A	28 DA-A	131 DA-A	
Plant-Eval Interval			85 DP-1	85 DP-1	156 DP-1	
Days After Emergence			79 DE-	79 DE-	150 DE	
ARM Action Codes			P	P	TY1	
Number of Decimals			0	0	0	

  

Trt No.	Treatment Name	Rate	Unit	Growth Stage	19	20	24
1	CHECK UNTREATED				0	0	27
2	LAUDIS	3 oz/a		MP, 4W	99	86	213
	AATREX	1 pt/a		MP, 4W			
	MSO	1 % v/v		MP, 4W			
	AMS	8.5 lb/100 gal		MP, 4W			
3	LAUDIS	3 oz/a		MP, 4W	99	83	207
	AATREX	1 pt/a		MP, 4W			
	MSO	0.75 % v/v		MP, 4W			
	AMS	8.5 lb/100 gal		MP, 4W			
4	LAUDIS	3 oz/a		MP, 4W	99	86	213
	AATREX	1 pt/a		MP, 4W			
	MSO	0.5 % v/v		MP, 4W			
	AMS	8.5 lb/100 gal		MP, 4W			
5	LAUDIS	3 oz/a		MP, 4W	99	84	211
	AATREX	1 pt/a		MP, 4W			
	DESTINY HC	0.5 % v/v		MP, 4W			
	AMS	8.5 lb/100 gal		MP, 4W			

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

		W Weed		W Weed			
		CHEAL		IPOSS			
		Chenopodium al>		Ipomoea sp.			
		Common lambsqu>		Morning glory			
		7-20-2009		7-20-2009		9-29-2009	
		CONTROL		CONTROL		YIELD	
		PERCENT		PERCENT		BU	
		1		1		1	
		8 WEEK		8 WEEK			
		60 60		60 60		131 131	
		28 DA-A		28 DA-A		131 DA-A	
		85 DP-1		85 DP-1		156 DP-1	
		79 DE-		79 DE-		150 DE	
		P		P		TY1	
		0		0		0	
Trt No.	Treatment Name	Rate	Unit	Growth Stage	19	20	24
6	LAUDIS	3	oz/a	MP, 4W	99	83	212
	AATREX	1	pt/a	MP, 4W			
	DYNE-AMIC	0.5	% v/v	MP, 4W			
	AMS	8.5	lb/100 gal	MP, 4W			
7	LAUDIS	3	oz/a	MP, 4W	98	83	209
	AATREX	1	pt/a	MP, 4W			
	SUNDANCE II	1	% v/v	MP, 4W			
	AMS	8.5	lb/100 gal	MP, 4W			
8	LAUDIS	3	oz/a	MP, 4W	99	82	207
	AATREX	1	pt/a	MP, 4W			
	SOY-STIK	1	% v/v	MP, 4W			
	AMS	8.5	lb/100 gal	MP, 4W			
9	LAUDIS	3	oz/a	MP, 4W	99	80	202
	AATREX	1	pt/a	MP, 4W			
	PERSIST ULTRA	1	% v/v	MP, 4W			
	AMS	8.5	lb/100 gal	MP, 4W			
10	CHECK UNTREATED				0	0	41
LSD (P=.05)					1.3	6.5	18.3
Standard Deviation					0.7	3.8	10.7
CV					0.92	5.66	6.12
Bartlett's X2					0.0	8.022	20.842
P(Bartlett's X2)					.	0.331	0.013*
Replicate F					1.000	3.750	2.082
Replicate Prob(F)					0.3874	0.0435	0.1537
Treatment F					9769.001	260.645	144.692
Treatment Prob(F)					0.0001	0.0001	0.0001



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

### CORN POSTEMERGENCE VII

Trial ID: C9011      Protocol ID: BAYER HP09NARDLY  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact: DAVE LAMORE

#### Pest Type

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

#### Pest Code

SETFA, Setaria faberi, = US

AMBTR, Ambrosia trifida, = US

CHEAL, Chenopodium album, = US

IPOSS, Ipomoea sp., = US

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Type

YIELD = yield

#### Rating Unit

PERCENT = percent

BU = bushel

#### Plant-Eval Interval

32 DP-1 = 1 4-26-2009

39 DP-1 = 1 4-26-2009

53 DP-1 = 1 4-26-2009

85 DP-1 = 1 4-26-2009

156 DP-1 = 1 4-26-2009

#### ARM Action Codes

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

TY1 =  $4.204633 \times 22 \times (100 - 23) / 84.5$

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE VII

Trial ID: C9011      Protocol ID: BAYER HP09NARDLY  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact: DAVE LAMORE

### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-26-2009

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

### Trial Location

### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

### Crop Description

<b>Crop 1:</b> ZEAMX      Zea mays      Corn	
<b>Variety:</b> DKC 62-54	
<b>BBCH Scale:</b> BCOR	<b>Planting Date:</b> 4-26-2009
<b>Planting Method:</b> ROWS	<b>Rate, Unit:</b> 30000 S/A
<b>Depth, Unit:</b> 1.5      IN	
<b>Row Spacing, Unit:</b> 30      IN	
<b>Seed Bed:</b> MEDIUM      medium	<b>Soil Temperature, Unit:</b> 64      F
<b>Soil Moisture:</b> NORMAL      normal	<b>Emergence Date:</b> 5-2-2009
<b>Harvest Date:</b> 9-29-2009	<b>Harvest Equipment:</b> COMBINE
<b>Harvested Width, Unit:</b> 5      FT	<b>Harvested Length, Unit:</b> 37      FT
<b>% Standard Moisture:</b> 15.5	

### Pest Description

# Plant and Soil Science, U of KY

## Weed Science Research

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

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

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

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

### Site and Design

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 17 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI

### Application Description

**A**  
**Application Date:** 5-21-2009  
**Time of Day:** 3 PM  
**Application Method:** SPRAY  
**Application Timing:** MP  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 81 F  
**% Relative Humidity:** 34  
**Wind Velocity, Unit:** 4 MPH  
**Wind Direction:** SE  
**Soil Temperature, Unit:** 65 F  
**Soil Moisture:** NORMAL  
**% Cloud Cover:** 5

### Crop Stage At Each Application

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

**A**

**Crop 1 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V3

### Pest Stage At Each Application

**A**

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

### Application Equipment

**A**

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



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

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	SETFA	AMBTR	CHEAL	IPOSS	SETFA	AMBTR						
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	Setaria faberi	Ambrosia trifi>						
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory	Giant foxtail	Giant ragweed						
Crop Code	ZEAMX				ZEAMX							
BBCH Scale	BCOR				BCOR							
Crop Scientific Name	Zea mays				Zea mays							
Crop Name	Corn				Corn							
Rating Date												
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL					
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT					
Number of Subsamples	1	1	1	1	1	1	1					
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK					
Days After First/Last Applic.												
Plant-Eval Interval												
Days After Emergence												
ARM Action Codes	P	P	P	P	P	P	P					
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
6	CAPRENO HERBICIDE	3	oz/a	MP, 4"W	0	98	93	99	95	0	98	90
	AATREX	1	pt/a	MP, 4"W								
	COC	1	% v/v	MP, 4"W								
	LIQUID N	1.5	qt/a	MP, 4"W								
7	IMPACT	0.75	oz/a	MP, 4"W	0	99	83	99	90	0	93	77
	AATREX	1	pt/a	MP, 4"W								
	COC	1	% v/v	MP, 4"W								
	LIQUID N	1.5	qt/a	MP, 4"W								
8	CAPRENO HERBICIDE	3	oz/a	MP, 4"W	0	99	96	99	93	0	93	91
	AATREX	1	pt/a	MP, 4"W								
	MSO	0.5	% v/v	MP, 4"W								
	LIQUID N	1.5	qt/a	MP, 4"W								
9	LUMAX	2.5	qt/a	MP, 4"W	0	98	99	99	98	0	98	99
	CAPRENO HERBICIDE	3	oz/a	MP, 4"W								
	AATREX	1	pt/a	MP, 4"W								
	COC	1	% v/v	MP, 4"W								
	LIQUID N	1.5	qt/a	MP, 4"W								
10	CHECK UNTREATED				0	0	0	0	0	0	0	0
	LSD (P=.05)				0.0	2.6	5.4	0.0	4.4	0.0	7.2	7.3
	Standard Deviation				0.0	1.5	3.1	0.0	2.6	0.0	4.2	4.3
	CV				0.0	1.93	4.13	0.0	3.36	0.0	5.47	5.8
	Bartlett's X2				0.0	0.0	2.827	0.0	2.192	0.0	7.923	5.603
	P(Bartlett's X2)				.	.	0.727	.	0.822	.	0.244	0.469
	Replicate F				0.000	0.231	0.758	0.000	1.080	0.000	3.020	2.207
	Replicate Prob(F)				1.0000	0.7962	0.4829	1.0000	0.3607	1.0000	0.0740	0.1390
	Treatment F				0.000	2231.923	493.833	0.000	741.703	0.000	279.409	254.303
	Treatment Prob(F)				1.0000	0.0001	0.0001	1.0000	0.0001	1.0000	0.0001	0.0001



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

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	CHEAL	IPOSS		SETFA	AMBTR	CHEAL	IPOSS					
Pest Scientific Name	Chenopodium al>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.					
Pest Name	Common lambsqu>	Morning glory		Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory					
Crop Code								ZEAMX				
BBCH Scale								BCOR				
Crop Scientific Name								Zea mays				
Crop Name								Corn				
Rating Date								9-29-2009				
Rating Type	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	YIELD				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU 15.5%				
Number of Subsamples	1	1	1	1	1	1	1	1				
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK					
Days After First/Last Applic.								155 123				
Plant-Eval Interval								156 DP-1				
Days After Emergence								150 DE				
ARM Action Codes		P	P	P	P	P	P	TY1				
Number of Decimals	0	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	9	10	11	12	13	14	15	19
6	CAPRENO HERBICIDE	3	oz/a	MP, 4"W	99	93	0	98	90	99	89	219
	AATREX	1	pt/a	MP, 4"W								
	COC	1	% v/v	MP, 4"W								
	LIQUID N	1.5	qt/a	MP, 4"W								
7	IMPACT	0.75	oz/a	MP, 4"W	99	85	0	93	73	99	82	209
	AATREX	1	pt/a	MP, 4"W								
	COC	1	% v/v	MP, 4"W								
	LIQUID N	1.5	qt/a	MP, 4"W								
8	CAPRENO HERBICIDE	3	oz/a	MP, 4"W	99	92	0	93	91	99	91	211
	AATREX	1	pt/a	MP, 4"W								
	MSO	0.5	% v/v	MP, 4"W								
	LIQUID N	1.5	qt/a	MP, 4"W								
9	LUMAX	2.5	qt/a	MP, 4"W	99	98	0	98	99	99	98	220
	CAPRENO HERBICIDE	3	oz/a	MP, 4"W								
	AATREX	1	pt/a	MP, 4"W								
	COC	1	% v/v	MP, 4"W								
	LIQUID N	1.5	qt/a	MP, 4"W								
10	CHECK UNTREATED				0	0	0	0	0	0	0	36
	LSD (P=.05)				0.0	5.0	0.0	7.2	7.8	0.0	5.1	10.7
	Standard Deviation				0.0	2.9	0.0	4.2	4.5	0.0	3.0	6.2
	CV				0.0	3.9	0.0	5.47	6.21	0.0	4.08	3.45
	Bartlett's X2				0.0	3.625	0.0	7.923	5.607	0.0	7.428	6.013
	P(Bartlett's X2)				.	0.822	.	0.244	0.469	.	0.386	0.739
	Replicate F				0.000	4.436	0.000	3.020	0.940	0.000	2.481	2.213
	Replicate Prob(F)				1.0000	0.0271	1.0000	0.0740	0.4088	1.0000	0.1118	0.1382
	Treatment F				0.000	554.304	0.000	279.409	224.007	0.000	512.430	447.815
	Treatment Prob(F)				1.0000	0.0001	1.0000	0.0001	0.0001	1.0000	0.0001	0.0001



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

### CORN POSTEMERGENCE VIII

Trial ID: C9012                      Protocol ID: BAYER HP09NARDLL  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:                              Investigator: Charles H Slack  
Sponsor Contact: DAVE LAMORE

#### Pest Type

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

#### Pest Code

SETFA, Setaria faberi, = US

AMBTR, Ambrosia trifida, = US

CHEAL, Chenopodium album, = US

IPOSS, Ipomoea sp., = US

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Type

YIELD = yield

#### Rating Unit

PERCENT = percent

#### Plant-Eval Interval

156 DP-1 = 1 4-26-2009

#### ARM Action Codes

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

TY1 = 3.85632\*17

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

CORN POSTEMERGENCE VIII

Trial ID: C9012                      Protocol ID: BAYER HP09NARDLL  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: DAVE LAMORE

**General Trial Information**

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-26-2009

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

**Trial Location**

**Personnel**

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

**Other Personnel**

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

**Crop Description**

<b>Crop 1:</b> ZEAMX      Zea mays	Corn
<b>Variety:</b> DKC 62-54	
<b>BBCH Scale:</b> BCOR	<b>Planting Date:</b> 4-26-2009
<b>Planting Method:</b> ROWS	<b>Rate, Unit:</b> 30000 S/A
<b>Depth, Unit:</b> 1.5      IN	
<b>Row Spacing, Unit:</b> 30      IN	
<b>Seed Bed:</b> MEDIUM      medium	<b>Soil Temperature, Unit:</b> 64      F
<b>Soil Moisture:</b> NORMAL      normal	<b>Emergence Date:</b> 5-2-2009
<b>Harvest Date:</b> 9-29-2009	<b>Harvest Equipment:</b> COMBINE
<b>Harvested Width, Unit:</b> 5      FT	<b>Harvested Length, Unit:</b> 37      FT
<b>% Standard Moisture:</b> 15.5	

**Pest Description**

# Plant and Soil Science, U of KY

## Weed Science Research

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

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

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

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

### Site and Design

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 17 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI

### Application Description

	A	B	C
<b>Application Date:</b>	4-27-2009	5-21-2009	5-29-2009
<b>Time of Day:</b>	4 PM	3 PM	10 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	MP	V5, 6"W
<b>Application Placement:</b>	BROSOI	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	82 F	81 F	65 F
<b>% Relative Humidity:</b>	35	34	40
<b>Wind Velocity, Unit:</b>	8 MPH	4 MPH	6 MPH
<b>Wind Direction:</b>	W	SE	NW
<b>Soil Temperature, Unit:</b>	64 F	65 F	72 F
<b>Soil Moisture:</b>	ADEQUATE	NORMAL	GOOD
<b>% Cloud Cover:</b>	10	5	0

### Crop Stage At Each Application

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

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>	V3		V5
<b>Height, Unit:</b>	8 IN		12 IN

### Pest Stage At Each Application

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

### Application Equipment

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



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

Pest Type		W Weed	W Weed	W Weed	W Weed		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	CHEAL	IPOSS		SETFA	AMBTR	CHEAL
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Chenopodium al>
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory		Giant foxtail	Giant ragweed	Common lambsqu>
Crop Code	ZEAMX					ZEAMX			
BBCH Scale	BCOR					BCOR			
Crop Scientific Name	Zea mays					Zea mays			
Crop Name	Corn					Corn			
Rating Date	6-3-2009	6-3-2009	6-3-2009	6-3-2009	6-3-2009	6-17-2009	6-17-2009	6-17-2009	6-17-2009
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1	1	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	37 14	37 14	37 14	37 14	37 14	51 28	51 28	51 28	51 28
Plant-Eval Interval	38 DP-1	38 DP-1	38 DP-1	38 DP-1	38 DP-1	52 DP-1	52 DP-1	52 DP-1	52 DP-1
Days After Emergence	32 DE-	32 DE-	32 DE-	32 DE-	32 DE-	46 DE-	46 DE-	46 DE-	46 DE-
ARM Action Codes	P	P	P	P	P	P	P	P	P
Number of Decimals	0	0	0	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4	5	6	7	8	9
5	RESOLVE	1.2	oz ai/a	V3	0	88	96	99	98	0	90	95	99
	MESOTRIONE	1.25	oz ai/a	V3									
	AATREX	1	lb ai/a	V3									
	COC	1	% v/v	V3									
	AMS	2	lb ai/a	V3									
6	RESOLVE Q	1.25	oz ai/a	V3	0	96	89	99	89	0	91	84	99
	MESOTRIONE	1.25	oz ai/a	V3									
	COC	1	% v/v	V3									
	AMS	2	lb ai/a	V3									
7	ACCENT	0.5	oz ai/a	V3	0	94	89	99	91	0	93	87	98
	MESOTRIONE	1.25	oz ai/a	V3									
	COC	1	% v/v	V3									
	AMS	2	lb ai/a	V3									
8	STEADFAST Q	1.5	oz ai/a	V3	0	99	89	99	95	0	96	86	99
	MESOTRIONE	1.25	oz ai/a	V3									
	COC	1	% v/v	V3									
	AMS	2	lb ai/a	V3									
9	CHECK UNTREATED				0	0	0	0	0	0	0	0	0
10	CHECK UNTREATED				0	0	0	0	0	0	0	0	0
	LSD (P=.05)				0.0	12.7	4.9	0.0	4.7	0.0	10.0	7.4	1.3
	Standard Deviation				0.0	7.4	2.9	0.0	2.7	0.0	5.8	4.3	0.7
	CV				0.0	9.9	3.94	0.0	3.72	0.0	7.93	6.1	0.92
	Bartlett's X2				0.0	4.147	10.363	0.0	4.435	0.0	3.213	5.044	0.0
	P(Bartlett's X2)				.	0.528	0.169	.	0.489	.	0.782	0.655	.
	Replicate F				0.000	0.056	3.759	0.000	0.995	0.000	0.286	3.238	1.000
	Replicate Prob(F)				1.0000	0.9460	0.0432	1.0000	0.3891	1.0000	0.7544	0.0629	0.3874
	Treatment F				0.000	86.724	540.489	0.000	604.572	0.000	134.611	225.519	9769.001
	Treatment Prob(F)				1.0000	0.0001	0.0001	1.0000	0.0001	1.0000	0.0001	0.0001	0.0001

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

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	IPOSS	SETFA	AMBTR	CHEAL	IPOSS						
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.						
Pest Name	Morning glory	Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory						
Crop Code		ZEAMX									
BBCH Scale		BCOR									
Crop Scientific Name		Zea mays									
Crop Name		Corn									
Rating Date	6-17-2009	7-8-2009	7-8-2009	7-8-2009	7-8-2009	7-8-2009 9-29-2009					
Rating Type	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	CONTROL YIELD					
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT BU					
Number of Subsamples	1	1	1	1	1	1					
Rating Timing	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK					
Days After First/Last Applic.	51 28	72 49	72 49	72 49	72 49	72 49 155 132					
Plant-Eval Interval	52 DP-1	73 DP-1	73 DP-1	73 DP-1	73 DP-1	73 DP-1 156 DP-1					
Days After Emergence	46 DE-	67 DE-	67 DE-	67 DE-	67 DE-	67 DE- 150 DE					
ARM Action Codes	P	P	P	P	P	P TY1					
Number of Decimals	0	0	0	0	0	0					
Trt No.	Treatment Name	Rate	Unit	Growth Stage	10	11	12	13	14	15	20
1	RESOLVE	1.2	oz ai/a	V3	88	0	80	86		99	80 206
	MESOTRIONE	1.25	oz ai/a	V3							
	COC	1	% v/v	V3							
	AMS	2	lb ai/a	V3							
2	CINCH ATZ	1	qt/a	PRE	89	0	99	82		99	83 206
	RESOLVE	1.2	oz ai/a	V3							
	COC	1	% v/v	V3							
	AMS	2	lb ai/a	V3							
3	MESOTRIONE	1.25	oz ai/a	V3	89	0	93	92		99	83 205
	RESOLVE	1.2	oz ai/a	V3							
	MESOTRIONE	1.25	oz ai/a	V3							
	ROUNDUP POWERMAX	22	fl oz/a	V3							
	AMS	2	lb ai/a	V3							
4	RESOLVE	1.2	oz ai/a	V3	88	0	92	85		99	85 203
	MESOTRIONE	1.25	oz ai/a	V3							
	IGNITE 280	22	fl oz/a	V3							
	AMS	2	lb ai/a	V3							

## 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	IPOSS	SETFA	AMBTR	CHEAL	IPOSS						
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.						
Pest Name	Morning glory	Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory						
Crop Code		ZEAMX									
BBCH Scale		BCOR									
Crop Scientific Name		Zea mays									
Crop Name		Corn									
Rating Date	6-17-2009	7-8-2009	7-8-2009	7-8-2009	7-8-2009	7-8-2009	9-29-2009				
Rating Type	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	YIELD				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU				
Number of Subsamples	1	1	1	1	1	1	1				
Rating Timing	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK					
Days After First/Last Applic.	51 28	72 49	72 49	72 49	72 49	72 49	155 132				
Plant-Eval Interval	52 DP-1	73 DP-1	73 DP-1	73 DP-1	73 DP-1	73 DP-1	156 DP-1				
Days After Emergence	46 DE-	67 DE-	67 DE-	67 DE-	67 DE-	67 DE-	150 DE				
ARM Action Codes	P	P	P	P	P	P	TY1				
Number of Decimals	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	10	11	12	13	14	15	20
5	RESOLVE	1.2	oz ai/a	V3	95	0	90	95	99	90	210
	MESOTRIONE	1.25	oz ai/a	V3							
	AATREX	1	lb ai/a	V3							
	COC	1	% v/v	V3							
	AMS	2	lb ai/a	V3							
6	RESOLVE Q	1.25	oz ai/a	V3	86	0	91	79	99	77	195
	MESOTRIONE	1.25	oz ai/a	V3							
	COC	1	% v/v	V3							
	AMS	2	lb ai/a	V3							
7	ACCENT	0.5	oz ai/a	V3	89	0	93	82	98	88	184
	MESOTRIONE	1.25	oz ai/a	V3							
	COC	1	% v/v	V3							
	AMS	2	lb ai/a	V3							
8	STEADFAST Q	1.5	oz ai/a	V3	88	0	96	80	99	87	194
	MESOTRIONE	1.25	oz ai/a	V3							
	COC	1	% v/v	V3							
	AMS	2	lb ai/a	V3							
9	CHECK UNTREATED				0	0	0	0	0	0	20
10	CHECK UNTREATED				0	0	0	0	0	0	25
	LSD (P=.05)				5.8	0.0	10.0	10.3	1.3	6.0	19.5
	Standard Deviation				3.4	0.0	5.8	6.0	0.7	3.5	11.3
	CV				4.73	0.0	7.93	8.79	0.92	5.19	6.89
	Bartlett's X2				4.62	0.0	3.213	7.298	0.0	2.505	24.46
	P(Bartlett's X2)				0.593	.	0.782	0.294	.	0.776	0.004*
	Replicate F				1.334	0.000	0.286	2.685	1.000	3.239	1.530
	Replicate Prob(F)				0.2883	1.0000	0.7544	0.0954	0.3874	0.0629	0.2435
	Treatment F				374.434	0.000	134.611	109.886	9769.001	312.991	131.615
	Treatment Prob(F)				0.0001	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001



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

## CORN POSTEMERGENCE IX

Trial ID: C9014      Protocol ID: DUPONT 111-09-01  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact: HELEN FLANIGAN

### Pest Type

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

### Pest Code

SETFA, Setaria faberi, = US

AMBTR, Ambrosia trifida, = US

CHEAL, Chenopodium album, = US

IPOSS, Ipomoea sp., = US

### Crop Code

ZEAMX, BCOR, Zea mays, = US

### Rating Type

YIELD = yield

### Rating Unit

PERCENT = percent

BU = bushel

### Plant-Eval Interval

38 DP-1 = 1 4-26-2009

52 DP-1 = 1 4-26-2009

73 DP-1 = 1 4-26-2009

156 DP-1 = 1 4-26-2009

### ARM Action Codes

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

TY1 =  $4.204633 \cdot 18 \cdot (100 - \text{MVAVGREP}(19)) / 84.5$

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE IX

Trial ID: C9014      Protocol ID: DUPONT 111-09-01  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact: HELEN FLANIGAN

### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-26-2009

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

### Trial Location

### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

### Crop Description

**Crop 1:** ZEAMX      Zea mays      Corn  
**Variety:** WYFFELS W7642  
**BBCH Scale:** BCOR      **Planting Date:** 4-26-2009  
**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:** 64      F  
**Soil Moisture:** NORMAL      normal      **Emergence Date:** 5-2-2009  
**Harvest Date:** 9-29-2009      **Harvest Equipment:** COMBINE  
**Harvested Width, Unit:** 5      FT      **Harvested Length, Unit:** 37      FT  
**% Standard Moisture:** 15.5

### Pest Description

# Plant and Soil Science, U of KY

## Weed Science Research

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

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

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

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

### Site and Design

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 17 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI

### Application Description

	A	B
<b>Application Date:</b>	4-27-2009	5-20-2009
<b>Time of Day:</b>	4 PM	4 PM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	V3
<b>Application Placement:</b>	BROSOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	82 F	78 F
<b>% Relative Humidity:</b>	35	40
<b>Wind Velocity, Unit:</b>	8 MPH	3 MPH
<b>Wind Direction:</b>	W	SW
<b>Soil Temperature, Unit:</b>	64 F	62 F
<b>Soil Moisture:</b>	ADEQUATE	NORMAL
<b>% Cloud Cover:</b>	10	0

### Crop Stage At Each Application

# Plant and Soil Science, U of KY

## Weed Science Research

	A	B
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>	V3	

### Pest Stage At Each Application

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

### Application Equipment

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



## 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	CHEAL	IPOSS	SETFA	AMBTR						
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	Setaria faberi	Ambrosia trifi>						
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory	Giant foxtail	Giant ragweed						
Crop Code	ZEAMX			ZEAMX								
BBCH Scale	BCOR			BCOR								
Crop Scientific Name	Zea mays			Zea mays								
Crop Name	Corn			Corn								
Rating Date												
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL					
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT					
Number of Subsamples	1	1	1	1	1	1	1					
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK					
Days After First/Last Applic.												
Plant-Eval Interval												
Days After Emergence												
ARM Action Codes	P	P	P	P	P	P	P					
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
8	CORVUS HERBICIDE	3	oz/a	PRE	0	99	99	99	99	0	99	98
	IGNITE 280	22	oz/a	V5								
	LAUDIS	2	oz/a	V5								
	AMS	1.5	lb ai/a	V5								
9	BALANCE FLEXX HERBICIDE	3	oz/a	PRE	12	99	99	99	99	12	99	96
	IGNITE 280	22	oz/a	V5								
	CAPRENO HERBICIDE	2	oz/a	V5								
	AMS	1.5	lb ai/a	V5								
10	BALANCE FLEXX HERBICIDE	3	oz/a	PRE	8	99	99	99	99	8	99	99
	CAPRENO HERBICIDE	3	oz/a	V5								
	AATREX	1	qt/a	V5								
	COC	1	% v/v	V5								
	AMS	1.5	lb ai/a	V5								
LSD (P=.05)					5.2	9.7	1.3	0.0	4.2	5.2	8.8	4.6
Standard Deviation					3.0	5.6	0.7	0.0	2.5	3.0	5.1	2.7
CV					120.49	6.41	0.82	0.0	2.83	120.49	5.88	3.05
Bartlett's X2					1.634	2.22	0.0	0.0	1.32	1.634	8.458	2.13
P(Bartlett's X2)					0.442	0.136	.	.	0.724	0.442	0.037*	0.712
Replicate F					1.102	0.695	1.000	0.000	3.480	1.102	0.346	0.299
Replicate Prob(F)					0.3536	0.5120	0.3874	1.0000	0.0527	0.3536	0.7123	0.7451
Treatment F					6.173	91.025	5456.397	0.000	464.301	6.173	108.866	399.514
Treatment Prob(F)					0.0005	0.0001	0.0001	1.0000	0.0001	0.0005	0.0001	0.0001



## 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	CHEAL	IPOSS		SETFA	AMBTR	CHEAL	IPOSS					
Pest Scientific Name	Chenopodium al>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.					
Pest Name	Common lambsqu>	Morning glory		Giant foxtail	Giant ragweed	Common lambsqu>	Morning glory					
Crop Code			ZEAMX					ZEAMX				
BBCH Scale			BCOR					BCOR				
Crop Scientific Name			Zea mays					Zea mays				
Crop Name			Corn					Corn				
Rating Date								9-29-2009				
Rating Type	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	YIELD				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU 15.5%				
Number of Subsamples	1	1	1	1	1	1	1	1				
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK					
Days After First/Last Applic.								155 123				
Plant-Eval Interval								156 DP-1				
Days After Emergence								150 DE				
ARM Action Codes		P	P	P	P	P	P	TY1				
Number of Decimals	0	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	9	10	11	12	13	14	15	20
8	CORVUS HERBICIDE	3	oz/a	PRE	99	96	0	99	98	99	96	216
	IGNITE 280	22	oz/a	V5								
	LAUDIS	2	oz/a	V5								
	AMS	1.5	lb ai/a	V5								
9	BALANCE FLEXX HERBICIDE	3	oz/a	PRE	99	96	12	99	96	99	94	211
	IGNITE 280	22	oz/a	V5								
	CAPRENO HERBICIDE	2	oz/a	V5								
	AMS	1.5	lb ai/a	V5								
10	BALANCE FLEXX HERBICIDE	3	oz/a	PRE	99	98	8	99	99	99	96	213
	CAPRENO HERBICIDE	3	oz/a	V5								
	AATREX	1	qt/a	V5								
	COC	1	% v/v	V5								
	AMS	1.5	lb ai/a	V5								
	LSD (P=.05)				0.0	4.9	5.2	8.8	5.2	0.0	6.0	13.8
	Standard Deviation				0.0	2.8	3.0	5.1	3.1	0.0	3.5	8.0
	CV				0.0	3.36	120.49	5.88	3.49	0.0	4.21	4.08
	Bartlett's X2				0.0	2.89	1.634	8.458	2.398	0.0	6.396	14.282
	P(Bartlett's X2)				.	0.717	0.442	0.037*	0.663	.	0.603	0.113
	Replicate F				0.000	0.794	1.102	0.346	0.129	0.000	2.213	0.714
	Replicate Prob(F)				1.0000	0.4671	0.3536	0.7123	0.8799	1.0000	0.1383	0.5032
	Treatment F				0.000	332.103	6.173	108.866	305.480	0.000	211.534	178.146
	Treatment Prob(F)				1.0000	0.0001	0.0005	0.0001	0.0001	1.0000	0.0001	0.0001



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

### CORN POSTEMERGENCE X

Trial ID: C9015      Protocol ID: BAYER HP09NARJJA  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact: DAVE LAMORE

#### Pest Type

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

#### Pest Code

SETFA, Setaria faberi, = US

AMBTR, Ambrosia trifida, = US

CHEAL, Chenopodium album, = US

IPOSS, Ipomoea sp., = US

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Type

YIELD = yield

#### Rating Unit

PERCENT = percent

#### Plant-Eval Interval

156 DP-1 = 1 4-26-2009

#### ARM Action Codes

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

TY1 = 3.85632\*18

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

CORN POSTEMERGENCE X

Trial ID: C9015      Protocol ID: BAYER HP09NARJJA  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact: DAVE LAMORE

### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-26-2009

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

### Trial Location

### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

### Crop Description

<b>Crop 1:</b> ZEAMX      Zea mays      Corn	
<b>Variety:</b> WYFFELS W7642	
<b>BBCH Scale:</b> BCOR	<b>Planting Date:</b> 4-26-2009
<b>Planting Method:</b> ROWS	<b>Rate, Unit:</b> 30000 S/A
<b>Depth, Unit:</b> 1.5      IN	
<b>Row Spacing, Unit:</b> 30      IN	
<b>Seed Bed:</b> MEDIUM      medium	<b>Soil Temperature, Unit:</b> 64      F
<b>Soil Moisture:</b> NORMAL      normal	<b>Emergence Date:</b> 5-2-2009
<b>Harvest Date:</b> 9-29-2009	<b>Harvest Equipment:</b> COMBINE
<b>Harvested Width, Unit:</b> 5      FT	<b>Harvested Length, Unit:</b> 37      FT
<b>% Standard Moisture:</b> 15.5	

### Pest Description

# Plant and Soil Science, U of KY

## Weed Science Research

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

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

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

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

### Site and Design

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6            **% OM:** 2.6            **Texture:** SIL            silt loam  
**% Silt:** 62            **pH:** 6.4            **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32            **CEC:** 17            **Fert. Level:** E            excellent  
**Soil Drainage:** E            excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP      **Distance, Unit:** 1.5 MI

### Application Description

	A	B	C
<b>Application Date:</b>	4-27-2009	5-20-2009	5-29-2009
<b>Time of Day:</b>	4 PM	3 PM	10 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	V2	V5
<b>Application Placement:</b>	BROSOI	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	82 F	78 F	65 F
<b>% Relative Humidity:</b>	35	40	40
<b>Wind Velocity, Unit:</b>	8 MPH	3 MPH	6 MPH
<b>Wind Direction:</b>	W	SW	NW
<b>Soil Temperature, Unit:</b>	64 F	62 F	72 F
<b>Soil Moisture:</b>	ADEQUATE	NORMAL	GOOD
<b>% Cloud Cover:</b>	10	0	0

### Crop Stage At Each Application

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

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>	V2	V2	V5

### Pest Stage At Each Application

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

### Application Equipment

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



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

Pest Type	ZEAMX		ZEAMX		ZEAMX		ZEAMX		ZEAMX		ZEAMX		
Pest Code	BCOR		BCOR		BCOR		BCOR		BCOR		BCOR		
Pest Scientific Name	Zea mays		Zea mays		Zea mays		Zea mays		Zea mays		Zea mays		
Pest Name	Corn		Corn		Corn		Corn		Corn		Corn		
Rating Date	6-3-2009	6-10-2009	6-10-2009	6-10-2009	6-10-2009	6-10-2009	6-10-2009	6-10-2009	6-24-2009	6-24-2009	6-24-2009	6-24-2009	
Rating Type	INJURY	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	
Number of Subsamples	1	1	1	1	1	1	1	1	1	1	1	1	
Rating Timing	1 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	
Days After First/Last Applic.	7 7	14 14	14 14	14 14	14 14	14 14	14 14	14 14	28 28	28 28	28 28	28 28	
Trt-Eval Interval	7 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	
Plant-Eval Interval	37 DP-1	44 DP-1	44 DP-1	44 DP-1	44 DP-1	44 DP-1	44 DP-1	44 DP-1	58 DP-1	58 DP-1	58 DP-1	58 DP-1	
Days After Emergence	30 DE-	37 DE-	37 DE-	37 DE-	37 DE-	37 DE-	37 DE-	37 DE-	51 DE-	51 DE-	51 DE-	51 DE-	
ARM Action Codes	P	P	P	P	P	P	P	P	P	P	P	P	
Number of Decimals	0	0	0	0	0	0	0	0	0	0	0	0	
Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9
6	STATUS	2.5	oz/a	LMP	0	0	98	98	99	95	0	92	91
	ROUNDUP POWERMAX	0.75	lb ae/a	LMP									
	INDUCE	0.25	% v/v	LMP									
	AMS	3.75	% v/v	LMP									
7	ROUNDUP POWERMAX	0.75	lb ae/a	LMP	0	0	98	95	99	91	0	89	92
	INDUCE	0.25	% v/v	LMP									
	AMS	3.75	% v/v	LMP									
	LSD (P=.05)				3.9	3.9	2.9	5.9	0.0	5.6	0.0	3.0	6.4
	Standard Deviation				2.2	2.2	1.6	3.3	0.0	3.2	0.0	1.7	3.6
	CV				57.28	65.47	1.94	3.99	0.0	3.94	0.0	2.17	4.46
	Bartlett's X2				0.0	0.0	0.0	2.693	0.0	1.688	0.0	2.675	2.185
	P(Bartlett's X2)				.	.	.	0.441	.	0.89	.	0.614	0.702
	Replicate F				1.000	1.000	2.000	0.443	0.000	5.137	0.000	2.586	0.470
	Replicate Prob(F)				0.3966	0.3966	0.1780	0.6522	1.0000	0.0244	1.0000	0.1165	0.6363
	Treatment F				64.000	49.000	1547.447	366.650	0.000	377.404	0.000	1246.961	295.974
	Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	1.0000	0.0001	1.0000	0.0001	0.0001



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

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	AMACH	IPOSS		SETFA	AMBTR	AMACH	IPOSS					
Pest Scientific Name	Amaranthus hyb>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>	Ipomoea sp.					
Pest Name	Smooth pigweed	Morning glory		Giant foxtail	Giant ragweed	Smooth pigweed	Morning glory					
Crop Code			ZEAMX					ZEAMX				
BBCH Scale			BCOR					BCOR				
Crop Scientific Name			Zea mays					Zea mays				
Crop Name			Corn					Corn				
Rating Date	6-24-2009	6-24-2009	7-24-2009	7-24-2009	7-24-2009	7-24-2009	7-24-2009	9-29-2009				
Rating Type	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	YIELD				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU 15.5%				
Number of Subsamples	1	1	1	1	1	1	1	1				
Rating Timing	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK					
Days After First/Last Applic.	28 28	28 28	58 58	58 58	58 58	58 58	58 58	125 125				
Trt-Eval Interval	28 DA-A	28 DA-A	58 DA-A	58 DA-A	58 DA-A	58 DA-A	58 DA-A	125 DA-A				
Plant-Eval Interval	58 DP-1	58 DP-1	88 DP-1	88 DP-1	88 DP-1	88 DP-1	88 DP-1	155 DP-1				
Days After Emergence	51 DE-	51 DE-	81 DE-	81 DE-	81 DE-	81 DE-	81 DE-	148 DE				
ARM Action Codes	P	P	P	P	P	P	P	TY1				
Number of Decimals	0	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	10	11	12	13	14	15	16	21
6	STATUS	2.5	oz/a	LMP	99	93	0	92	89	99	91	207
	ROUNDUP POWERMAX	0.75	lb ae/a	LMP								
	INDUCE	0.25	% v/v	LMP								
	AMS	3.75	% v/v	LMP								
7	ROUNDUP POWERMAX	0.75	lb ae/a	LMP	99	85	0	89	90	99	82	209
	INDUCE	0.25	% v/v	LMP								
	AMS	3.75	% v/v	LMP								
	LSD (P=.05)	0.0			0.0	6.6	0.0	2.3	5.1	0.0	6.9	13.8
	Standard Deviation	0.0			0.0	3.7	0.0	1.3	2.9	0.0	3.9	7.8
	CV	0.0			0.0	4.83	0.0	1.66	3.68	0.0	5.19	4.16
	Bartlett's X2	0.0			0.0	2.053	0.0	2.729	6.022	0.0	2.985	3.795
	P(Bartlett's X2)	.			.	0.842	.	0.435	0.198	.	0.702	0.704
	Replicate F	0.000			0.000	4.629	0.000	5.600	0.486	0.000	1.881	1.561
	Replicate Prob(F)	1.0000			1.0000	0.0324	1.0000	0.0191	0.6264	1.0000	0.1948	0.2497
	Treatment F	0.000			0.000	252.022	0.000	2135.429	437.743	0.000	218.772	164.657
	Treatment Prob(F)	1.0000			1.0000	0.0001	1.0000	0.0001	0.0001	1.0000	0.0001	0.0001



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

### CORN POSTEMERGENCE XI

Trial ID: C9016      Protocol ID: GOWAN CORN POST 19-T01  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact:

#### 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

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Type

YIELD = yield

#### Rating Unit

PERCENT = percent

#### Plant-Eval Interval

37 DP-1 = 1 4-27-2009

44 DP-1 = 1 4-27-2009

58 DP-1 = 1 4-27-2009

88 DP-1 = 1 4-27-2009

155 DP-1 = 1 4-27-2009

#### ARM Action Codes

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

TY1 = 3.85632\*[C19]

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE XI

Trial ID: C9016      Protocol ID: GOWAN CORN POST 19-T01  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact:

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-27-2009

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

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

<b>Crop 1:</b> ZEAMX	Zea mays	Corn
<b>Variety:</b> DKC 62 54		
<b>BBCH Scale:</b> BCOR		<b>Planting Date:</b> 4-27-2009
<b>Planting Method:</b> ROW	drilled	<b>Rate, Unit:</b> 30000 S/A
<b>Depth, Unit:</b> 1.5	IN	
<b>Row Spacing, Unit:</b> 30	IN	
<b>Seed Bed:</b> MEDIUM	medium	<b>Soil Temperature, Unit:</b> 65 F
<b>Soil Moisture:</b> NORMAL	normal	<b>Emergence Date:</b> 5-4-2009
<b>Harvest Date:</b> 9-29-2009		<b>Harvest Equipment:</b> COMBINE
<b>Harvested Width, Unit:</b> 5	FT	<b>Harvested Length, Unit:</b> 37 FT
<b>% Standard Moisture:</b> 15.5		

### General Trial Information

### Trial Location

### Personnel

### Other Personnel

### Crop Description

### Pest Description

# Plant and Soil Science, U of KY

## Weed Science Research

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

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

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

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

### Site and Design

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6            **% OM:** 2.6            **Texture:** SIL            silt loam  
**% Silt:** 62            **pH:** 6.4            **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32            **CEC:** 17            **Fert. Level:** E            excellent  
**Soil Drainage:** E            excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP      **Distance, Unit:** 2 MI

### Application Description

**A**

**Application Date:** 5-27-2009  
**Time of Day:** 11 AM  
**Application Method:** SPRAY  
**Application Timing:** LMP  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 72 F  
**% Relative Humidity:** 78  
**Wind Velocity, Unit:** 6 MPH  
**Wind Direction:** SW  
**Soil Temperature, Unit:** 71 F  
**Soil Moisture:** GOOD  
**% Cloud Cover:** 50

### Crop Stage At Each Application

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

**A**

**Crop 1 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** V4  
**Height, Unit:** 12 IN

### Pest Stage At Each Application

**A**

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

### Application Equipment

**A**

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





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

Pest Type		W Weed	W Weed	W Weed	W Weed		W Weed	W Weed	W Weed				
Pest Code		SETFA	AMBTR	AMACH	IPOSS		SETFA	AMBTR	AMACH				
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>				
Pest Name		Giant foxtail	Giant ragweed	Smooth pigweed	Morning glory		Giant foxtail	Giant ragweed	Smooth pigweed				
Crop Code	ZEAMX					ZEAMX							
BBCH Scale	BCOR					BCOR							
Crop Scientific Name	Zea mays					Zea mays							
Crop Name	Corn					Corn							
Rating Date	6-10-2009	6-10-2009	6-10-2009	6-10-2009	6-10-2009	6-24-2009	6-24-2009	6-24-2009	6-24-2009				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1	1	1				
SE Description													
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK				
Days After First/Last Applic.	43 14	43 14	43 14	43 14	43 14	57 28	57 28	57 28	57 28				
Trt-Eval Interval	14 DA-B	14 DA-B	14 DA-B	14 DA-B	14 DA-B	28 DA-B	28 DA-B	28 DA-B	28 DA-B				
Plant-Eval Interval	43 DP-1	43 DP-1	43 DP-1	43 DP-1	43 DP-1	57 DP-1	57 DP-1	57 DP-1	57 DP-1				
Days After Emergence	37 DE-	37 DE-	37 DE-	37 DE-	37 DE-	51 DE-	51 DE-	51 DE-	51 DE-				
ARM Action Codes	P	P	P	P	P	P	P	P	P				
Number of Decimals	0	0	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4	5	6	7	8	9
11	DUAL II MAGNUM	1.4	pt/a	PRE	0	96	95	99	83	0	96	91	99
	ROUNDUP POWERMAX	22	fl oz/a	MP									
	AMS	3.75	% v/v	MP									
LSD (P=.05)		0.0			27.7	13.8	1.2	12.8	0.0	27.4	14.1	1.2	
Standard Deviation		0.0			16.2	8.1	0.7	7.5	0.0	16.1	8.3	0.7	
CV		0.0			21.05	9.45	0.77	8.8	0.0	21.75	9.86	0.77	
Bartlett's X2		0.0			10.268	15.605	0.0	19.006	0.0	12.952	18.644	0.0	
P(Bartlett's X2)		.			0.114	0.004*	.	0.002*	.	0.044*	0.009*	.	
Replicate F		0.000			0.216	1.357	1.000	0.436	0.000	0.272	2.125	1.000	
Replicate Prob(F)		1.0000			0.8079	0.2801	0.3855	0.6523	1.0000	0.7645	0.1456	0.3855	
Treatment F		0.000			9.517	38.853	5499.213	45.472	0.000	10.189	36.280	5499.213	
Treatment Prob(F)		1.0000			0.0001	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001	0.0001	





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

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	IPOSS	SETFA	AMBTR	AMACH	IPOSS						
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>	Amaranthus hyb>	Ipomoea sp.						
Pest Name	Morning glory	Giant foxtail	Giant ragweed	Smooth pigweed	Morning glory						
Crop Code		ZEAMX				ZEAMX					
BBCH Scale		BCOR				BCOR					
Crop Scientific Name		Zea mays				Zea mays					
Crop Name		Corn				Corn					
Rating Date	6-24-2009	7-24-2009	7-24-2009	7-24-2009	7-24-2009	7-24-2009	9-29-2009				
Rating Type	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	YIELD				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU				
Number of Subsamples	1	1	1	1	1	1	1				
SE Description							15.5%				
Rating Timing	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK					
Days After First/Last Applic.	57 28	87 58	87 58	87 58	87 58	87 58	154 125				
Trt-Eval Interval	28 DA-B	58 DA-B	58 DA-B	58 DA-B	58 DA-B	58 DA-B					
Plant-Eval Interval	57 DP-1	87 DP-1	87 DP-1	87 DP-1	87 DP-1	87 DP-1	154 DP-1				
Days After Emergence	51 DE-	81 DE-	81 DE-	81 DE-	81 DE-	81 DE-	148 DE				
ARM Action Codes	P	P	P	P	P	P	TY1				
Number of Decimals	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	10	11	12	13	14	15	20
6	DUAL II MAGNUM	1.4	pt/a	PRE	96	0	99	99	99	96	201
	SAMSON	12	fl oz/a	MP							
	AATREX	1	lb ai/a	MP							
	MSO	1	% v/v	MP							
	AMS	8.5	lb/100 gal	MP							
7	DUAL II MAGNUM	1.4	pt/a	PRE	99	0	99	96	99	99	212
	SAMSON	12	fl oz/a	MP							
	AATREX	1	lb ai/a	MP							
	CLARITY	6.65	fl oz/a	MP							
	AMS	8.5	lb/100 gal	MP							
8	AATREX	1	lb ai/a	PRE	74	0	60	73	99	70	191
	SAMSON	12	fl oz/a	MP							
	AMS	8.5	lb/100 gal	MP							
9	AATREX	1	lb ai/a	PRE	89	0	55	75	98	89	178
	ACCENT	0.666	oz/a	MP							
	AMS	8.5	lb/100 gal	MP							
10	AATREX	1	lb ai/a	PRE	92	0	60	90	99	87	207
	OPTION	1.5	oz/a	MP							
	AMS	8.5	lb/100 gal	MP							

## 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	IPOSS	SETFA	AMBTR	AMACH	IPOSS						
Pest Scientific Name	Ipomoea sp.	Setaria faberi	Ambrosia trifi>	Amaranthus hyb>	Ipomoea sp.						
Pest Name	Morning glory	Giant foxtail	Giant ragweed	Smooth pigweed	Morning glory						
Crop Code		ZEAMX						ZEAMX			
BBCH Scale		BCOR						BCOR			
Crop Scientific Name		Zea mays						Zea mays			
Crop Name		Corn						Corn			
Rating Date	6-24-2009	7-24-2009	7-24-2009	7-24-2009	7-24-2009	7-24-2009	9-29-2009				
Rating Type	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	YIELD				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU				
Number of Subsamples	1	1	1	1	1	1	1				
SE Description								15.5%			
Rating Timing	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK					
Days After First/Last Applic.	57 28	87 58	87 58	87 58	87 58	87 58	154 125				
Trt-Eval Interval	28 DA-B	58 DA-B	58 DA-B	58 DA-B	58 DA-B	58 DA-B					
Plant-Eval Interval	57 DP-1	87 DP-1	87 DP-1	87 DP-1	87 DP-1	87 DP-1	154 DP-1				
Days After Emergence	51 DE-	81 DE-	81 DE-	81 DE-	81 DE-	81 DE-	148 DE				
ARM Action Codes	P	P	P	P	P	P	TY1				
Number of Decimals	0	0	0	0	0	0	0				
Trt No.	Treatment	Rate	Unit	Growth Stage	10	11	12	13	14	15	20
11	DUAL II MAGNUM	1.4	pt/a	PRE	82	0	96	91	99	82	187
	ROUNDUP POWERMAX	22	fl oz/a	MP							
	AMS	3.75	% v/v	MP							
LSD (P=.05)					12.2	0.0	27.4	16.9	1.2	13.9	13.8
Standard Deviation					7.2	0.0	16.1	9.9	0.7	8.2	8.1
CV					8.77	0.0	21.75	11.95	0.77	10.19	4.35
Bartlett's X2					23.238	0.0	12.952	18.405	0.0	29.035	10.289
P(Bartlett's X2)					0.003*	.	0.044*	0.005*	.	0.001*	0.415
Replicate F					0.949	0.000	0.272	2.122	1.000	2.183	9.083
Replicate Prob(F)					0.4040	1.0000	0.7645	0.1459	0.3855	0.1388	0.0016
Treatment F					46.067	0.000	10.189	25.677	5499.213	34.874	79.673
Treatment Prob(F)					0.0001	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001

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

### CORN POSTEMERGENCE XII

Trial ID: C9017      Protocol ID: ISK CORN POST  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact:

#### 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

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Type

YIELD = yield

#### Rating Unit

PERCENT = percent

BU = bushel

#### Plant-Eval Interval

43 DP-1 = 1 4-28-2009

57 DP-1 = 1 4-28-2009

87 DP-1 = 1 4-28-2009

154 DP-1 = 1 4-28-2009

#### ARM Action Codes

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

TY1 = 3.85632\*18

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE XII

Trial ID: C9017      Protocol ID: ISK CORN POST  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact:

### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-28-2009

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

### Trial Location

### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

### Crop Description

<b>Crop 1:</b> ZEAMX      Zea mays      Corn	
<b>Variety:</b> DKC 62-54	
<b>BBCH Scale:</b> BCOR	<b>Planting Date:</b> 4-28-2009
<b>Planting Method:</b> ROWS	<b>Rate, Unit:</b> 30000 S/A
<b>Depth, Unit:</b> 1.5      IN	
<b>Row Spacing, Unit:</b> 30      IN	
<b>Seed Bed:</b> MEDIUM      medium	<b>Soil Temperature, Unit:</b> 64      F
<b>Soil Moisture:</b> NORMAL      normal	<b>Emergence Date:</b> 5-4-2009
<b>Harvest Date:</b> 9-29-2009	<b>Harvest Equipment:</b> COMBINE
<b>Harvested Width, Unit:</b> 5      FT	<b>Harvested Length, Unit:</b> 37      FT
<b>% Standard Moisture:</b> 15.5	

### Pest Description

# Plant and Soil Science, U of KY

## Weed Science Research

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

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

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

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

### Site and Design

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 17 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

### Application Description

	A	B
<b>Application Date:</b>	4-28-2009	5-27-2009
<b>Time of Day:</b>	10 AM	11 AM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	MP
<b>Application Placement:</b>	BROSOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	70 F	72 F
<b>% Relative Humidity:</b>	30	78
<b>Wind Velocity, Unit:</b>	6 MPH	6 MPH
<b>Wind Direction:</b>	SW	SW
<b>Soil Temperature, Unit:</b>	64 F	72 F
<b>Soil Moisture:</b>	NORMAL	GOOD
<b>% Cloud Cover:</b>	10	50

### Crop Stage At Each Application

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

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

### Pest Stage At Each Application

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

### Application Equipment

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







## 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	CHEAL		SETFA	AMBTR	CHEAL					
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>		Setaria faberi	Ambrosia trifi>	Chenopodium al>					
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>		Giant foxtail	Giant ragweed	Common lambsqu>					
Crop Code	ZEAMX					ZEAMX			ZEAMX				
BBCH Scale	BCOR					BCOR			BCOR				
Crop Scientific Name	Zea mays					Zea mays			Zea mays				
Crop Name	Corn					Corn			Corn				
Rating Date	6-9-2009	6-9-2009	6-9-2009	6-9-2009	6-23-2009	6-23-2009	6-23-2009	6-23-2009	7-21-2009				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1	1	1				
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.	41 14	41 14	41 14	41 14	55 28	55 28	55 28	55 28	83 56				
Plant-Eval Interval	41 DP-1	41 DP-1	41 DP-1	41 DP-1	55 DP-1	55 DP-1	55 DP-1	55 DP-1	83 DP-1				
Days After Emergence	36 DE-	36 DE-	36 DE-	36 DE-	50 DE-	50 DE-	50 DE-	50 DE-	78 DE-				
ARM Action Codes	P	P	P	P	P	P	P	P	P				
Number of Decimals	0	0	0	0	0	0	0	0	0				
Trt	Treatment	Rate	Rate	Growth									
No.	Name		Unit	Stage	1	2	3	4	5	6	7	8	9
10	CHECK UNTREATED	0			0	0	0	0	0	0	0	0	0
	LSD (P=.05)	3.4			4.4	22.2	1.5	3.4	3.0	21.6	1.4	3.4	
	Standard Deviation	2.4			3.0	15.3	1.0	2.4	2.1	14.9	0.9	2.4	
	CV	235.7			3.52	18.7	1.16	235.7	2.36	18.3	1.05	235.7	
	Bartlett's X2	0.0			3.967	13.303	0.0	0.0	3.911	24.97	0.061	0.0	
	P(Bartlett's X2)	.			0.784	0.001*	.	.	0.562	0.001*	0.805	.	
	Replicate F	0.000			0.191	1.882	1.000	0.000	0.557	1.904	1.678	0.000	
	Replicate Prob(F)	1.0000			0.9016	0.1565	0.4079	1.0000	0.6477	0.1528	0.1952	1.0000	
	Treatment F	4.200			399.839	17.986	3645.042	4.200	885.003	18.955	4457.085	4.200	
	Treatment Prob(F)	0.0018			0.0001	0.0001	0.0001	0.0018	0.0001	0.0001	0.0001	0.0018	

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

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	10	11	12	16
1	NIC-IT	0.0234	lb ai/a	MP	95	98	99	167
	AATREX	1	lb ai/a	MP				
	COC	1	% v/v	MP				
	LIQUID N	3	% v/v	MP				
2	NIC-IT	0.0313	lb ai/a	MP	97	99	99	169
	AATREX	1	lb ai/a	MP				
	COC	1	% v/v	MP				
	LIQUID N	3	% v/v	MP				
3	NIC-IT	0.0234	lb ai/a	MP	95	96	99	164
	BANVEL	0.375	lb ai/a	MP				
	COC	1	% v/v	MP				
	LIQUID N	3	% v/v	MP				
4	NIC-IT	0.0313	lb ai/a	MP	97	97	99	159
	BANVEL	0.375	lb ai/a	MP				
	COC	1	% v/v	MP				
	LIQUID N	3	% v/v	MP				

Pest Type	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	CHEAL	
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Rating Date	7-21-2009	7-21-2009	7-21-2009	
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.	83 56	83 56	83 56	
Plant-Eval Interval	83 DP-1	83 DP-1	83 DP-1	
Days After Emergence	78 DE-	78 DE-	78 DE-	
ARM Action Codes	P	P	P	TY1
Number of Decimals	0	0	0	0

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

Pest Type	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	CHEAL	
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Rating Date	7-21-2009	7-21-2009	7-21-2009	
Rating Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.	83 56	83 56	83 56	
Plant-Eval Interval	83 DP-1	83 DP-1	83 DP-1	
Days After Emergence	78 DE-	78 DE-	78 DE-	
ARM Action Codes	P	P	P	TY1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	10	11	12	16
5	NIC-IT	0.0234	lb ai/a	MP	97	99	99	175
	BANVEL	0.375	lb ai/a	MP				
	AATREX	1	lb ai/a	MP				
	COC	1	% v/v	MP				
	LIQUID N	3	% v/v	MP				
6	NIC-IT	0.0313	lb ai/a	MP	98	62	97	81
	HARASS	0.00234	lb ai/a	MP				
	COC	1	% v/v	MP				
	LIQUID N	3	% v/v	MP				
7	ACCENT	0.031	lb ai/a	MP	99	98	99	176
	AATREX	1	lb ai/a	MP				
	COC	1	% v/v	MP				
	LIQUID N	3	% v/v	MP				
8	STOUT	0.034	lb ai/a	MP	97	59	98	156
	COC	1	% v/v	MP				
	LIQUID N	3	% v/v	MP				
9	GLYFOS X-TRA	1	lb ai/a	PRE	99	94	99	167
	HARNESS	1.75	pt/a	PRE				
	NIC-IT	0.0313	lb ai/a	MP				
	COC	1	% v/v	MP				
	LIQUID N	3	% v/v	MP				



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

### CORN POSTEMERGENCE XIII

Trial ID: C9018                      Protocol ID: CHEMINOVA NIC00901  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:                              Investigator: Charles H Slack  
Sponsor Contact:

#### Pest Type

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

#### Pest Code

SETFA, Setaria faberi, = US

AMBTR, Ambrosia trifida, = US

CHEAL, Chenopodium album, = US

#### Crop Code

ZEAMX, BCOR, Zea mays, = US

#### Rating Type

YIELD = yield

#### Rating Unit

PERCENT = percent

BU = bushel

#### Plant-Eval Interval

41 DP-1 = 1 4-29-2009

55 DP-1 = 1 4-29-2009

83 DP-1 = 1 4-29-2009

#### ARM Action Codes

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

TY1 = 3.85632\*[C14]

# Plant and Soil Science, U of KY

## Weed Science Research

### CORN POSTEMERGENCE XIII

Trial ID: C9018      Protocol ID: CHEMINOVA NIC00901  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact:

### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-24-2009

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

### Trial Location

### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

### Crop Description

<b>Crop 1:</b> ZEAMX	Zea mays	Corn
<b>Variety:</b> DKC 62-54		
<b>BBCH Scale:</b> BCOR		<b>Planting Date:</b> 4-29-2009
<b>Planting Method:</b> ROW	drilled	<b>Rate, Unit:</b> 30000 S/A
<b>Depth, Unit:</b> 1.5	IN	
<b>Row Spacing, Unit:</b> 30	IN	
<b>Seed Bed:</b> MEDIUM	medium	<b>Soil Temperature, Unit:</b> 65 F
<b>Soil Moisture:</b> NORMAL	normal	<b>Emergence Date:</b> 5-4-2009
<b>Harvest Date:</b> 10-1-2009		<b>Harvest Equipment:</b> COMBINE
<b>Harvested Width, Unit:</b> 5	FT	<b>Harvested Length, Unit:</b> 37 FT
<b>% Standard Moisture:</b> 15.5		

### Pest Description

# Plant and Soil Science, U of KY

## Weed Science Research

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

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

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

### Site and Design

**Plot Width, Unit:** 10 FT      **Site Type:** FIELD    field  
**Plot Length, Unit:** 33 FT  
**Plot Area, Unit:** 330 FT<sup>2</sup>    **Tillage Type:** NOTILL    no-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:** 17      **Fert. Level:** E            excellent  
**Soil Drainage:** E            excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP      **Distance, Unit:** 2 MI

### Application Description

	A	B
<b>Application Date:</b>	4-29-2009	5-26-2009
<b>Time of Day:</b>	4 PM	4 PM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	MP
<b>Application Placement:</b>	BROSOI	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	70 F	84 F
<b>% Relative Humidity:</b>	30	70
<b>Wind Velocity, Unit:</b>	4 MPH	6 MPH
<b>Wind Direction:</b>	SW	S
<b>Soil Temperature, Unit:</b>	63 F	72 F
<b>Soil Moisture:</b>	NORMAL	GOOD
<b>% Cloud Cover:</b>	20	90

### Crop Stage At Each Application

	A	B
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>		V4
<b>Height, Unit:</b>		10 IN

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

### Pest Stage At Each Application

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

### Application Equipment

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

### Date By Notes

4-29-2009 CH Slack A preplant burndown application of glyphosate to entire trial.







## 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	W Weed	W Weed			
Pest Code	STEME	LAMPU	AMBTR		SETFA	AMBTR	IPOSS		SETFA			
Pest Scientific Name	Stellaria media	Lamium purpure>	Ambrosia trifi>		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		Setaria faberi			
Pest Name	Common chickwe>	Purple deadnet>	Giant ragweed		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail			
Crop Code				GLXMA				GLXMA				
BBCH Scale				BSOY				BSOY				
Crop Scientific Name				Glycine max				Glycine max				
Rating Date	5-15-2009	5-15-2009	5-15-2009	6-15-2009	6-15-2009	6-15-2009	6-16-2009	6-29-2009	6-29-2009			
Rating Type	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
Number of Subsamples	1	1	1	1	1	1	1	1	1			
SE Description				AFT. POST	AFT. POST	AFT. POST	AFT. POST	AFT. POST	AFT. POST			
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK			
Days After First/Last Applic.	15 15	15 15	15 15	46 14	46 14	46 14	47 15	60 28	60 28			
Trt-Eval Interval	15 DA-A	15 DA-A	15 DA-A									
Plant-Eval Interval	4 DP-1	4 DP-1	4 DP-1	35 DP-1	35 DP-1	35 DP-1	36 DP-1	49 DP-1	49 DP-1			
Days After Emergence	-2 DE-	-2 DE-	-2 DE-	29 DE-	29 DE-	29 DE-	30 DE-	43 DE-	43 DE-			
ARM Action Codes	P	P	P					P	P			
Number of Decimals	0	0	0	0	0	0	0	0	0			
Trt Treatment	Rate	Unit	Growth Stage	1	2	3	4	5	6	7	8	9
9 GLYFOS X-TRA	1	qt/a	1WK	99	99	99	0	0	0	0	0	0
WEEDONE LV4	1	pt/a	1WK									
AMS	3.75	% v/v	1WK									
CHECK UNTREATED												
10 GLYFOS X-TRA	1	qt/a	1WK	99	99	99	0	0	0	0	0	0
WEEDONE LV4	1	pt/a	1WK									
AMS	3.75	% v/v	1WK									
CHECK UNTREATED												
LSD (P=.05)				0.0	0.0	0.0	0.0	7.3	3.7	5.6	0.0	12.9
Standard Deviation				0.0	0.0	0.0	0.0	4.3	2.1	3.3	0.0	7.5
CV				0.0	0.0	0.0	0.0	5.81	2.78	4.29	0.0	10.54
Bartlett's X2				0.0	0.0	0.0	0.0	2.274	2.554	2.578	0.0	3.959
P(Bartlett's X2)				.	.	.	.	0.81	0.466	0.765	.	0.555
Replicate F				0.000	0.000	0.000	0.000	0.452	2.650	3.271	0.000	0.198
Replicate Prob(F)				1.0000	1.0000	1.0000	1.0000	0.6437	0.0980	0.0614	1.0000	0.8223
Treatment F				0.000	0.000	0.000	0.000	255.240	1090.541	454.349	0.000	80.279
Treatment Prob(F)				1.0000	1.0000	1.0000	1.0000	0.0001	0.0001	0.0001	1.0000	0.0001

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

Pest Type	W Weed	W Weed		W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS		SETFA	AMBTR	IPOSS
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory
Crop Code			GLXMA			
BBCH Scale			BSOY			
Crop Scientific Name			Glycine max			
Rating Date	6-29-2009	6-29-2009	7-28-2009	7-28-2009	7-28-2009	7-28-2009
Rating Type	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1	1
SE Description	AFT. POST	AFT. POST	AFT. POST	AFT. POST	AFT. POST	AFT. POST
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	60 28	60 28	89 57	89 57	89 57	89 57
Trt-Eval Interval						
Plant-Eval Interval	49 DP-1	49 DP-1	78 DP-1	78 DP-1	78 DP-1	78 DP-1
Days After Emergence	43 DE-	43 DE-	72 DE-	72 DE-	72 DE-	72 DE-
ARM Action Codes	P	P	P	P	P	P
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	10	11	12	13	14	15
1	GLYFOS X-TRA	1	qt/a	1WK	95	98	0	67	94	98
	WEEDONE LV4	1	pt/a	1WK						
	AMS	3.75	% v/v	1WK						
	RHYTHM	0.147	lb ai/a	MP						
	AMS	2.5	% v/v	MP						
2	GLYFOS X-TRA	1	qt/a	1WK	98	90	0	80	96	92
	WEEDONE LV4	1	pt/a	1WK						
	AMS	3.75	% v/v	1WK						
	RHYTHM	0.294	lb ai/a	MP						
	AMS	2.5	% v/v	MP						
3	GLYFOS X-TRA	1	qt/a	1WK	99	96	0	98	99	96
	WEEDONE LV4	1	pt/a	1WK						
	AMS	3.75	% v/v	1WK						
	RHYTHM	0.588	lb ai/a	MP						
	AMS	2.5	% v/v	MP						
	MSO	1	% v/v	MP						

## 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	AMBTR	IPOSS		SETFA	AMBTR	IPOSS
Pest Scientific Name	Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory
Crop Code			GLXMA			
BBCH Scale			BSOY			
Crop Scientific Name			Glycine max			
Rating Date	6-29-2009	6-29-2009	7-28-2009	7-28-2009	7-28-2009	7-28-2009
Rating Type	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1	1
SE Description	AFT. POST	AFT. POST	AFT. POST	AFT. POST	AFT. POST	AFT. POST
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	60 28	60 28	89 57	89 57	89 57	89 57
Trt-Eval Interval						
Plant-Eval Interval	49 DP-1	49 DP-1	78 DP-1	78 DP-1	78 DP-1	78 DP-1
Days After Emergence	43 DE-	43 DE-	72 DE-	72 DE-	72 DE-	72 DE-
ARM Action Codes	P	P	P	P	P	P
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	10	11	12	13	14	15
4	GLYFOS X-TRA	1	qt/a	1WK	99	95	0	99	99	95
	WEEDONE LV4	1	pt/a	1WK						
	AMS	3.75	% v/v	1WK						
	RHYTHM	0.147	lb ai/a	MP						
	GLYFOS X-TRA	1	lb ai/a	MP						
5	GLYFOS X-TRA	1	qt/a	1WK	99	99	0	99	99	99
	WEEDONE LV4	1	pt/a	1WK						
	AMS	3.75	% v/v	1WK						
	RHYTHM	0.294	lb ai/a	MP						
	GLYFOS X-TRA	1	lb ai/a	MP						
6	GLYFOS X-TRA	1	qt/a	1WK	99	99	0	83	99	99
	WEEDONE LV4	1	pt/a	1WK						
	AMS	3.75	% v/v	1WK						
	DAWN	0.375	lb ai/a	MP						
	INDUCE	0.25	% v/v	MP						
7	GLYFOS X-TRA	1	qt/a	1WK	83	90	0	96	83	90
	WEEDONE LV4	1	pt/a	1WK						
	AMS	3.75	% v/v	1WK						
	FLEXSTAR	0.147	lb ai/a	MP						
	AMS	2.5	% v/v	MP						
	MSO	1	% v/v	MP						
8	GLYFOS X-TRA	1	qt/a	1WK	92	92	0	96	92	92
	WEEDONE LV4	1	pt/a	1WK						
	AMS	3.75	% v/v	1WK						
	FLEXSTAR	0.294	lb ai/a	MP						
	AMS	2.5	% v/v	MP						
	MSO	1	% v/v	MP						

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

Pest Type		W Weed	W Weed		W Weed	W Weed	W Weed		
Pest Code		AMBTR	IPOSS		SETFA	AMBTR	IPOSS		
Pest Scientific Name		Ambrosia trifi>	Ipomoea sp.		Setaria faberi	Ambrosia trifi>	Ipomoea sp.		
Pest Name		Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		
Crop Code				GLXMA					
BBCH Scale				BSOY					
Crop Scientific Name				Glycine max					
Rating Date		6-29-2009	6-29-2009	7-28-2009	7-28-2009	7-28-2009	7-28-2009		
Rating Type		CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL		
Rating Unit		PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
Number of Subsamples		1	1	1	1	1	1		
SE Description		AFT. POST	AFT. POST	AFT. POST	AFT. POST	AFT. POST	AFT. POST		
Rating Timing		4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK		
Days After First/Last Applic.		60 28	60 28	89 57	89 57	89 57	89 57		
Trt-Eval Interval									
Plant-Eval Interval		49 DP-1	49 DP-1	78 DP-1	78 DP-1	78 DP-1	78 DP-1		
Days After Emergence		43 DE-	43 DE-	72 DE-	72 DE-	72 DE-	72 DE-		
ARM Action Codes		P	P	P	P	P	P		
Number of Decimals		0	0	0	0	0	0		
Trt Treatment	Rate	Unit	Growth Stage	10	11	12	13	14	15
9 GLYFOS X-TRA	1	qt/a	1WK	0	0	0	0	0	0
WEEDONE LV4	1	pt/a	1WK						
AMS	3.75	% v/v	1WK						
CHECK UNTREATED									
10 GLYFOS X-TRA	1	qt/a	1WK	0	0	0	0	0	0
WEEDONE LV4	1	pt/a	1WK						
AMS	3.75	% v/v	1WK						
CHECK UNTREATED									
LSD (P=.05)				5.3	6.2	0.0	7.8	6.4	5.9
Standard Deviation				3.1	3.6	0.0	4.5	3.7	3.4
CV				4.04	4.74	0.0	6.32	4.9	4.51
Bartlett's X2				1.811	1.997	0.0	2.685	0.447	2.578
P(Bartlett's X2)				0.612	0.85	.	0.748	0.93	0.765
Replicate F				2.847	1.765	0.000	0.759	2.456	2.155
Replicate Prob(F)				0.0843	0.1995	1.0000	0.4825	0.1140	0.1449
Treatment F				516.711	373.331	0.000	224.266	351.415	411.473
Treatment Prob(F)				0.0001	0.0001	1.0000	0.0001	0.0001	0.0001

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

NO TILL SOYBEAN

Trial ID: S9020      Protocol ID: CHEMINOVA FOMME0901  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact:

### Pest Type

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

### Pest Code

STEME, Stellaria media, = US

LAMPU, Lamium purpureum, = US

AMBTR, Ambrosia trifida, = US

SETFA, Setaria faberi, = US

IPOSS, Ipomoea sp., = US

### Crop Code

GLXMA, BSOY, Glycine max, = US

### Rating Unit

PERCENT = percent

### Plant-Eval Interval

4 DP-1 = 1 5-11-2009

35 DP-1 = 1 5-11-2009

36 DP-1 = 1 5-11-2009

49 DP-1 = 1 5-11-2009

78 DP-1 = 1 5-11-2009

### 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: S9020      Protocol ID: CHEMINOVA FOMME0901  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact:

## General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-30-2009

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

## Trial Location

## Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

## Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

## Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4403  
**BBCH Scale:** BSOY      **Planting Date:** 5-11-2009  
**Planting Method:** DRILLE      **Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDIUM medium      **Soil Temperature, Unit:** 64 F  
**Soil Moisture:** NORMAL normal      **Emergence Date:** 5-17-2009

## Pest Description

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



# Plant and Soil Science, U of KY

## Weed Science Research

**Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel

**Pest 3 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

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

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

### Site and Design

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

### Soil Description

**Description Name:** LANTON  
**% Sand:** 3 **% OM:** 4 **Texture:** SIL silt loam  
**% Silt:** 63 **pH:** 6.5 **Soil Name:** LANTON SILT LOAM  
**% Clay:** 34 **CEC:** 25 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.75 MI

### Application Description

	A	B
<b>Application Date:</b>	4-30-2009	6-1-2009
<b>Time of Day:</b>	4 PM	6 PM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	1 WK	MP
<b>Application Placement:</b>	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	72 F	83 F
<b>% Relative Humidity:</b>	61	50
<b>Wind Velocity, Unit:</b>	8 MPH	6 MPH
<b>Wind Direction:</b>	SSW	SW
<b>Soil Temperature, Unit:</b>	61 F	72 F
<b>Soil Moisture:</b>	NORMAL	NORMAL
<b>% Cloud Cover:</b>	80	0

### Crop Stage At Each Application

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

	A	B
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA BSOY	GLXMA BSOY
<b>Stage Scale Used:</b>	V3	

### Pest Stage At Each Application

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

### Application Equipment

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





## 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	W Weed				
Pest Code	LACSE	AMBTR	SETFA	AMACH	CHEAL	IPOSS	SETFA					
Pest Scientific Name	Lactuca serrio>	Ambrosia trifi>	Setaria faberi	Amaranthus hyb>	Chenopodium al>	Ipomoea sp.	Setaria faberi					
Pest Name	Prickly lettuce	Giant ragweed	Giant foxtail	Smooth pigweed	Common lambsqu>	Morning glory	Giant foxtail					
Crop Code							GLXMA					
BBCH Scale							BSOY					
Crop Scientific Name							Glycine max					
Crop Name							Soybean					
Rating Date	6-5-2009	6-5-2009	6-5-2009	6-5-2009	6-5-2009	6-5-2009	6-19-2009	6-19-2009				
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1	1				
SE Description	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST				
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK				
Days After First/Last Applic.	14 14	14 14	14 14	14 14	14 14	14 14	28 28	28 28				
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A	28 DA-A	28 DA-A				
Plant-Eval Interval	14 DP-1	14 DP-1	14 DP-1	14 DP-1	14 DP-1	14 DP-1	28 DP-1	28 DP-1				
Days After Emergence	8 DE-1	8 DE-1	8 DE-1	8 DE-1	8 DE-1	8 DE-1	22 DE-	22 DE-				
ARM Action Codes	P	P	P	P	P	P	P	P				
Number of Decimals	0	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4	5	6	7	8
10	DURANGO DMA	24	fl oz/a	PRE	99	99	99	99	99	99	0	92
	ENVIVE	3.5	oz/a	PRE								
	ROUNDUP POWERMAX	22	fl oz/a	LP								
	AMS	3.75	% v/v	LP								
	LSD (P=.05)				0.0	0.0	7.2	0.0	0.0	7.1	0.0	10.9
	Standard Deviation				0.0	0.0	4.2	0.0	0.0	4.1	0.0	6.4
	CV				0.0	0.0	4.45	0.0	0.0	4.39	0.0	7.5
	Bartlett's X2				0.0	0.0	7.641	0.0	0.0	0.475	0.0	7.922
	P(Bartlett's X2)				.	.	0.266	.	.	0.924	.	0.441
	Replicate F				0.000	0.000	2.744	0.000	0.000	1.931	0.000	6.092
	Replicate Prob(F)				1.0000	1.0000	0.0912	1.0000	1.0000	0.1739	1.0000	0.0095
	Treatment F				0.000	0.000	4.410	0.000	0.000	11.133	0.000	10.213
	Treatment Prob(F)				1.0000	1.0000	0.0036	1.0000	1.0000	0.0001	1.0000	0.0001

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

				W Weed	W Weed	W Weed		W Weed	W Weed	W Weed	
				AMACH	CHEAL	IPOSS		SETFA	AMACH	CHEAL	
				Amaranthus hyb>	Chenopodium al>	Ipomoea sp.		Setaria faberi	Amaranthus hyb>	Chenopodium al>	
				Smooth pigweed	Common lambsqu>	Morning glory		Giant foxtail	Smooth pigweed	Common lambsqu>	
							GLXMA				
							BSOY				
							Glycine max				
							Soybean				
Pest Type				6-19-2009	6-19-2009	6-19-2009	7-17-2009	7-17-2009	7-17-2009	7-17-2009	
Pest Code				CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	
Pest Scientific Name				PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	
Pest Name				1	1	1	1	1	1	1	
Crop Code				BEFORE POST	BEFORE POST	BEFORE POST	4WK AFT POST	4WK AFT POST	4WK AFT POST	4WK AFT POST	
BBCH Scale				4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Crop Scientific Name				28 28	28 28	28 28	56 25	56 25	56 25	56 25	
Crop Name				28 DA-A	28 DA-A	28 DA-A	18 DA-B	18 DA-B	18 DA-B	18 DA-B	
Rating Date				28 DP-1	28 DP-1	28 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1	
Rating Type				22 DE-	22 DE-	22 DE-	50 DE-	50 DE-	50 DE-	50 DE-	
Rating Unit				P	P	P	P	P	P	P	
Number of Subsamples				0	0	0	0	0	0	0	
SE Description											
Rating Timing											
Days After First/Last Applic.											
Trt-Eval Interval											
Plant-Eval Interval											
Days After Emergence											
ARM Action Codes											
Number of Decimals											
Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	9	10	11	12	13	14	15
1	DURANGO DMA	24	fl oz/a	PRE	92	90	95	0	99	99	99
	SONIC	3	oz/a	PRE							
	DURANGO DMA	24	fl oz/a	LP							
	AMS	2	% w/w	LP							
2	DURANGO DMA	24	fl oz/a	PRE	95	95	96	0	99	99	99
	SONIC	4.5	oz/a	PRE							
	DURANGO DMA	24	fl oz/a	LP							
	AMS	2	% w/w	LP							
3	DURANGO DMA	24	fl oz/a	PRE	95	90	95	0	99	99	99
	FIRSTRATE	0.3	oz/a	PRE							
	DURANGO DMA	24	fl oz/a	LP							
	AMS	2	% w/w	LP							
	DURANGO DMA	24	fl oz/a	REG							
	AMS	2	% w/w	REG							
4	DURANGO DMA	24	fl oz/a	PRE	93	93	53	0	99	99	99
	BOUNDARY	1.5	pt/a	PRE							
	TOUCHDOWN TOTAL	24	fl oz/a	LP							

## 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	AMACH	CHEAL	IPOSS	SETFA	AMACH	CHEAL	
Pest Scientific Name	Amaranthus hyb>	Chenopodium al>	Ipomoea sp.	Setaria faberi	Amaranthus hyb>	Chenopodium al>	
Pest Name	Smooth pigweed	Common lambsqu>	Morning glory	Giant foxtail	Smooth pigweed	Common lambsqu>	
Crop Code				GLXMA			
BBCH Scale				BSOY			
Crop Scientific Name				Glycine max			
Crop Name				Soybean			
Rating Date	6-19-2009	6-19-2009	6-19-2009	7-17-2009	7-17-2009	7-17-2009	
Rating Type	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1	1	1
SE Description	BEFORE POST	BEFORE POST	BEFORE POST	4WK AFT POST	4WK AFT POST	4WK AFT POST	4WK AFT POST
Rating Timing	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	28 28	28 28	28 28	56 25	56 25	56 25	56 25
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	18 DA-B	18 DA-B	18 DA-B	18 DA-B
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1
Days After Emergence	22 DE-	22 DE-	22 DE-	50 DE-	50 DE-	50 DE-	50 DE-
ARM Action Codes	P	P	P	P	P	P	P
Number of Decimals	0	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	9	10	11	12	13	14	15
5	DURANGO DMA	24	fl oz/a	PRE	83	86	76	0	99	99	99
	INTRRO	2	qt/a	PRE							
	ROUNDUP POWERMAX	22	fl oz/a	LP							
	AMS	3.7	% v/v	LP							
6	DURANGO DMA	24	fl oz/a	PRE	96	92	92	0	99	99	99
	PREFIX	2	pt/a	PRE							
	TOUCHDOWN TOTAL	24	fl oz/a	LP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
7	BOUNDARY	1.5	pt/a	PRE	88	88	75	0	99	99	99
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	TOUCHDOWN TOTAL	24	fl oz/a	LP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
8	DURANGO DMA	24	fl oz/a	PRE	98	91	98	0	99	99	99
	VALOR XLT	3	oz/a	PRE							
	ROUNDUP POWERMAX	22	fl oz/a	LP							
	AMS	3.75	% v/v	LP							
9	DURANGO DMA	24	fl oz/a	PRE	96	95	90	0	99	99	99
	GANGSTER FR	0.4	oz/a	PRE							
	GANGSTER V	2	oz/a	PRE							
	ROUNDUP POWERMAX	22	fl oz/a	LP							
	AMS	3.75	% v/v	LP							

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

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	AMACH	CHEAL	IPOSS		SETFA	AMACH	CHEAL				
Pest Scientific Name	Amaranthus hyb>	Chenopodium al>	Ipomoea sp.		Setaria faberi	Amaranthus hyb>	Chenopodium al>				
Pest Name	Smooth pigweed	Common lambsqu>	Morning glory		Giant foxtail	Smooth pigweed	Common lambsqu>				
Crop Code				GLXMA							
BBCH Scale				BSOY							
Crop Scientific Name				Glycine max							
Crop Name				Soybean							
Rating Date	6-19-2009	6-19-2009	6-19-2009	7-17-2009	7-17-2009	7-17-2009	7-17-2009				
Rating Type	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1				
SE Description	BEFORE POST	BEFORE POST	BEFORE POST	4WK AFT POST	4WK AFT POST	4WK AFT POST	4WK AFT POST				
Rating Timing	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK				
Days After First/Last Applic.	28 28	28 28	28 28	56 25	56 25	56 25	56 25				
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	18 DA-B	18 DA-B	18 DA-B	18 DA-B				
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1				
Days After Emergence	22 DE-	22 DE-	22 DE-	50 DE-	50 DE-	50 DE-	50 DE-				
ARM Action Codes	P	P	P	P	P	P	P				
Number of Decimals	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	9	10	11	12	13	14	15
10	DURANGO DMA	24	fl oz/a	PRE	98	96	98	0	99	99	99
	ENVIVE	3.5	oz/a	PRE							
	ROUNDUP POWERMAX	22	fl oz/a	LP							
	AMS	3.75	% v/v	LP							
LSD (P=.05)					8.2	8.4	10.7	0.0	0.0	0.0	0.0
Standard Deviation					4.8	4.9	6.2	0.0	0.0	0.0	0.0
CV					5.11	5.36	7.16	0.0	0.0	0.0	0.0
Bartlett's X2					11.77	4.415	8.992	0.0	0.0	0.0	0.0
P(Bartlett's X2)					0.162	0.818	0.438	.	.	.	.
Replicate F					4.039	0.465	1.310	0.000	0.000	0.000	0.000
Replicate Prob(F)					0.0356	0.6355	0.2943	1.0000	1.0000	1.0000	1.0000
Treatment F					2.724	1.286	16.122	0.000	0.000	0.000	0.000
Treatment Prob(F)					0.0336	0.3094	0.0001	1.0000	1.0000	1.0000	1.0000



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

Pest Type W Weed  
 Pest Code IPOSS  
 Pest Scientific Name Ipomoea sp.  
 Pest Name Morning glory  
 Crop Code  
 BBCH Scale  
 Crop Scientific Name  
 Crop Name  
 Rating Date 7-17-2009  
 Rating Type CONTROL  
 Rating Unit PERCENT  
 Number of Subsamples 1 1 1 1 1  
 SE Description 4WK AFT POST  
 Rating Timing 8 WEEK  
 Days After First/Last Applic. 56 25  
 Trt-Eval Interval 18 DA-B  
 Plant-Eval Interval 56 DP-1  
 Days After Emergence 50 DE-  
 ARM Action Codes P  
 Number of Decimals 0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	16	17	18	19	20	21	22
1	DURANGO DMA	24	fl oz/a	PRE	99						
	SONIC	3	oz/a	PRE							
	DURANGO DMA	24	fl oz/a	LP							
	AMS	2	% w/w	LP							
2	DURANGO DMA	24	fl oz/a	PRE	99						
	SONIC	4.5	oz/a	PRE							
	DURANGO DMA	24	fl oz/a	LP							
	AMS	2	% w/w	LP							
3	DURANGO DMA	24	fl oz/a	PRE	99						
	FIRSTRATE	0.3	oz/a	PRE							
	DURANGO DMA	24	fl oz/a	LP							
	AMS	2	% w/w	LP							
	DURANGO DMA	24	fl oz/a	REG							
	AMS	2	% w/w	REG							
4	DURANGO DMA	24	fl oz/a	PRE	99						
	BOUNDARY	1.5	pt/a	PRE							
	TOUCHDOWN TOTAL	24	fl oz/a	LP							

## 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	
Rating Date	7-17-2009
Rating Type	CONTROL
Rating Unit	PERCENT
Number of Subsamples	1 1 1 1 1 1
SE Description	4WK AFT POST
Rating Timing	8 WEEK
Days After First/Last Applic.	56 25
Trt-Eval Interval	18 DA-B
Plant-Eval Interval	56 DP-1
Days After Emergence	50 DE-
ARM Action Codes	P
Number of Decimals	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	16	17	18	19	20	21	22
5	DURANGO DMA	24	fl oz/a	PRE		99					
	INTRRO	2	qt/a	PRE							
	ROUNDUP POWERMAX	22	fl oz/a	LP							
	AMS	3.7	% v/v	LP							
6	DURANGO DMA	24	fl oz/a	PRE		99					
	PREFIX	2	pt/a	PRE							
	TOUCHDOWN TOTAL	24	fl oz/a	LP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
7	BOUNDARY	1.5	pt/a	PRE		99					
	GRAMOXONE INTEON	48	fl oz/a	PRE							
	TOUCHDOWN TOTAL	24	fl oz/a	LP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
8	DURANGO DMA	24	fl oz/a	PRE		99					
	VALOR XLT	3	oz/a	PRE							
	ROUNDUP POWERMAX	22	fl oz/a	LP							
	AMS	3.75	% v/v	LP							
9	DURANGO DMA	24	fl oz/a	PRE		99					
	GANGSTER FR	0.4	oz/a	PRE							
	GANGSTER V	2	oz/a	PRE							
	ROUNDUP POWERMAX	22	fl oz/a	LP							
	AMS	3.75	% v/v	LP							

## 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							
Rating Date	7-17-2009						
Rating Type	CONTROL						
Rating Unit	PERCENT						
Number of Subsamples	1	1	1	1	1	1	
SE Description	4WK AFT POST						
Rating Timing	8 WEEK						
Days After First/Last Applic.	56 25						
Trt-Eval Interval	18 DA-B						
Plant-Eval Interval	56 DP-1						
Days After Emergence	50 DE-						
ARM Action Codes	P						
Number of Decimals	0						

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Trt	Treatment	Rate	Unit	Growth	16	17	18	19	20	21	22
10	DURANGO DMA	24	fl oz/a	PRE	99						
	ENVIVE	3.5	oz/a	PRE							
	ROUNDUP POWERMAX	22	fl oz/a	LP							
	AMS	3.75	% v/v	LP							
	LSD (P=.05)				0.0	.	.	.	.	.	.
	Standard Deviation				0.0	.	.	.	.	.	.
	CV				0.0	.	.	.	.	.	.
	Bartlett's X2				0.0	.	.	.	.	.	.
	P(Bartlett's X2)				.	.	.	.	.	.	.
	Replicate F				0.000						
	Replicate Prob(F)				1.0000						
	Treatment F				0.000						
	Treatment Prob(F)				1.0000						

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

### NO TILL SOYBEAN

Trial ID: S9021-2      Protocol ID: DOW SOYBEAN POST  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact: BRUCE MADDY

#### Pest Type

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

#### Pest Code

LACSE, Lactuca serriola, = US  
AMBTR, Ambrosia trifida, = US  
SETFA, Setaria faberi, = US  
AMACH, Amaranthus hybridus, = US  
CHEAL, Chenopodium album, = US  
IPOSS, Ipomoea sp., = US

#### Crop Code

GLXMA, BSOY, Glycine max, = US

#### Rating Unit

PERCENT = percent

#### Plant-Eval Interval

14 DP-1 = 1 5-22-2009  
28 DP-1 = 1 5-22-2009  
56 DP-1 = 1 5-22-2009

#### 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: S9021-2      Protocol ID: DOW SOYBEAN POST  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact: BRUCE MADDY

### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-22-2009

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

### Trial Location

### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AGR 4403  
**BBCH Scale:** BSOY      **Planting Date:** 5-22-2009  
**Planting Method:** DRILLE drilled      **Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium      **Soil Temperature, Unit:** 69 F  
**Soil Moisture:** GOOD good      **Emergence Date:** 5-28-2009

### Pest Description

**Pest 1 Type:** W      **Code:** LACSE      *Lactuca serriola*  
**Common Name:** Prickly lettuce

# Plant and Soil Science, U of KY

## Weed Science Research

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

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

**Pest 4 Type:** W **Code:** AMACH *Amaranthus hybridus*  
**Common Name:** Smooth pigweed

**Pest 5 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

**Pest 6 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 FT<sup>2</sup>    **Tillage Type:** NOTILL    no-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:** 17      **Fert. Level:** E            excellent  
**Soil Drainage:** E            excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP      **Distance, Unit:** 2 MI

### Application Description

	A	B
<b>Application Date:</b>	5-22-2009	6-22-2009
<b>Time of Day:</b>	3 PM	2PM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	LP
<b>Application Placement:</b>	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	78 F	80 F
<b>% Relative Humidity:</b>	32	30
<b>Wind Velocity, Unit:</b>	8 MPH	4 MPH
<b>Wind Direction:</b>	WSW	SW
<b>Soil Temperature, Unit:</b>	69 F	79 F
<b>Soil Moisture:</b>	NORMAL	NORMAL
<b>% Cloud Cover:</b>	10	10

# Plant and Soil Science, U of KY

## Weed Science Research

### Crop Stage At Each Application

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

### Pest Stage At Each Application

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

### Application Equipment

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





## 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	W Weed	W Weed	W Weed	W Weed		
Pest Code	STEME	LAMPU	AMBTR	IPOSS	SETFA	AMBTR	IPOSS	SETFA	AMBTR	IPOSS	IPOSS		
Pest Scientific Name	Stellaria media	Lamium purpure>	Ambrosia trifi>	Ipomoea sp.	Setaria faberi	Ambrosia trifi>	Ipomoea sp.	Setaria faberi	Ambrosia trifi>	Ipomoea sp.	Ipomoea sp.		
Pest Name	Common chickwe>	Purple deadnet>	Giant ragweed	Morning glory	Giant foxtail	Giant ragweed	Morning glory	Giant foxtail	Giant ragweed	Morning glory	Morning glory		
Crop Code					GLXMA			GLXMA			GLXMA		
BBCH Scale					BSOY			BSOY			BSOY		
Crop Scientific Name					Glycine max			Glycine max			Glycine max		
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	INJURY		
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT		
Number of Subsamples	1	1	1	1	1	1	1	1	1	1	1		
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK		
ARM Action Codes	P	P	P	P	P	P	P	P	P	P	P		
Number of Decimals	0	0	0	0	0	0	0	0	0	0	0		
Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9
6	TACKLE	2.026	lb ai/a	3WAP	99	99	99	99	0	99	99	99	0
	AMS		2 % w/w	3WAP									
	INDUCE	0.25	% v/v	3WAP									
	LSD (P=.05)				0.0	0.0	0.0	0.0	0.0	3.9	6.4	10.0	0.0
	Standard Deviation				0.0	0.0	0.0	0.0	0.0	2.1	3.5	5.5	0.0
	CV				0.0	0.0	0.0	0.0	0.0	2.21	4.44	6.9	0.0
	Bartlett's X2				0.0	0.0	0.0	0.0	0.0	3.299	0.0	0.857	0.0
	P(Bartlett's X2)				.	.	.	.	.	0.069	1.00	0.355	.
	Replicate F				0.000	0.000	0.000	0.000	0.000	1.265	0.455	0.556	0.000
	Replicate Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000	0.3237	0.6472	0.5905	1.0000
	Treatment F				0.000	0.000	0.000	0.000	0.000	11.747	262.993	99.938	0.000
	Treatment Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000	0.0006	0.0001	0.0001	1.0000

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

					W Weed	W Weed	W Weed
					SETFA	AMBTR	IPOSS
					Setaria faberi	Ambrosia trifi>	Ipomoea sp.
					Giant foxtail	Giant ragweed	Morning glory
					CONTROL	CONTROL	CONTROL
					PERCENT	PERCENT	PERCENT
					1	1	1
					8 WEEK	8 WEEK	8 WEEK
					P	P	P
					0	0	0
Trt	Treatment	Rate	Rate	Growth	10	11	12
No.	Name		Unit	Stage			
1	TACKLE	1.0313	lb ai/a	2WK	93	23	27
	AMS	17	lb/100 gal	2WK			
	INDUCE	0.25	% v/v	2WK			
2	TACKLE	1.0313	lb ai/a	2WK	99	99	99
	AMS	2	% w/w	2WK			
	INDUCE	0.25	% v/v	2WK			
	TACKLE	1.0313	lb ai/a	3WAP			
	AMS	2	% w/w	3WAP			
	INDUCE	0.25	% v/v	3WAP			
3	TACKLE	1.0313	lb ai/a	2 WK	89	50	47
	AMS	2	% w/w	2WK			
	INDUCE	0.25	% v/v	2WK			
	CHA-019	1.13	lb ai/a	PRE			
4	GLYFOS X-TRA	1	lb ai/a	2WK	99	99	99
	AMS	2	% w/w	2WK			
	TACKLE	1.0313	lb ai/a	3WAP			
	AMS	2	% w/w	3WAP			
	INDUCE	0.25	% v/v	3WAP			
5	GLYFOS X-TRA	1	lb ai/a	2WK	99	99	99
	AMS	2	% w/w	2WK			
	EXTREME	0.81	lb ai/a	3WAP			
	AMS	2	% w/w	3WAP			
	INDUCE	0.25	% v/v	3WAP			

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

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea sp.
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code				
BBCH Scale				
Crop Scientific Name				
Rating Type		CONTROL	CONTROL	CONTROL
Rating Unit		PERCENT	PERCENT	PERCENT
Number of Subsamples		1	1	1
Rating Timing		8 WEEK	8 WEEK	8 WEEK
ARM Action Codes		P	P	P
Number of Decimals		0	0	0
Trt	Treatment			
No.	Name	Rate	Rate	Growth
			Unit	Stage
				10
				11
				12
6	TACKLE	2.026	lb ai/a	3WAP
	AMS	2	% w/w	3WAP
	INDUCE	0.25	% v/v	3WAP
LSD (P=.05)				3.9
Standard Deviation				2.1
CV				2.21
Bartlett's X2				3.299
P(Bartlett's X2)				0.069
Replicate F				1.265
Replicate Prob(F)				0.3237
Treatment F				11.747
Treatment Prob(F)				0.0006
				1.000
				0.4019
				597.904
				0.0001
				0.455
				0.6472
				264.138
				0.0001

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

NO TILL SOYBEAN EPP II

Trial ID: S9022      Protocol ID: CHEMINOVA TAC0901  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact:

### Pest Type

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

### Pest Code

STEME, Stellaria media, = US

LAMPU, Lamium purpureum, = US

AMBTR, Ambrosia trifida, = US

IPOSS, Ipomoea sp., = US

SETFA, Setaria faberi, = 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 EPP II

Trial ID: S9022      Protocol ID: CHEMINOVA TAC0901  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact:

### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-24-2009

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

### Trial Location

### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4403  
**BBCH Scale:** BSOY      **Planting Date:** 5-11-2009  
**Planting Method:** DRILLE drilled      **Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDIUM medium      **Soil Temperature, Unit:** 64 F  
**Soil Moisture:** NORMAL normal      **Emergence Date:** 5-17-2009

### Pest Description

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

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

**Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel

**Pest 3 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

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

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

### Site and Design

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

### Soil Description

**Description Name:** LANTON  
**% Sand:** 3      **% OM:** 4      **Texture:** SIL            silt loam  
**% Silt:** 63      **pH:** 6.5      **Soil Name:** LANTON SILT LOAM  
**% Clay:** 34      **CEC:** 25      **Fert. Level:** E          excellent  
**Soil Drainage:** E          excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP      **Distance, Unit:** 1.75 MI

### Application Description

	A	B	C
<b>Application Date:</b>	4-24-2009	5-12-2009	6-1-2009
<b>Time of Day:</b>	3 PM	3 PM	5 PM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	2WK EPP	PRE	3WAP
<b>Application Placement:</b>	BROFOL	BROSOI	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	78 F	70 F	83 F
<b>% Relative Humidity:</b>	32	30	50
<b>Wind Velocity, Unit:</b>	8 MPH	4 MPH	6 MPH
<b>Wind Direction:</b>	WSW	SW	SW
<b>Soil Temperature, Unit:</b>	57 F	62 F	71 F
<b>Soil Moisture:</b>	ADEQUATE	NORMAL	NORMAL
<b>% Cloud Cover:</b>	10	0	0

### Crop Stage At Each Application

# Plant and Soil Science, U of KY

## Weed Science Research

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

### Pest Stage At Each Application

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

### Application Equipment

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





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

Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code		STEME	LAMPU	SETFA	AMBTR	AMACH	CHEAL				
Pest Scientific Name		Stellaria media	Lamium purpure>	Setaria faberi	Ambrosia trifi>	Amaranthus hyb>	Chenopodium al>				
Pest Name		Common chickwe>	Purple deadnet>	Giant foxtail	Giant ragweed	Smooth pigweed	Common lambsqu>				
Crop Code	GLXMA										
BBCH Scale	BSOY										
Crop Scientific Name	Glycine max										
Crop Name	Soybean										
Description											
Rating Date	5-18-2009	5-7-2009	5-7-2009	5-7-2009	5-7-2009	5-7-2009	5-7-2009				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1				
SE Description	AFT PLANTING	AFT APPL	AFT APPL	AFT APPL	AFT APPL	AFT APPL	AFT APPL				
Rating Timing	1 WEEK	1 WEEK	1 WEEK	1 WEEK	1 WEEK	1 WEEK	1 WEEK				
Days After First/Last Applic.	18 18	7 7	7 7	7 7	7 7	7 7	7 7				
Trt-Eval Interval		7 DA-A	7 DA-A	7 DA-A	7 DA-A	7 DA-A	7 DA-A				
Plant-Eval Interval	7 DP-1	-4 DP-1	-4 DP-1	-4 DP-1	-4 DP-1	-4 DP-1	-4 DP-1				
Days After Emergence	2 DE-1	-9 DE-	-9 DE-	-9 DE-	-9 DE-	-9 DE-	-9 DE-				
ARM Action Codes	P	P	P	P	P	P	P				
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
4	SHARPEN	1	fl oz/a	1WK EPP	0	99	99	99	99	80	99
	ROUNDUP POWERMAX	22	fl oz/a	1WK EPP							
	MSO	1	% v/v	1WK EPP							
	AMS	3.7	% v/v	1WK EPP							
	ROUNDUP POWERMAX	22	fl oz/a	+45D							
	INDUCE	0.25	% v/v	+45D							
	AMS	3.7	% v/v	+45D							
5	OPTILL	2	oz/a	1WK EPP	0	99	99	99	99	98	99
	ROUNDUP POWERMAX	22	fl oz/a	1WK EPP							
	MSO	1	% v/v	1WK EPP							
	AMS	3.7	% v/v	1WK EPP							
	ROUNDUP POWERMAX	22	fl oz/a	+45D							
	INDUCE	0.25	% v/v	+45D							
	AMS	3.7	% v/v	+45D							

## 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		STEME	LAMPU	SETFA	AMBTR	AMACH	CHEAL			
Pest Scientific Name		Stellaria media	Lamium purpure>	Setaria faberi	Ambrosia trifi>	Amaranthus hyb>	Chenopodium al>			
Pest Name		Common chickwe>	Purple deadnet>	Giant foxtail	Giant ragweed	Smooth pigweed	Common lambsqu>			
Crop Code	GLXMA									
BBCH Scale	BSOY									
Crop Scientific Name	Glycine max									
Crop Name	Soybean									
Description										
Rating Date	5-18-2009	5-7-2009	5-7-2009	5-7-2009	5-7-2009	5-7-2009	5-7-2009			
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
Number of Subsamples	1	1	1	1	1	1	1			
SE Description	AFT PLANTING	AFT APPL	AFT APPL	AFT APPL	AFT APPL	AFT APPL	AFT APPL			
Rating Timing	1 WEEK	1 WEEK	1 WEEK	1 WEEK	1 WEEK	1 WEEK	1 WEEK			
Days After First/Last Applic.	18 18	7 7	7 7	7 7	7 7	7 7	7 7			
Trt-Eval Interval		7 DA-A	7 DA-A	7 DA-A	7 DA-A	7 DA-A	7 DA-A			
Plant-Eval Interval	7 DP-1	-4 DP-1	-4 DP-1	-4 DP-1	-4 DP-1	-4 DP-1	-4 DP-1			
Days After Emergence	2 DE-1	-9 DE-	-9 DE-	-9 DE-	-9 DE-	-9 DE-	-9 DE-			
ARM Action Codes	P	P	P	P	P	P	P			
Number of Decimals	0	0	0	0	0	0	0			
Trt Treatment	Rate	Unit	Growth Stage	1	2	3	4	5	6	7
6 SHARPEN	2 fl oz/a	1WK EPP		0	99	99	99	99	90	99
ROUNDUP POWERMAX	22 fl oz/a	1WK EPP								
MSO	1 % v/v	1WK EPP								
AMS	3.7 % v/v	1WK EPP								
ROUNDUP POWERMAX	22 fl oz/a	+45D								
INDUCE	0.25 % v/v	+45D								
AMS	3.7 % v/v	+45D								
LSD (P=.05)				0.0	0.0	0.0	0.0	0.0	19.9	0.0
Standard Deviation				0.0	0.0	0.0	0.0	0.0	11.0	0.0
CV				0.0	0.0	0.0	0.0	0.0	15.19	0.0
Bartlett's X2				0.0	0.0	0.0	0.0	0.0	8.554	0.0
P(Bartlett's X2)				.	.	.	.	.	0.036*	.
Replicate F				0.000	0.000	0.000	0.000	0.000	1.222	0.000
Replicate Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000	0.3351	1.0000
Treatment F				0.000	0.000	0.000	0.000	0.000	32.415	0.000
Treatment Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000	0.0001	1.0000





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

Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code		STEME	LAMPU	SETFA	AMBTR	AMACH	CHEAL			
Pest Scientific Name		Stellaria media	Lamium purpure>	Setaria faberi	Ambrosia trifi>	Amaranthus hyb>	Chenopodium al>			
Pest Name		Common chickwe>	Purple deadnet>	Giant foxtail	Giant ragweed	Smooth pigweed	Common lambsqu>			
Crop Code	GLXMA									
BBCH Scale	BSOY									
Crop Scientific Name	Glycine max									
Crop Name	Soybean									
Description										
Rating Date	5-25-2009	5-14-2009	5-14-2009	5-14-2009	5-14-2009	5-14-2009	5-14-2009			
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
Number of Subsamples	1	1	1	1	1	1	1			
SE Description	AFT PLANTING	AFT APPL	AFT APPL	AFT APPL	AFT APPL	AFT APPL	AFT APPL			
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK			
Days After First/Last Applic.	25 25	14 14	14 14	14 14	14 14	14 14	14 14			
Trt-Eval Interval										
Plant-Eval Interval	14 DP-1	3 DP-1	3 DP-1	3 DP-1	3 DP-1	3 DP-1	3 DP-1			
Days After Emergence	9 DE-1	-2 DE-	-2 DE-	-2 DE-	-2 DE-	-2 DE-	-2 DE-			
ARM Action Codes	P	P	P	P	P	P	P			
Number of Decimals	0	0	0	0	0	0	0			
Trt Treatment	Rate	Unit	Growth Stage	8	9	10	11	12	13	14
6 SHARPEN	2 fl oz/a	1WK EPP		0	99	99	86	99	99	99
ROUNDUP POWERMAX	22 fl oz/a	1WK EPP								
MSO	1 % v/v	1WK EPP								
AMS	3.7 % v/v	1WK EPP								
ROUNDUP POWERMAX	22 fl oz/a	+45D								
INDUCE	0.25 % v/v	+45D								
AMS	3.7 % v/v	+45D								
LSD (P=.05)				0.0	0.0	0.0	3.5	0.9	6.1	0.0
Standard Deviation				0.0	0.0	0.0	1.9	0.5	3.3	0.0
CV				0.0	0.0	0.0	2.49	0.58	4.19	0.0
Bartlett's X2				0.0	0.0	0.0	1.61	0.0	1.385	0.0
P(Bartlett's X2)				.	.	.	0.204	.	0.50	.
Replicate F				0.000	0.000	0.000	1.422	1.000	0.315	0.000
Replicate Prob(F)				1.0000	1.0000	1.0000	0.2860	0.4019	0.7366	1.0000
Treatment F				0.000	0.000	0.000	1191.604	21401.201	415.793	0.000
Treatment Prob(F)				1.0000	1.0000	1.0000	0.0001	0.0001	0.0001	1.0000





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

Pest Type		W Weed	W Weed	W Weed	W Weed		W Weed	W Weed			
Pest Code		SETFA	AMBTR	AMACH	CHEAL		SETFA	AMBTR			
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>	Chenopodium al>		Setaria faberi	Ambrosia trifi>			
Pest Name		Giant foxtail	Giant ragweed	Smooth pigweed	Common lambsqu>		Giant foxtail	Giant ragweed			
Crop Code	GLXMA					GLXMA					
BBCH Scale	BSOY					BSOY					
Crop Scientific Name	Glycine max					Glycine max					
Crop Name	Soybean					Soybean					
Description	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST						
Rating Date	6-11-2009	6-11-2009	6-11-2009	6-11-2009	6-11-2009	7-9-2009	7-9-2009	7-9-2009			
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
Number of Subsamples	1	1	1	1	1	1	1	1			
SE Description	AFT PLANTING	AFT APPL	AFT APPL	AFT APPL	AFT APPL	AFT POST	AFT POST	AFT POST			
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK			
Days After First/Last Applic.	42 42	42 42	42 42	42 42	42 42	70 21	70 21	70 21			
Trt-Eval Interval											
Plant-Eval Interval	31 DP-1	31 DP-1	31 DP-1	31 DP-1	31 DP-1	59 DP-1	59 DP-1	59 DP-1			
Days After Emergence	26 DE-	26 DE-	26 DE-	26 DE-	26 DE-	54 DE-	54 DE-	54 DE-			
ARM Action Codes	P	P	P	P	P	P	P	P			
Number of Decimals	0	0	0	0	0	0	0	0			
Trt Treatment	Rate	Unit	Growth Stage	15	16	17	18	19	20	21	22
6 SHARPEN	2 fl oz/a	1WK EPP		0	77	98	95	99	0	99	99
ROUNDUP POWERMAX	22 fl oz/a	1WK EPP									
MSO	1 % v/v	1WK EPP									
AMS	3.7 % v/v	1WK EPP									
ROUNDUP POWERMAX	22 fl oz/a	+45D									
INDUCE	0.25 % v/v	+45D									
AMS	3.7 % v/v	+45D									
LSD (P=.05)				0.0	8.1	5.9	5.2	5.8	0.0	0.0	0.0
Standard Deviation				0.0	4.4	3.3	2.9	3.2	0.0	0.0	0.0
CV				0.0	6.54	4.61	4.01	4.15	0.0	0.0	0.0
Bartlett's X2				0.0	1.007	2.313	1.763	1.587	0.0	0.0	0.0
P(Bartlett's X2)				.	0.80	0.678	0.623	0.208	.	.	.
Replicate F				0.000	0.493	1.170	5.296	1.667	0.000	0.000	0.000
Replicate Prob(F)				1.0000	0.6249	0.3495	0.0270	0.2373	1.0000	1.0000	1.0000
Treatment F				0.000	181.025	385.985	489.552	444.023	0.000	0.000	0.000
Treatment Prob(F)				1.0000	0.0001	0.0001	0.0001	0.0001	1.0000	1.0000	1.0000



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

Pest Type	W Weed	W Weed
Pest Code	AMACH	CHEAL
Pest Scientific Name	Amaranthus hyb>	Chenopodium al>
Pest Name	Smooth pigweed	Common lambsqu>
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Rating Date	7-9-2009	7-9-2009
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
Number of Subsamples	1	1
SE Description	AFT POST	AFT POST
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.	70 21	70 21
Trt-Eval Interval		
Plant-Eval Interval	59 DP-1	59 DP-1
Days After Emergence	54 DE-	54 DE-
ARM Action Codes	P	P
Number of Decimals	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	23	24
1	CHECK UNTREATED				0	0
2	ROUNDUP POWERMAX	22 fl oz/a		1WK EPP	99	99
	INDUCE	0.25 % v/v		1WK EPP		
	AMS	3.7 % v/v		1WK EPP		
	ROUNDUP POWERMAX	22 fl oz/a		+45D		
	INDUCE	0.25 % v/v		+45D		
	AMS	3.7 % v/v		+45D		
3	ROUNDUP POWERMAX	22 fl oz/a		1WK EPP	99	99
	WEEDONE LV4	16 fl oz/a		1WK EPP		
	INDUCE	0.25 % v/v		1WK EPP		
	AMS	3.7 % v/v		1WK EPP		
	ROUNDUP POWERMAX	22 fl oz/a		+45D		
	INDUCE	0.25 % v/v		+45D		
	AMS	3.7 % v/v		+45D		

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

Pest Type	W Weed	W Weed
Pest Code	AMACH	CHEAL
Pest Scientific Name	Amaranthus hyb>	Chenopodium al>
Pest Name	Smooth pigweed	Common lambsqu>
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Rating Date	7-9-2009	7-9-2009
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
Number of Subsamples	1	1
SE Description	AFT POST	AFT POST
Rating Timing	8 WEEK	8 WEEK
Days After First/Last Applic.	70 21	70 21
Trt-Eval Interval		
Plant-Eval Interval	59 DP-1	59 DP-1
Days After Emergence	54 DE-	54 DE-
ARM Action Codes	P	P
Number of Decimals	0	0

Trt	Treatment	Rate	Unit	Growth Stage	23	24
4	SHARPEN	1	fl oz/a	1WK EPP	99	99
	ROUNDUP POWERMAX	22	fl oz/a	1WK EPP		
	MSO	1	% v/v	1WK EPP		
	AMS	3.7	% v/v	1WK EPP		
	ROUNDUP POWERMAX	22	fl oz/a	+45D		
	INDUCE	0.25	% v/v	+45D		
	AMS	3.7	% v/v	+45D		
5	OPTILL	2	oz/a	1WK EPP	99	99
	ROUNDUP POWERMAX	22	fl oz/a	1WK EPP		
	MSO	1	% v/v	1WK EPP		
	AMS	3.7	% v/v	1WK EPP		
	ROUNDUP POWERMAX	22	fl oz/a	+45D		
	INDUCE	0.25	% v/v	+45D		
	AMS	3.7	% v/v	+45D		

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

Pest Type		W Weed	W Weed
Pest Code		AMACH	CHEAL
Pest Scientific Name		Amaranthus hyb>	Chenopodium al>
Pest Name		Smooth pigweed	Common lambsqu>
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Description			
Rating Date		7-9-2009	7-9-2009
Rating Type		CONTROL	CONTROL
Rating Unit		PERCENT	PERCENT
Number of Subsamples		1	1
SE Description		AFT POST	AFT POST
Rating Timing		8 WEEK	8 WEEK
Days After First/Last Applic.		70 21	70 21
Trt-Eval Interval			
Plant-Eval Interval		59 DP-1	59 DP-1
Days After Emergence		54 DE-	54 DE-
ARM Action Codes		P	P
Number of Decimals		0	0
Trt	Treatment	Rate	Growth
No.	Name	Unit	Stage
			23
			24
6	SHARPEN	2 fl oz/a	1WK EPP
	ROUNDUP POWERMAX	22 fl oz/a	1WK EPP
	MSO	1 % v/v	1WK EPP
	AMS	3.7 % v/v	1WK EPP
	ROUNDUP POWERMAX	22 fl oz/a	+45D
	INDUCE	0.25 % v/v	+45D
	AMS	3.7 % v/v	+45D
LSD (P=.05)			0.0
Standard Deviation			0.0
CV			0.0
Bartlett's X2			0.0
P(Bartlett's X2)			.
Replicate F		0.000	0.000
Replicate Prob(F)		1.0000	1.0000
Treatment F		0.000	0.000
Treatment Prob(F)		1.0000	1.0000

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

NO TILL SOYBEAN EPP III

Trial ID: S9023      Protocol ID: BASF D91-A-02  
Location: LEXINGTON, KY      Study Director: CHARLES H. 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

STEME, Stellaria media, = US  
LAMPU, Lamium purpureum, = US  
SETFA, Setaria faberi, = US  
AMBTR, Ambrosia trifida, = US  
AMACH, Amaranthus hybridus, = US  
CHEAL, Chenopodium album, = US

### Crop Code

GLXMA, BSOY, Glycine max, = US

### Rating Unit

PERCENT = percent

### Plant-Eval Interval

7 DP-1 = 1 5-11-2009  
-4 DP-1 = 1 5-11-2009  
14 DP-1 = 1 5-11-2009  
3 DP-1 = 1 5-11-2009  
31 DP-1 = 1 5-11-2009  
59 DP-1 = 1 5-11-2009

### 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 EPP III

Trial ID: S9023      Protocol ID: BASF D91-A-02  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact: GREG STAPLETON

### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-30-2009

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

### Trial Location

### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AGR 4403  
**BBCH Scale:** BSOY      **Planting Date:** 5-11-2009  
**Planting Method:** DRILLE drilled      **Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDIUM medium      **Soil Temperature, Unit:** 63 F  
**Soil Moisture:** GOOD good      **Emergence Date:** 5-16-2009

### Pest Description

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

# Plant and Soil Science, U of KY

## Weed Science Research

**Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel

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

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

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

**Pest 6 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

### Site and Design

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

### Soil Description

**Description Name:** LANTON  
**% Sand:** 3      **% OM:** 4      **Texture:** SIL            silt loam  
**% Silt:** 63      **pH:** 6.5      **Soil Name:** LANTON SILT LOAM  
**% Clay:** 34      **CEC:** 25      **Fert. Level:** E            excellent  
**Soil Drainage:** E            excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP      **Distance, Unit:** 1.75 MI

### Application Description

	A	B
<b>Application Date:</b>	4-30-2009	6-18-2009
<b>Time of Day:</b>	4 PM	10 AM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	1 WK	+45D
<b>Application Placement:</b>	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	72 F	75 F
<b>% Relative Humidity:</b>	61	82
<b>Wind Velocity, Unit:</b>	8 MPH	3 MPH
<b>Wind Direction:</b>	SSW	WSW
<b>Soil Temperature, Unit:</b>	62 F	75 F
<b>Soil Moisture:</b>	NORMAL	EXCELL
<b>% Cloud Cover:</b>	80	99

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

### Crop Stage At Each Application

	A	B
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA BSOY	GLXMA BSOY
<b>Height, Unit:</b>	14	IN

### Pest Stage At Each Application

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

### Application Equipment

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

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

NO TILL SOYBEAN EPP IV

Trial ID: S9024      Protocol ID: MON 2009 04 10  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
                                  Sponsor Contact: GLEN MURPHY

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	
Pest Code	AMBTR	LAMAM	STEME	AMBTR	AMACH	DIGSS	
Pest Scientific Name	Ambrosia trifi>	Lamium amplexi>	Stellaria media	Ambrosia trifi>	Amaranthus hyb>	Digitaria sp.	
Pest Name	Giant ragweed	Henbit	Common chickwe>	Giant ragweed	Smooth pigweed	Crabgrass	
Crop Code							GLXMA
BBCH Scale							BSOY
Crop Scientific Name							Glycine max
Crop Name							Soybean
Rating Date	5-12-2009	5-12-2009	5-12-2009	6-5-2009	6-5-2009	6-5-2009	6-5-2009
Rating Type	BURNDOWN	BURNDOWN	BURNDWN	CONTROL	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1	1	1
Rating Timing	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	12 12	12 12	12 12	36 36	36 36	36 36	36 36
Trt-Eval Interval	12 DA-A	12 DA-A	12 DA-A	36 DA-A	36 DA-A	36 DA-A	36 DA-A
Plant-Eval Interval	0 DP-1	0 DP-1	0 DP-1	24 DP-1	24 DP-1	25 DP-1	24 DP-1
Days After Emergence						18 DE-	
ARM Action Codes	P	P	P	P	P	P	P
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
1	ROUNDUP POWERMAX	0.75	lb ae/a	1 WK EPP	99	99	99	0	13	0	0
	WEEDONE LV4	0.25	lb ae/a	1 WK EPP							
	AMS	3.75	% v/v	1 WK EPP							
2	LOROX	0.5	lb ai/a	1 WK EPP	99	99	99	0	7	7	0
	ROUNDUP POWERMAX	0.75	lb ae/a	1 WK EPP							
	WEEDONE LV4	0.25	lb ae/a	1 WK EPP							
3	FIRSTRATE	0.016	lb ai/a	1 WK EPP	99	99	99	50	47	17	2
	ROUNDUP POWERMAX	0.75	lb ae/a	1 WK EPP							
	WEEDONE LV4	0.25	lb ae/a	1 WK EPP							
4	PROWL H20	0.95	lb ai/a	1 WK EPP	99	99	99	10	27	27	2
	ROUNDUP POWERMAX	0.75	lb ae/a	1 WK EPP							
	WEEDONE LV4	0.25	lb ae/a	1 WK EPP							
5	VALOR SX	2	oz/a	1 WK EPP	99	99	99	17	27	27	2
	ROUNDUP POWERMAX	0.75	lb ae/a	1 WK EPP							
	WEEDONE LV4	0.25	lb ae/a	1 WK EPP							
	AMS	3.75	% v/v	1 WK EPP							



## 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	AMBTR	LAMAM	STEME	AMBTR	AMACH	DIGSS					
Pest Scientific Name	Ambrosia trifi>	Lamium amplexi>	Stellaria media	Ambrosia trifi>	Amaranthus hyb>	Digitaria sp.					
Pest Name	Giant ragweed	Henbit	Common chickwe>	Giant ragweed	Smooth pigweed	Crabgrass					
Crop Code							GLXMA				
BBCH Scale							BSOY				
Crop Scientific Name							Glycine max				
Crop Name							Soybean				
Rating Date	5-12-2009	5-12-2009	5-12-2009	6-5-2009	6-5-2009	6-5-2009	6-5-2009				
Rating Type	BURNDOWN	BURNDOWN	BURNDWN	CONTROL	CONTROL	CONTROL	INJURY				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1				
Rating Timing	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK				
Days After First/Last Applic.	12 12	12 12	12 12	36 36	36 36	36 36	36 36				
Trt-Eval Interval	12 DA-A	12 DA-A	12 DA-A	36 DA-A	36 DA-A	36 DA-A	36 DA-A				
Plant-Eval Interval	0 DP-1	0 DP-1	0 DP-1	24 DP-1	24 DP-1	25 DP-1	24 DP-1				
Days After Emergence						18 DE-					
ARM Action Codes	P	P	P	P	P	P	P				
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
6	VALOR SX	2.5	oz/a	1 WK EPP	99	99	99	37	43	40	3
	ROUNDUP POWERMAX	0.75	lb ae/a	1 WK EPP							
	WEEDONE LV4	0.25	lb ae/a	1 WK EPP							
	AMS	3.75	% v/v	1 WK EPP							
7	VALOR XLT	3	oz/a	1 WK EPP	99	99	99	90	83	57	7
	ROUNDUP POWERMAX	0.75	lb ae/a	1 WK EPP							
	WEEDONE LV4	0.25	lb ae/a	1 WK EPP							
	AMS	3.75	% v/v	1 WK EPP							
8	AUTHORITY FIRST	3	oz/a	1 WK EPP	99	99	99	67	62	63	3
	ROUNDUP POWERMAX	0.75	lb ae/a	1 WK EPP							
	WEEDONE LV4	0.25	lb ae/a	1 WK EPP							
	AMS	3.75	% v/v	1 WK EPP							
9	AUTHORITY ASSIST	4	fl oz/a	1 WK EPP	99	99	99	47	60	53	0
	ROUNDUP POWERMAX	0.75	lb ae/a	1 WK EPP							
	WEEDONE LV4	0.25	lb ae/a	1 WK EPP							
	AMS	3.75	% v/v	1 WK EPP							
10	AUTHORITY MTZ	8	oz/a	1 WK EPP	99	99	99	33	63	7	0
	ROUNDUP POWERMAX	0.75	lb ae/a	1 WK EPP							
	WEEDONE LV4	0.25	lb ae/a	1 WK EPP							
	AMS	3.75	% v/v	1 WK EPP							
11	GANSTER COPAK	1.8	oz/a	1 WK EPP	99	99	99	62	50	63	8
	ROUNDUP POWERMAX	0.75	lb ae/a	1 WK EPP							
	WEEDONE LV4	0.25	lb ae/a	1 WK EPP							
	AMS	3.75	% v/v	1 WK EPP							
12	CANOPY EX	1.1	oz/a	1 WK EPP	99	99	99	87	50	57	10
	ROUNDUP POWERMAX	0.75	lb ae/a	1 WK EPP							
	WEEDONE LV4	0.25	lb ae/a	1 WK EPP							
	AMS	3.75	% v/v	1 WK EPP							

## 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	AMBTR	LAMAM	STEME	AMBTR	AMACH	DIGSS					
Pest Scientific Name	Ambrosia trifi>	Lamium amplexi>	Stellaria media	Ambrosia trifi>	Amaranthus hyb>	Digitaria sp.					
Pest Name	Giant ragweed	Henbit	Common chickwe>	Giant ragweed	Smooth pigweed	Crabgrass					
Crop Code							GLXMA				
BBCH Scale							BSOY				
Crop Scientific Name							Glycine max				
Crop Name							Soybean				
Rating Date	5-12-2009	5-12-2009	5-12-2009	6-5-2009	6-5-2009	6-5-2009	6-5-2009				
Rating Type	BURNDOWN	BURNDOWN	BURNDWN	CONTROL	CONTROL	CONTROL	INJURY				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1				
Rating Timing	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK				
Days After First/Last Applic.	12 12	12 12	12 12	36 36	36 36	36 36	36 36				
Trt-Eval Interval	12 DA-A	12 DA-A	12 DA-A	36 DA-A	36 DA-A	36 DA-A	36 DA-A				
Plant-Eval Interval	0 DP-1	0 DP-1	0 DP-1	24 DP-1	24 DP-1	25 DP-1	24 DP-1				
Days After Emergence						18 DE-					
ARM Action Codes	P	P	P	P	P	P	P				
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
13	CANOPY	2.25	oz/a	1 WK EPP	99	99	99	57	60	70	3
	ROUNDUP POWERMAX	0.75	lb ae/a	1 WK EPP							
	WEEDONE LV4	0.25	lb ae/a	1 WK EPP							
	AMS	3.75	% v/v	1 WK EPP							
14	ENVIVE	3	oz/a	1 WK EPP	99	99	99	88	63	63	7
	ROUNDUP POWERMAX	0.75	lb ae/a	1 WK EPP							
	WEEDONE LV4	0.25	lb ae/a	1 WK EPP							
	AMS	3.75	% v/v	1 WK EPP							
15	PREFIX	1	qt/a	1 WK EPP	99	99	99	57	57	60	3
	ROUNDUP POWERMAX	0.75	lb ae/a	1 WK EPP							
	WEEDONE LV4	0.25	lb ae/a	1 WK EPP							
	AMS	3.75	% v/v	1 WK EPP							
16	EXTREME	1.5	qt/a	1 WK EPP	99	99	99	17	17	17	2
	WEEDONE LV4	0.25	lb ae/a	1 WK EPP							
	AMS	3.75	% v/v	1 WK EPP							
	LSD (P=.05)				0.0	0.0	0.0	38.5	49.2	37.9	6.6
	Standard Deviation				0.0	0.0	0.0	23.1	29.5	22.8	4.0
	CV				0.0	0.0	0.0	51.49	64.79	58.1	122.55
	Bartlett's X2				0.0	0.0	0.0	17.758	13.509	15.551	6.023
	P(Bartlett's X2)				.	.	.	0.087	0.487	0.342	0.872
	Replicate F				0.000	0.000	0.000	0.165	0.834	3.155	0.432
	Replicate Prob(F)				1.0000	1.0000	1.0000	0.8483	0.4441	0.0571	0.6529
	Treatment F				0.000	0.000	0.000	5.178	1.610	3.446	1.878
	Treatment Prob(F)				1.0000	1.0000	1.0000	0.0001	0.1300	0.0019	0.0692

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

NO TILL SOYBEAN EPP IV

Trial ID: S9024      Protocol ID: MON 2009 04 10  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact: GLEN MURPHY

### Pest Type

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

### Pest Code

AMBTR, Ambrosia trifida, = US

LAMAM, Lamium amplexicaule, = US

STEME, Stellaria media, = US

AMACH, Amaranthus hybridus, = US

DIGSS, Digitaria sp., = US

### Crop Code

GLXMA, BSOY, Glycine max, = US

### Rating Unit

PERCENT = percent

### Plant-Eval Interval

25 DP-1 = 1 5-11-2009

### 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 EPP IV

Trial ID: S9024      Protocol ID: MON 2009 04 10  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact: GLEN MURPHY

### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-30-2009

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

### Trial Location

### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AGR 4403  
**BBCH Scale:** BSOY      **Planting Date:** 5-11-2009  
**Planting Method:** DRILLE drilled      **Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDIUM medium      **Soil Temperature, Unit:** 64 F  
**Soil Moisture:** GOOD good      **Emergence Date:** 5-18-2009

### Pest Description

**Pest 1 Type:** W      **Code:** AMBTR Ambrosia trifida  
**Common Name:** Giant ragweed

# Plant and Soil Science, U of KY

## Weed Science Research

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

**Pest 3 Type:** W **Code:** STEME *Stellaria media*  
**Common Name:** Common chickweed

**Pest 4 Type:** W **Code:** AMACH *Amaranthus hybridus*  
**Common Name:** Smooth pigweed

**Pest 5 Type:** W **Code:** DIGSS *Digitaria sp.*  
**Common Name:** Crabgrass

### Site and Design

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

### Soil Description

**Description Name:** LANTON  
**% Sand:** 3 **% OM:** 4 **Texture:** SIL silt loam  
**% Silt:** 63 **pH:** 6.5 **Soil Name:** LANTON SILT LOAM  
**% Clay:** 34 **CEC:** 25 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.75 MI

### Application Description

**A**  
**Application Date:** 4-30-2009  
**Time of Day:** 4 PM  
**Application Method:** SPRAY  
**Application Timing:** 1 WK  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 72 F  
**% Relative Humidity:** 61  
**Wind Velocity, Unit:** 8 MPH  
**Wind Direction:** SSW  
**Soil Temperature, Unit:** 62 F  
**Soil Moisture:** NORMAL  
**% Cloud Cover:** 80

### 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:** AMBTR W  
**Height, Unit:** 3 IN  
**Pest 2 Code, Type, Scale:** LAMAM W  
**Height, Unit:** 5 IN  
**Pest 3 Code, Type, Scale:** STEME W  
**Height, Unit:** 4 IN  
**Pest 4 Code, Type, Scale:** AMACH W  
**Pest 5 Code, Type, Scale:** DIGSS W

### Application Equipment

**A**

**Appl. Equipment:** ATV  
**Operating Pressure, Unit:** 30 PSI  
**Nozzle Type:** FLAT FAN  
**Nozzle Size:** 8004 DG  
**Nozzle Spacing, Unit:** 20 IN  
**Boom Length, Unit:** 8.5 FT  
**Boom Height, Unit:** 30 IN  
**Ground Speed, Unit:** 4 MPH  
**Carrier:** WATER  
**Spray Volume, Unit:** 24 GPA  
**Propellant:** CO2

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

NO TILL SOYBEAN EPP V

Trial ID: S9025      Protocol ID: GOWAN NT SOY  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMPU	AMBTR	STEME	LAMPU	AMBTR	STEME
Pest Scientific Name	Stellaria media	Lamium purpure>	Ambrosia trifi>	Stellaria media	Lamium purpure>	Ambrosia trifi>	Stellaria media
Pest Name	Common chickwe>	Purple deadnet>	Giant ragweed	Common chickwe>	Purple deadnet>	Giant ragweed	Common chickwe>
Rating Date	5-5-2009	5-5-2009	5-5-2009	5-14-2009	5-14-2009	5-14-2009	5-28-2009
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1	1	1
Rating Timing	5 DAY	5 DAY	5 DAY	2 WEEK	2 WEEK	2 WEEK	4 WEEK
Days After First/Last Applic.	5 5	5 5	5 5	14 14	14 14	14 14	28 28
Trt-Eval Interval	5 DA-A	5 DA-A	5 DA-A	14 DA-A	14 DA-A	14 DA-A	28 DA-A
Plant-Eval Interval	-6 DP-1	-6 DP-1	-6 DP-1	3 DP-1	3 DP-1	3 DP-1	17 DP-1
Days After Emergence	-13 DE	-13 DE	-13 DE	-4 DE-	-4 DE-	-4 DE-	10 DE-
ARM Action Codes	P	P	P	P	P	P	P
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
1	CHECK UNTREATED				0	0	0	0	0	0	0
2	VIDA	1 oz/a		1WK	95	95	93	99	99	99	99
	ROUNDUP POWERMAX	0.75 lb ae/a		1WK							
	INDUCE	0.25 % v/v		1WK							
	AMS	3.75 % v/v		1WK							
3	ROUNDUP POWERMAX	0.75 lb ae/a		1WK	70	70	70	99	99	99	99
	INDUCE	0.25 % v/v		1WK							
	AMS	3.75 % v/v		1WK							
	LSD (P=.05)				0.0	0.0	3.8	0.0	0.0	0.0	0.0
	Standard Deviation				0.0	0.0	1.7	0.0	0.0	0.0	0.0
	CV				0.0	0.0	3.06	0.0	0.0	0.0	0.0
	Bartlett's X2				0.0	0.0	0.0	0.0	0.0	0.0	0.0
	P(Bartlett's X2)				.	.	.	.	.	.	.
	Replicate F				0.000	0.000	1.000	0.000	0.000	0.000	0.000
	Replicate Prob(F)				1.0000	1.0000	0.4444	1.0000	1.0000	1.0000	1.0000
	Treatment F				0.000	0.000	2548.000	0.000	0.000	0.000	0.000
	Treatment Prob(F)				1.0000	1.0000	0.0001	1.0000	1.0000	1.0000	1.0000

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

Pest Type			W Weed	W Weed
Pest Code			LAMPU	AMBTR
Pest Scientific Name			Lamium purpure>	Ambrosia trifi>
Pest Name			Purple deadnet>	Giant ragweed
Rating Date			5-28-2009	5-28-2009
Rating Type			CONTROL	CONTROL
Rating Unit			PERCENT	PERCENT
Number of Subsamples			1	1
Rating Timing			4 WEEK	4 WEEK
Days After First/Last Applic.			28 28	28 28
Trt-Eval Interval			28 DA-A	28 DA-A
Plant-Eval Interval			17 DP-1	17 DP-1
Days After Emergence			10 DE-	10 DE-
ARM Action Codes			P	P
Number of Decimals			0	0
Trt No.	Treatment Name	Rate	Growth Unit	Stage
				8
				9
1	CHECK UNTREATED			0
2	VIDA	1 oz/a	1WK	99
	ROUNDUP POWERMAX	0.75 lb ae/a	1WK	
	INDUCE	0.25 % v/v	1WK	
	AMS	3.75 % v/v	1WK	
3	ROUNDUP POWERMAX	0.75 lb ae/a	1WK	95
	INDUCE	0.25 % v/v	1WK	
	AMS	3.75 % v/v	1WK	
LSD (P=.05)				0.0
Standard Deviation				3.8
CV				0.0
Bartlett's X2				0.0
P(Bartlett's X2)				0.0
Replicate F				0.000
Replicate Prob(F)				1.0000
Treatment F				0.000
Treatment Prob(F)				2899.000
				1.0000
				0.0001



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

NO TILL SOYBEAN EPP V

Trial ID: S9025      Protocol ID: GOWAN NT SOY  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact:

### Pest Type

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

### Pest Code

STEME, Stellaria media, = US

LAMPU, Lamium purpureum, = US

AMBTR, Ambrosia trifida, = US

### Rating Unit

PERCENT = percent

### Plant-Eval Interval

-6 DP-1 = 1 5-11-2009

3 DP-1 = 1 5-11-2009

17 DP-1 = 1 5-11-2009

### 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 EPP V

Trial ID: S9025      Protocol ID: GOWAN NT SOY  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact:

## General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-30-2009

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

## Trial Location

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

## Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

## Other Personnel

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AGR 4403  
**BBCH Scale:** BSOY      **Planting Date:** 5-11-2009  
**Planting Method:** DRILLE drilled      **Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDIUM medium      **Soil Temperature, Unit:** 64 F  
**Soil Moisture:** GOOD good      **Emergence Date:** 5-18-2009

## Crop Description

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

## Pest Description

# Plant and Soil Science, U of KY

## Weed Science Research

**Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel

**Pest 3 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

### Site and Design

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

### Soil Description

**Description Name:** LANTON  
**% Sand:** 3 **% OM:** 4 **Texture:** SIL silt loam  
**% Silt:** 63 **pH:** 6.5 **Soil Name:** LANTON SILT LOAM  
**% Clay:** 34 **CEC:** 25 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.75 MI

### Application Description

**A**  
**Application Date:** 4-30-2009  
**Time of Day:** 4 PM  
**Application Method:** SPRAY  
**Application Timing:** 1 WK  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 72 F  
**% Relative Humidity:** 61  
**Wind Velocity, Unit:** 8 MPH  
**Wind Direction:** SSW  
**Soil Temperature, Unit:** 65 F  
**Soil Moisture:** NORMAL  
**% Cloud Cover:** 80

### Crop Stage At Each Application

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

### Pest Stage At Each Application

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

**A**

**Pest 1 Code, Type, Scale:** STEME W  
**Height, Unit:** 6 IN  
**Pest 2 Code, Type, Scale:** LAMPU W  
**Height, Unit:** 6 IN  
**Pest 3 Code, Type, Scale:** AMBTR W  
**Height, Unit:** 4 IN

### Application Equipment

**A**

**Appl. Equipment:** ATV  
**Operating Pressure, Unit:** 30 PSI  
**Nozzle Type:** FLAT FAN  
**Nozzle Size:** 8004 DG  
**Nozzle Spacing, Unit:** 20 IN  
**Boom Length, Unit:** 8.5 FT  
**Boom Height, Unit:** 30 IN  
**Ground Speed, Unit:** 4 MPH  
**Carrier:** WATER  
**Spray Volume, Unit:** 24 GPA  
**Propellant:** CO2







## 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	W Weed			
Pest Code	STEME	LAMPU	LACSE	ERICA	SETFA	AMBTR	AMACH				
Pest Scientific Name	Stellaria media	Lamium purpure>	Lactuca serrio>	Conyza canaden>	Setaria faberi	Ambrosia trifi>	Amaranthus hyb>				
Pest Name	Common chickwe>	Purple deadnet>	Prickly lettuce	Marestail	Giant foxtail	Giant ragweed	Smooth pigweed				
Crop Code					GLXMA						
BBCH Scale					BSOY						
Crop Scientific Name					Glycine max						
Crop Name					Soybean						
Rating Date	5-15-2009	5-15-2009	5-15-2009	5-15-2009	5-29-2009	5-29-2009	5-29-2009				
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
Number of Subsamples	1	1	1	1	1	1	1	1			
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK			
Days After First/Last Applic.	15 15	15 15	15 15	15 15	29 29	29 29	29 29	29 29			
Trt-Eval Interval	15 DA-A	15 DA-A	15 DA-A	15 DA-A	29 DA-A	29 DA-A	29 DA-A	29 DA-A			
Plant-Eval Interval	4 DP-1	4 DP-1	4 DP-1	4 DP-1	18 DP-1	18 DP-1	18 DP-1	18 DP-1			
Days After Emergence	-2 DE-	-2 DE-	-2 DE-	-2 DE-	12 DE-	12 DE-	12 DE-	12 DE-			
ARM Action Codes	P	P	P	P	P	P	P	P			
Number of Decimals	0	0	0	0	0	0	0	0			
Trt Treatment	Rate	Unit	Growth Stage	1	2	3	4	5	6	7	8
18 GLYFOS X-TRA	1 qt/a	1WK		99	99	99	99	0	0	0	0
WEEDONE LV4	1 pt/a	1WK									
AMS	3.75 % v/v	1WK									
CHECK UNTREATED											
LSD (P=.05)				0.0	0.0	0.0	0.0	0.0	2.9	19.5	5.8
Standard Deviation				0.0	0.0	0.0	0.0	0.0	1.7	11.7	3.5
CV				0.0	0.0	0.0	0.0	0.0	2.0	17.89	4.09
Bartlett's X2				0.0	0.0	0.0	0.0	0.0	1.291	9.599	11.184
P(Bartlett's X2)				.	.	.	.	.	0.936	0.844	0.263
Replicate F				0.000	0.000	0.000	0.000	0.000	1.327	0.005	0.297
Replicate Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000	0.2786	0.9950	0.7451
Treatment F				0.000	0.000	0.000	0.000	0.000	475.139	11.040	144.561
Treatment Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000	0.0001	0.0001	0.0001



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

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	AMACH
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>
Pest Name		Giant foxtail	Giant ragweed	Smooth pigweed
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	6-29-2009	6-29-2009	6-29-2009	6-29-2009
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	60 60	60 60	60 60	60 60
Trt-Eval Interval	43 DA-A	60 DA-A	60 DA-A	60 DA-A
Plant-Eval Interval	49 DP-1	49 DP-1	49 DP-1	49 DP-1
Days After Emergence	43 DE-	43 DE-	43 DE-	43 DE-
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	9	10	11	12
1	GLYFOS X-TRA	1	qt/a	1WK	0	90	33	50
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	CHA-016	0.38	lb ai/a	1WK				
2	GLYFOS X-TRA	1	qt/a	1WK	0	87	68	77
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	CHA-016	0.5	lb ai/a	1WK				
3	GLYFOS X-TRA	1	qt/a	1WK	0	90	37	67
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	CHA-016	0.75	lb ai/a	1WK				
4	GLYFOS X-TRA	1	qt/a	1WK	0	93	52	95
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	CHA-019	0.75	lb ai/a	1WK				

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

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	AMACH
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>
Pest Name		Giant foxtail	Giant ragweed	Smooth pigweed
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	6-29-2009	6-29-2009	6-29-2009	6-29-2009
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	60 60	60 60	60 60	60 60
Trt-Eval Interval	43 DA-A	60 DA-A	60 DA-A	60 DA-A
Plant-Eval Interval	49 DP-1	49 DP-1	49 DP-1	49 DP-1
Days After Emergence	43 DE-	43 DE-	43 DE-	43 DE-
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	9	10	11	12
5	GLYFOS X-TRA	1	qt/a	1WK	0	88	40	90
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	CHA-019	0.94	lb ai/a	1WK				
6	GLYFOS X-TRA	1	qt/a	1WK	0	88	37	91
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	CHA-019	1.13	lb ai/a	1WK				
7	GLYFOS X-TRA	1	qt/a	1WK	0	90	72	98
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	CHA-019	1.5	lb ai/a	1WK				
8	GLYFOS X-TRA	1	qt/a	1WK	0	92	60	90
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	CHA-019	2.26	lb ai/a	1WK				
9	GLYFOS X-TRA	1	qt/a	1WK	0	90	27	90
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	CHA-021	0.52	lb ai/a	1WK				
10	GLYFOS X-TRA	1	qt/a	1WK	0	87	43	90
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	CHA-021	0.68	lb ai/a	1WK				
11	GLYFOS X-TRA	1	qt/a	1WK	0	90	58	95
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	CHA-021	1	lb ai/a	1WK				

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

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	AMACH
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>
Pest Name		Giant foxtail	Giant ragweed	Smooth pigweed
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	6-29-2009	6-29-2009	6-29-2009	6-29-2009
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	60 60	60 60	60 60	60 60
Trt-Eval Interval	43 DA-A	60 DA-A	60 DA-A	60 DA-A
Plant-Eval Interval	49 DP-1	49 DP-1	49 DP-1	49 DP-1
Days After Emergence	43 DE-	43 DE-	43 DE-	43 DE-
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	9	10	11	12
12	GLYFOS X-TRA	1	qt/a	1WK	0	88	63	95
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	CHA-021	2	lb ai/a	1WK				
13	GLYFOS X-TRA	1	qt/a	1WK	0	91	47	91
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	CHA-016	0.51	lb ai/a	1WK				
	METRIBUZIN	0.17	lb ai/a	1WK				
14	GLYFOS X-TRA	1	qt/a	1WK	0	92	23	88
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	CHA-016	0.75	lb ai/a	1WK				
	METRIBUZIN	0.25	lb ai/a	1WK				
15	GLYFOS X-TRA	1	qt/a	1WK	0	90	50	92
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	CHA-016	0.75	lb ai/a	1WK				
	METRIBUZIN	0.38	lb ai/a	1WK				
16	GLYFOS X-TRA	1	qt/a	1WK	0	85	58	92
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	METRIBUZIN	0.38	lb ai/a	1WK				
17	GLYFOS X-TRA	1	qt/a	1WK	0	95	88	93
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	CHA-016	0.5	lb ai/a	1WK				
	DAWN	0.25	lb ai/a	1WK				

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

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	AMACH
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>
Pest Name		Giant foxtail	Giant ragweed	Smooth pigweed
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	6-29-2009	6-29-2009	6-29-2009	6-29-2009
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	60 60	60 60	60 60	60 60
Trt-Eval Interval	43 DA-A	60 DA-A	60 DA-A	60 DA-A
Plant-Eval Interval	49 DP-1	49 DP-1	49 DP-1	49 DP-1
Days After Emergence	43 DE-	43 DE-	43 DE-	43 DE-
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

  

Trt No.	Treatment Name	Rate	Unit	Growth Stage	9	10	11	12
18	GLYFOS X-TRA	1	qt/a	1WK	0	0	0	0
	WEEDONE LV4	1	pt/a	1WK				
	AMS	3.75	% v/v	1WK				
	CHECK UNTREATED							
	LSD (P=.05)				0.0	7.7	34.3	8.1
	Standard Deviation				0.0	4.6	20.6	4.9
	CV				0.0	5.45	43.26	5.94
	Bartlett's X2				0.0	13.861	11.75	15.734
	P(Bartlett's X2)				.	0.179	0.698	0.204
	Replicate F				0.000	3.810	0.611	0.387
	Replicate Prob(F)				1.0000	0.0321	0.5486	0.6822
	Treatment F				0.000	63.566	2.962	70.197
	Treatment Prob(F)				1.0000	0.0001	0.0034	0.0001

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

NO TILL SOYBEAN EPP VI

Trial ID: S9026      Protocol ID: CHEMINOVA CLOM0901  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact:

### Pest Type

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

### Pest Code

STEME, *Stellaria media*, = US  
LAMPU, *Lamium purpureum*, = US  
LACSE, *Lactuca serriola*, = US  
ERICA, *Conyza canadensis*, = US  
SETFA, *Setaria faberi*, = US  
AMBTR, *Ambrosia trifida*, = US  
AMACH, *Amaranthus hybridus*, = US

### Crop Code

GLXMA, BSOY, *Glycine max*, = US

### Rating Unit

PERCENT = percent

### Plant-Eval Interval

4 DP-1 = 1 5-11-2009  
18 DP-1 = 1 5-11-2009  
49 DP-1 = 1 5-11-2009

### 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 EPP VI

Trial ID: S9026      Protocol ID: CHEMINOVA CLOM0901  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact:

### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-30-2009

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

### Trial Location

### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4403  
**BBCH Scale:** BSOY      **Planting Date:** 5-11-2009  
**Planting Method:** DRILLE drilled      **Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDIUM medium      **Soil Temperature, Unit:** 64 F  
**Soil Moisture:** NORMAL normal      **Emergence Date:** 5-17-2009

### Pest Description

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

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

**Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel

**Pest 3 Type:** W **Code:** LACSE *Lactuca serriola*  
**Common Name:** Prickly lettuce

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

**Pest 5 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 6 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

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

### Site and Design

**Plot Width, Unit:** 8.5 FT **Site Type:** FIELD field  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 374 FT<sup>2</sup> **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:** 17 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

### Application Description

# Plant and Soil Science, U of KY

## Weed Science Research

**A**

**Application Date:** 4-30-2009  
**Time of Day:** 4 PM  
**Application Method:** SPRAY  
**Application Timing:** 1 WK  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 72 F  
**% Relative Humidity:** 61  
**Wind Velocity, Unit:** 8 MPH  
**Wind Direction:** SSW  
**Soil Temperature, Unit:** 64 F  
**Soil Moisture:** NORMAL  
**% Cloud Cover:** 80

### Crop Stage At Each Application

**A**

**Crop 1 Code, BBCH Scale:** GLXMA BSOY

### Pest Stage At Each Application

**A**

**Pest 1 Code, Type, Scale:** STEME W  
**Height, Unit:** 6 IN  
**Pest 2 Code, Type, Scale:** LAMPU W  
**Height, Unit:** 6 IN  
**Pest 3 Code, Type, Scale:** LACSE W  
**Height, Unit:** 6 IN  
**Pest 4 Code, Type, Scale:** ERICA W  
**Height, Unit:** 4 IN  
**Pest 5 Code, Type, Scale:** SETFA W  
**Height, Unit:** 6 IN  
**Pest 6 Code, Type, Scale:** AMBTR W  
**Height, Unit:** 4 IN  
**Pest 7 Code, Type, Scale:** AMACH W  
**Height, Unit:** 2 IN

### Application Equipment

**A**

**Appl. Equipment:** ATV  
**Operating Pressure, Unit:** 30 PSI  
**Nozzle Type:** FLAT FAN  
**Nozzle Size:** 8004 DG  
**Nozzle Spacing, Unit:** 20 IN  
**Boom Length, Unit:** 8.5 FT  
**Boom Height, Unit:** 30 IN  
**Ground Speed, Unit:** 4 MPH  
**Carrier:** WATER  
**Spray Volume, Unit:** 24 GPA  
**Propellant:** CO2



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

NO TILL SOYBEAN EPP VII

Trial ID: S9027      Protocol ID: BAYER HP09NARMRA  
 Location: LEXINGTON, KY      Study Director: CHARLES SLACK  
 Project ID:      Investigator: Charles H Slack  
                                  Sponsor Contact: DAVE LAMORE

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMPU	LACSE	ERICA	SETFA	ERICA	ERICA
Pest Scientific Name	Stellaria media	Lamium purpure>	Lactuca serrio>	Conyza canadens>	Setaria faberi	Conyza canadens>	Conyza canadens>
Pest Name	Common chickwe>	Purple deadnet>	Prickly lettuce	Marestail	Giant foxtail	Marestail	Marestail
Crop Code					GLXMA		
BBCH Scale					BSOY		
Crop Scientific Name					Glycine max		
Crop Name					Soybean		
Rating Date	5-15-2009	5-15-2009	5-15-2009	5-15-2009	6-12-2009	6-12-2009	6-12-2009
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1	1	1
SE Description	AFT -1WK	AFT -1WK	AFT -1WK	AFT -1WK	2 WK AFT EP	2 WK AFT EP	2 WK AFT EP
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	15 15	15 15	15 15	15 15	43 14	43 14	43 14
Trt-Eval Interval	15 DA-A	15 DA-A	15 DA-A	15 DA-A	14 DA-B	14 DA-B	14 DA-B
Plant-Eval Interval	4 DP-1	4 DP-1	4 DP-1	4 DP-1	32 DP-1	32 DP-1	32 DP-1
Days After Emergence	-3 DE-	-3 DE-	-3 DE-	-3 DE-	25 DE-	25 DE-	25 DE-
ARM Action Codes	P	P	P	P	P	P	P
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
1	UNTREATED				0	0	0	0	0	0	0
2	IGNITE 280	22 oz/a		- 1 WK	99	99	99	99	0	99	99
	AMS	8.5 lb/100 gal		- 1 WK							
	ROUNDUP POWERMAX	22 oz/a		EP							
	AMS	8.5 lb/100 gal		EP							
	ROUNDUP POWERMAX	22 oz/a		MP							
	AMS	8.5 lb/100 gal		MP							
3	IGNITE 280	29 oz/a		- 1 WK	99	99	99	99	0	99	99
	AMS	8.5 lb/100 gal		- 1 WK							
	ROUNDUP POWERMAX	22 oz/a		EP							
	AMS	8.5 lb/100 gal		EP							
	ROUNDUP POWERMAX	22 oz/a		MP							
	AMS	8.5 lb/100 gal		MP							

## 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	STEME	LAMPU	LACSE	ERICA	SETFA	ERICA	
Pest Scientific Name	Stellaria media	Lamium purpure>	Lactuca serrio>	Conyza canadens>	Setaria faberi	Conyza canadens>	
Pest Name	Common chickwe>	Purple deadnet>	Prickly lettuce	Marestail	Giant foxtail	Marestail	
Crop Code					GLXMA		
BBCH Scale					BSOY		
Crop Scientific Name					Glycine max		
Crop Name					Soybean		
Rating Date	5-15-2009	5-15-2009	5-15-2009	5-15-2009	6-12-2009	6-12-2009	6-12-2009
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1	1	1
SE Description	AFT -1WK	AFT -1WK	AFT -1WK	AFT -1WK	2 WK AFT EP	2 WK AFT EP	2 WK AFT EP
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	15 15	15 15	15 15	15 15	43 14	43 14	43 14
Trt-Eval Interval	15 DA-A	15 DA-A	15 DA-A	15 DA-A	14 DA-B	14 DA-B	14 DA-B
Plant-Eval Interval	4 DP-1	4 DP-1	4 DP-1	4 DP-1	32 DP-1	32 DP-1	32 DP-1
Days After Emergence	-3 DE-	-3 DE-	-3 DE-	-3 DE-	25 DE-	25 DE-	25 DE-
ARM Action Codes	P	P	P	P	P	P	P
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
4	IGNITE 280	29	oz/a	- 1 WK	99	99	99	99	0	99	99
	WEEDONE LV4	1	pt/a	- 1 WK							
	AMS	8.5	lb/100 gal	- 1 WK							
	ROUNDUP POWERMAX	22	oz/a	EP							
	AMS	8.5	lb/100 gal	EP							
	ROUNDUP POWERMAX	22	oz/a	MP							
	AMS	8.5	lb/100 gal	MP							
5	IGNITE 280	29	oz/a	- 1 WK	99	99	99	99	0	99	99
	VALOR XLT	3	oz/a	- 1 WK							
	AMS	8.5	lb/100 gal	- 1 WK							
	ROUNDUP POWERMAX	22	oz/a	EP							
	AMS	8.5	lb/100 gal	EP							
	ROUNDUP POWERMAX	22	oz/a	MP							
	AMS	8.5	lb/100 gal	MP							
6	IGNITE 280	29	oz/a	- 1 WK	99	99	99	99	0	99	99
	OPTILL	2	oz/a	- 1WK							
	AMS	8.5	lb/100 gal	- 1 WK							
	ROUNDUP POWERMAX	22	oz/a	EP							
	AMS	8.5	lb/100 gal	EP							
	ROUNDUP POWERMAX	22	oz/a	MP							
	AMS	8.5	lb/100 gal	MP							

## 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	STEME	LAMPU	LACSE	ERICA	SETFA	ERICA	
Pest Scientific Name	Stellaria media	Lamium purpure>	Lactuca serrio>	Conyza canadens>	Setaria faberi	Conyza canadens>	
Pest Name	Common chickwe>	Purple deadnet>	Prickly lettuce	Marestail	Giant foxtail	Marestail	
Crop Code					GLXMA		
BBCH Scale					BSOY		
Crop Scientific Name					Glycine max		
Crop Name					Soybean		
Rating Date	5-15-2009	5-15-2009	5-15-2009	5-15-2009	6-12-2009	6-12-2009	
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1	1	1
SE Description	AFT -1WK	AFT -1WK	AFT -1WK	AFT -1WK	2 WK AFT EP	2 WK AFT EP	2 WK AFT EP
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	15 15	15 15	15 15	15 15	43 14	43 14	43 14
Trt-Eval Interval	15 DA-A	15 DA-A	15 DA-A	15 DA-A	14 DA-B	14 DA-B	14 DA-B
Plant-Eval Interval	4 DP-1	4 DP-1	4 DP-1	4 DP-1	32 DP-1	32 DP-1	32 DP-1
Days After Emergence	-3 DE-	-3 DE-	-3 DE-	-3 DE-	25 DE-	25 DE-	25 DE-
ARM Action Codes	P	P	P	P	P	P	P
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
7	IGNITE 280	22	oz/a	- 1 WK	99	99	99	99	0	99	99
	ROUNDUP POWERMAX	22	oz/a	- 1 WK							
	AMS	8.5	lb/100 gal	- 1 WK							
	ROUNDUP POWERMAX	22	oz/a	EP							
	AMS	8.5	lb/100 gal	EP							
	ROUNDUP POWERMAX	22	oz/a	MP							
	AMS	8.5	lb/100 gal	MP							
8	ROUNDUP POWERMAX	22	oz/a	- 1 WK	99	99	99	99	0	99	99
	AMS	8.5	lb/100 gal	- 1 WK							
	ROUNDUP POWERMAX	22	oz/a	EP							
	AMS	8.5	lb/100 gal	EP							
	ROUNDUP POWERMAX	22	oz/a	MP							
	AMS	8.5	lb/100 gal	MP							
9	OPTILL	2	oz/a	- 1 WK	99	99	99	99	0	99	99
	COC	1	% v/v	- 1 WK							
	AMS	8.5	lb/100 gal	- 1 WK							
	ROUNDUP POWERMAX	22	oz/a	EP							
	AMS	8.5	lb/100 gal	EP							
	ROUNDUP POWERMAX	22	oz/a	MP							
	AMS	8.5	lb/100 gal	MP							













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

Pest Type	W Weed	W Weed	W Weed	W Weed					
Pest Code	SETFA	ERICA	AMBTR	IPOSS					
Pest Scientific Name	Setaria faberi	Conyza canadens>	Ambrosia trifi>	Ipomoea sp.					
Pest Name	Giant foxtail	Marestail	Giant ragweed	Morning glory					
Crop Code									
BBCH Scale									
Crop Scientific Name									
Crop Name									
Rating Date	7-23-2009	7-23-2009	7-23-2009	7-23-2009	10-5-2009				
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	YIELD				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	BU				
Number of Subsamples	1	1	1	1	1				
SE Description	4 WK AFT MP	4 WK AFT MP	4 WK AFT MP	4 WK AFT MP					
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK					
Days After First/Last Applic.	84 30	84 30	84 30	84 30	158 104				
Trt-Eval Interval	30 DA-C	30 DA-C	30 DA-C	30 DA-C					
Plant-Eval Interval	73 DP-1	73 DP-1	73 DP-1	73 DP-1	147 DP-1				
Days After Emergence	66 DE-	66 DE-	66 DE-	66 DE-	140 DE				
ARM Action Codes	P	P	P	P	TY1				
Number of Decimals	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	16	17	18	19	24
1	UNTREATED				0	0	0	0	25
2	IGNITE 280	22 oz/a		- 1 WK	99	99	99	99	58
	AMS	8.5 lb/100 gal		- 1 WK					
	ROUNDUP POWERMAX	22 oz/a		EP					
	AMS	8.5 lb/100 gal		EP					
	ROUNDUP POWERMAX	22 oz/a		MP					
	AMS	8.5 lb/100 gal		MP					
3	IGNITE 280	29 oz/a		- 1 WK	99	99	99	99	59
	AMS	8.5 lb/100 gal		- 1 WK					
	ROUNDUP POWERMAX	22 oz/a		EP					
	AMS	8.5 lb/100 gal		EP					
	ROUNDUP POWERMAX	22 oz/a		MP					
	AMS	8.5 lb/100 gal		MP					

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

Pest Type	W Weed	W Weed	W Weed	W Weed	
Pest Code	SETFA	ERICA	AMBTR	IPOSS	
Pest Scientific Name	Setaria faberi	Conyza canadensis	Ambrosia trifida	Ipomoea sp.	
Pest Name	Giant foxtail	Marestail	Giant ragweed	Morning glory	
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	7-23-2009	7-23-2009	7-23-2009	7-23-2009	10-5-2009
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1	1
SE Description	4 WK AFT MP	4 WK AFT MP	4 WK AFT MP	4 WK AFT MP	
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.	84 30	84 30	84 30	84 30	158 104
Trt-Eval Interval	30 DA-C	30 DA-C	30 DA-C	30 DA-C	
Plant-Eval Interval	73 DP-1	73 DP-1	73 DP-1	73 DP-1	147 DP-1
Days After Emergence	66 DE-	66 DE-	66 DE-	66 DE-	140 DE
ARM Action Codes	P	P	P	P	TY1
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	16	17	18	19	24
4	IGNITE 280	29	oz/a	- 1 WK	99		99	99	67
	WEEDONE LV4	1	pt/a	- 1 WK					
	AMS	8.5	lb/100 gal	- 1 WK					
	ROUNDUP POWERMAX	22	oz/a	EP					
	AMS	8.5	lb/100 gal	EP					
	ROUNDUP POWERMAX	22	oz/a	MP					
	AMS	8.5	lb/100 gal	MP					
5	IGNITE 280	29	oz/a	- 1 WK	99	99	99	99	67
	VALOR XLT	3	oz/a	- 1 WK					
	AMS	8.5	lb/100 gal	- 1 WK					
	ROUNDUP POWERMAX	22	oz/a	EP					
	AMS	8.5	lb/100 gal	EP					
	ROUNDUP POWERMAX	22	oz/a	MP					
	AMS	8.5	lb/100 gal	MP					
6	IGNITE 280	29	oz/a	- 1 WK	99	99	99	99	62
	OPTILL	2	oz/a	- 1WK					
	AMS	8.5	lb/100 gal	- 1 WK					
	ROUNDUP POWERMAX	22	oz/a	EP					
	AMS	8.5	lb/100 gal	EP					
	ROUNDUP POWERMAX	22	oz/a	MP					
	AMS	8.5	lb/100 gal	MP					

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

Pest Type	W Weed	W Weed	W Weed	W Weed	
Pest Code	SETFA	ERICA	AMBTR	IPOSS	
Pest Scientific Name	Setaria faberi	Conyza canadensis	Ambrosia trifida	Ipomoea sp.	
Pest Name	Giant foxtail	Marestail	Giant ragweed	Morning glory	
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	7-23-2009	7-23-2009	7-23-2009	7-23-2009	10-5-2009
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1	1
SE Description	4 WK AFT MP	4 WK AFT MP	4 WK AFT MP	4 WK AFT MP	
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.	84 30	84 30	84 30	84 30	158 104
Trt-Eval Interval	30 DA-C	30 DA-C	30 DA-C	30 DA-C	
Plant-Eval Interval	73 DP-1	73 DP-1	73 DP-1	73 DP-1	147 DP-1
Days After Emergence	66 DE-	66 DE-	66 DE-	66 DE-	140 DE
ARM Action Codes	P	P	P	P	TY1
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	16	17	18	19	24
7	IGNITE 280	22	oz/a	- 1 WK	99	99	99	99	63
	ROUNDUP POWERMAX	22	oz/a	- 1 WK					
	AMS	8.5	lb/100 gal	- 1 WK					
	ROUNDUP POWERMAX	22	oz/a	EP					
	AMS	8.5	lb/100 gal	EP					
	ROUNDUP POWERMAX	22	oz/a	MP					
	AMS	8.5	lb/100 gal	MP					
8	ROUNDUP POWERMAX	22	oz/a	- 1 WK	99	99	99	99	63
	AMS	8.5	lb/100 gal	- 1 WK					
	ROUNDUP POWERMAX	22	oz/a	EP					
	AMS	8.5	lb/100 gal	EP					
	ROUNDUP POWERMAX	22	oz/a	MP					
	AMS	8.5	lb/100 gal	MP					
9	OPTILL	2	oz/a	- 1 WK	99	99	99	99	61
	COC	1	% v/v	- 1 WK					
	AMS	8.5	lb/100 gal	- 1 WK					
	ROUNDUP POWERMAX	22	oz/a	EP					
	AMS	8.5	lb/100 gal	EP					
	ROUNDUP POWERMAX	22	oz/a	MP					
	AMS	8.5	lb/100 gal	MP					

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

Pest Type	W Weed	W Weed	W Weed	W Weed	
Pest Code	SETFA	ERICA	AMBTR	IPOSS	
Pest Scientific Name	Setaria faberi	Conyza canadens	Ambrosia trifid	Ipomoea sp.	
Pest Name	Giant foxtail	Marestail	Giant ragweed	Morning glory	
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	7-23-2009	7-23-2009	7-23-2009	7-23-2009	10-5-2009
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	BU
Number of Subsamples	1	1	1	1	1
SE Description	4 WK AFT MP	4 WK AFT MP	4 WK AFT MP	4 WK AFT MP	
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.	84 30	84 30	84 30	84 30	158 104
Trt-Eval Interval	30 DA-C	30 DA-C	30 DA-C	30 DA-C	
Plant-Eval Interval	73 DP-1	73 DP-1	73 DP-1	73 DP-1	147 DP-1
Days After Emergence	66 DE-	66 DE-	66 DE-	66 DE-	140 DE
ARM Action Codes	P	P	P	P	TY1
Number of Decimals	0	0	0	0	0

  

Trt	Treatment	Rate	Unit	Growth Stage	16	17	18	19	24
10	GRAMOXONE INTEON	2.5	pt/a	- 1 WK	99	99	99	99	55
	INDUCE	0.25	% v/v	- 1 WK					
	ROUNDUP POWERMAX	22	oz/a	EP					
	AMS	8.5	lb/100 gal	EP					
	ROUNDUP POWERMAX	22	oz/a	MP					
	AMS	8.5	lb/100 gal	MP					
	LSD (P=.05)				0.0	0.0	0.0	0.0	9.4
	Standard Deviation				0.0	0.0	0.0	0.0	5.5
	CV				0.0	0.0	0.0	0.0	9.45
	Bartlett's X2				0.0	0.0	0.0	0.0	13.52
	P(Bartlett's X2)				.	.	.	.	0.14
	Replicate F				0.000	0.000	0.000	0.000	0.094
	Replicate Prob(F)				1.0000	1.0000	1.0000	1.0000	0.9106
	Treatment F				0.000	0.000	0.000	0.000	14.493
	Treatment Prob(F)				1.0000	1.0000	1.0000	1.0000	0.0001

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

NO TILL SOYBEAN EPP VII

Trial ID: S9027      Protocol ID: BAYER HP09NARMRA  
Location: LEXINGTON, KY      Study Director: CHARLES SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact: DAVE LAMORE

### Pest Type

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

### Pest Code

STEME, *Stellaria media*, = US  
LAMPU, *Lamium purpureum*, = US  
LACSE, *Lactuca serriola*, = US  
ERICA, *Conyza canadensis*, = US  
SETFA, *Setaria faberi*, = US  
AMBTR, *Ambrosia trifida*, = US  
IPOSS, *Ipomoea* sp., = US

### Crop Code

GLXMA, BSOY, *Glycine max*, = US

### Rating Type

YIELD = yield

### Rating Unit

PERCENT = percent  
BU = bushel

### Plant-Eval Interval

4 DP-1 = 1 5-11-2009  
32 DP-1 = 1 5-11-2009  
46 DP-1 = 1 5-11-2009  
73 DP-1 = 1 5-11-2009  
147 DP-1 = 1 5-11-2009

### ARM Action Codes

P = Rating scale of 0 to 100 (e.g. % control or injury)  
TY1 = 3.865346\*22

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

NO TILL SOYBEAN EPP VII

Trial ID: S9027      Protocol ID: BAYER HP09NARMRA  
 Location: LEXINGTON, KY      Study Director: CHARLES SLACK  
 Project ID:      Investigator: Charles H Slack  
                          Sponsor Contact: DAVE LAMORE

### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-30-2009

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

### Trial Location

### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

### Crop Description

<b>Crop 1:</b> GLXMA    Glycine max	Soybean
<b>Variety:</b> AGR 4403	
<b>BBCH Scale:</b> BSOY	<b>Planting Date:</b> 5-11-2009
<b>Planting Method:</b> DRILLE    drilled	<b>Rate, Unit:</b> 200000    S/A
<b>Depth, Unit:</b> 1.25    IN	
<b>Row Spacing, Unit:</b> 7.5    IN	
<b>Seed Bed:</b> MEDIUM    medium	<b>Soil Temperature, Unit:</b> 64    F
<b>Soil Moisture:</b> GOOD    good	<b>Emergence Date:</b> 5-18-2009
<b>Harvest Date:</b> 10-5-2009	<b>Harvest Equipment:</b> HEGE COMBINE
<b>Harvested Width, Unit:</b> 5    FT	<b>Harvested Length, Unit:</b> 37    FT

### Pest Description

**Pest 1 Type:** W    **Code:** STEME    Stellaria media

# Plant and Soil Science, U of KY

## Weed Science Research

**Common Name:** Common chickweed

**Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel

**Pest 3 Type:** W **Code:** LACSE *Lactuca serriola*  
**Common Name:** Prickly lettuce

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

**Pest 5 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 6 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest 7 Type:** W **Code:** IPOSS *Ipomoea* sp.  
**Common Name:** Morning glory

### Site and Design

**Plot Width, Unit:** 8.5 FT **Site Type:** FIELD field  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 374 FT<sup>2</sup> **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:** 17 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

### Application Description

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

	A	B	C
<b>Application Date:</b>	4-30-2009	5-29-2009	6-23-2009
<b>Time of Day:</b>	4 PM	10 AM	11 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	1 WK	EP	MP
<b>Application Placement:</b>	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	72 F	65 F	80 F
<b>% Relative Humidity:</b>	61	40	58
<b>Wind Velocity, Unit:</b>	8 MPH	6 MPH	3 MPH
<b>Wind Direction:</b>	SSW	NW	N
<b>Soil Temperature, Unit:</b>	62 F	72 F	78 F
<b>Soil Moisture:</b>	NORMAL	GOOD	GOOD
<b>% Cloud Cover:</b>	80	0	0

### Crop Stage At Each Application

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
<b>Height, Unit:</b>		5 IN	10 IN

### Pest Stage At Each Application

	A	B	C
<b>Pest 1 Code, Type, Scale:</b>	STEME W	STEME W	STEME W
<b>Height, Unit:</b>	4 IN		
<b>Pest 2 Code, Type, Scale:</b>	LAMPU W	LAMPU W	LAMPU W
<b>Height, Unit:</b>	5 IN		
<b>Pest 3 Code, Type, Scale:</b>	LACSE W	LACSE W	LACSE W
<b>Height, Unit:</b>	5 IN	3 IN	
<b>Pest 4 Code, Type, Scale:</b>	ERICA W	ERICA W	ERICA W
<b>Height, Unit:</b>	2 IN	4 IN	5 IN
<b>Pest 5 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W
<b>Height, Unit:</b>		3 IN	5 IN
<b>Pest 6 Code, Type, Scale:</b>	AMBTR W	AMBTR W	AMBTR W
<b>Height, Unit:</b>		4 IN	6 IN
<b>Pest 7 Code, Type, Scale:</b>	IPOSS W	IPOSS W	IPOSS W
<b>Height, Unit:</b>		2 IN	4 IN

### Application Equipment



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

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

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

NO TILL SOYBEAN EPP VIII

Trial ID: S9028      Protocol ID: SYNGENTA SOY HAJ03X4  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
                                  Sponsor Contact: SCOTT CULLEY

Pest Type	W Weed	W Weed	W Weed	W Weed		W Weed	W Weed				
Pest Code	STEME	LAMPU	LACSE	ERICA		SETFA	AMBTR				
Pest Scientific Name	Stellaria media	Lamium purpure>	Lactuca serrio>	Conyza canadens>		Setaria faberi	Ambrosia trifi>				
Pest Name	Common chickwe>	Purple deadnet>	Prickly lettuce	Marestail		Giant foxtail	Giant ragweed				
Crop Code					GLXMA						
BBCH Scale					BSOY						
Crop Scientific Name					Glycine max						
Crop Name					Soybean						
Rating Date	5-15-2009	5-15-2009	5-15-2009	5-15-2009	6-5-2009	6-5-2009	6-5-2009				
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1				
SE Description					BEFORE POST	BEFORE POST	BEFORE POST				
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK				
Days After First/Last Applic.	15 15	15 15	15 15	15 15	36 36	36 36	36 36				
Trt-Eval Interval	15 DA-A	15 DA-A	15 DA-A	15 DA-A	0 DA-B	0 DA-B	0 DA-B				
Plant-Eval Interval	4 DP-1	4 DP-1	4 DP-1	4 DP-1	25 DP-1	25 DP-1	25 DP-1				
Days After Emergence	-3 DE-	-3 DE-	-3 DE-	-3 DE-	18 DE-	18 DE-	18 DE-				
ARM Action Codes	P	P	P	P	P	P	P				
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
1	PREFIX	2	pt/a	1 WK EPP	99	99	99	99	0	91	93
	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP							
	WEEDONE LV4	1	pt/a	1 WK EPP							
	COC	1	% v/v	1 WK EPP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
	TOUCHDOWN TOTAL	24	fl oz/a	LP							
2	BOUNDARY	1.5	pt/a	1 WK EPP	99	99	99	99	0	78	66
	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP							
	WEEDONE LV4	1	pt/a	1 WK EPP							
	COC	1	% v/v	1 WK EPP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
	TOUCHDOWN TOTAL	24	fl oz/a	LP							

## 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	STEME	LAMPU	LACSE	ERICA	SETFA	AMBTR					
Pest Scientific Name	Stellaria media	Lamium purpure>	Lactuca serriol>	Conyza canadens>	Setaria faberi	Ambrosia trifid>					
Pest Name	Common chickweed>	Purple deadnettle>	Prickly lettuce	Marestail	Giant foxtail	Giant ragweed					
Crop Code					GLXMA						
BBCH Scale					BSOY						
Crop Scientific Name					Glycine max						
Crop Name					Soybean						
Rating Date	5-15-2009	5-15-2009	5-15-2009	5-15-2009	6-5-2009	6-5-2009					
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1				
SE Description					BEFORE POST	BEFORE POST	BEFORE POST				
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK				
Days After First/Last Applic.	15 15	15 15	15 15	15 15	36 36	36 36	36 36				
Trt-Eval Interval	15 DA-A	15 DA-A	15 DA-A	15 DA-A	0 DA-B	0 DA-B	0 DA-B				
Plant-Eval Interval	4 DP-1	4 DP-1	4 DP-1	4 DP-1	25 DP-1	25 DP-1	25 DP-1				
Days After Emergence	-3 DE-	-3 DE-	-3 DE-	-3 DE-	18 DE-	18 DE-	18 DE-				
ARM Action Codes	P	P	P	P	P	P	P				
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
3	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP	99	99	99	99	0	53	53
	WEEDONE LV4	1	pt/a	1 WK EPP							
	COC	1	% v/v	1 WK EPP							
	N-PAK AMS LIQUID	2.5	% v/v	2 TR							
	TOUCHDOWN TOTAL	24	fl oz/a	2 TR							
	N-PAK AMS LIQUID	2.5	% v/v	+21D							
	TOUCHDOWN TOTAL	24	fl oz/a	+21D							
4	BOUNDARY	1.5	pt/a	1 WK EPP	99	99	99	99	0	76	82
	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP							
	WEEDONE LV4	1	pt/a	1 WK EPP							
	COC	1	% v/v	1 WK EPP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
	FLEXSTAR GT	3	pt/a	LP							
	COC	1	% v/v	LP							
5	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP	99	99	99	99	0	78	82
	WEEDONE LV4	1	pt/a	1 WK EPP							
	COC	1	% v/v	1 WK EPP							
	N-PAK AMS LIQUID	2.5	% v/v	2 TR							
	TOUCHDOWN TOTAL	24	fl oz/a	2 TR							
	PREFIX	2	pt/a	2 TR							
	N-PAK AMS LIQUID	2.5	% v/v	+21D							
	TOUCHDOWN TOTAL	24	fl oz/a	+21D							

## 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	STEME	LAMPU	LACSE	ERICA	SETFA	AMBTR					
Pest Scientific Name	Stellaria media	Lamium purpure>	Lactuca serrio>	Conyza canadens>	Setaria faberi	Ambrosia trifi>					
Pest Name	Common chickwe>	Purple deadnet>	Prickly lettuce	Marestail	Giant foxtail	Giant ragweed					
Crop Code					GLXMA						
BBCH Scale					BSOY						
Crop Scientific Name					Glycine max						
Crop Name					Soybean						
Rating Date	5-15-2009	5-15-2009	5-15-2009	5-15-2009	6-5-2009	6-5-2009					
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1				
SE Description					BEFORE POST	BEFORE POST	BEFORE POST				
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK				
Days After First/Last Applic.	15 15	15 15	15 15	15 15	36 36	36 36	36 36				
Trt-Eval Interval	15 DA-A	15 DA-A	15 DA-A	15 DA-A	0 DA-B	0 DA-B	0 DA-B				
Plant-Eval Interval	4 DP-1	4 DP-1	4 DP-1	4 DP-1	25 DP-1	25 DP-1	25 DP-1				
Days After Emergence	-3 DE-	-3 DE-	-3 DE-	-3 DE-	18 DE-	18 DE-	18 DE-				
ARM Action Codes	P	P	P	P	P	P	P				
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
6	N-PAK AMS LIQUID	2.5	% v/v	1 WK EPP	99	99	99	99	0	70	93
	SONIC	3.22	oz/a	1 WK EPP							
	DURANGO DMA	24	fl oz/a	1 WK EPP							
	WEEDONE LV4	1	pt/a	1 WKEPP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
	DURANGO DMA	24	fl oz/a	LP							
7	N-PAK AMS LIQUID	2.5	% v/v	1 WKEPP	99	99	99	99	0	79	96
	VALOR XLT	3	oz/a	1 WK EPP							
	ROUNDUP POWERMAX	22	fl oz/a	1 WKEPP							
	WEEDONE LV4	1	pt/a	1 WK EPP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
	ROUNDUP POWERMAX	22	fl oz/a	LP							
8	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP	99	99	99	99	0	63	73
	WEEDONE LV4	1	pt/a	1 WK EPP							
	COC	1	% v/v	1 WK EPP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
	TOUCHDOWN TOTAL	24	fl oz/a	LP							
9	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP	99	99	99	99	0	80	98
	WEEDONE LV4	1	pt/a	1 WK EPP							
	INDUCE	0.25	% v/v	1 WK EPP							
	ENVIVE	3.5	oz/a	1 WK EPP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
	TOUCHDOWN TOTAL	24	fl oz/a	LP							

## 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	STEME	LAMPU	LACSE	ERICA	SETFA	AMBTR					
Pest Scientific Name	Stellaria media	Lamium purpure>	Lactuca serrio>	Conyza canadens>	Setaria faberi	Ambrosia trifi>					
Pest Name	Common chickwe>	Purple deadnet>	Prickly lettuce	Marestail	Giant foxtail	Giant ragweed					
Crop Code					GLXMA						
BBCH Scale					BSOY						
Crop Scientific Name					Glycine max						
Crop Name					Soybean						
Rating Date	5-15-2009	5-15-2009	5-15-2009	5-15-2009	6-5-2009	6-5-2009					
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1				
SE Description					BEFORE POST	BEFORE POST	BEFORE POST				
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK				
Days After First/Last Applic.	15 15	15 15	15 15	15 15	36 36	36 36	36 36				
Trt-Eval Interval	15 DA-A	15 DA-A	15 DA-A	15 DA-A	0 DA-B	0 DA-B	0 DA-B				
Plant-Eval Interval	4 DP-1	4 DP-1	4 DP-1	4 DP-1	25 DP-1	25 DP-1	25 DP-1				
Days After Emergence	-3 DE-	-3 DE-	-3 DE-	-3 DE-	18 DE-	18 DE-	18 DE-				
ARM Action Codes	P	P	P	P	P	P	P				
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
10	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP	99	99	99	99	0	98	98
	WEEDONE LV4	1	pt/a	1 WK EPP							
	INDUCE	0.25	% v/v	1 WK EPP							
	CANOPY EX	1.5	oz/a	1 WK EPP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
	TOUCHDOWN TOTAL	24	fl oz/a	LP							
	LSD (P=.05)				0.0	0.0	0.0	0.0	0.0	38.8	22.5
	Standard Deviation				0.0	0.0	0.0	0.0	0.0	22.6	13.1
	CV				0.0	0.0	0.0	0.0	0.0	29.49	15.76
	Bartlett's X2				0.0	0.0	0.0	0.0	0.0	14.694	28.742
	P(Bartlett's X2)				.	.	.	.	.	0.10	0.001*
	Replicate F				0.000	0.000	0.000	0.000	0.000	0.322	0.056
	Replicate Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000	0.7289	0.9456
	Treatment F				0.000	0.000	0.000	0.000	0.000	0.947	4.081
	Treatment Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000	0.5113	0.0054

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

Pest Type	W Weed		W Weed		W Weed		W Weed		W Weed		
Pest Code	ERICA		SETFA		AMBTR		ERICA		SETFA		
Pest Scientific Name	Conyza canadens>		Setaria faberi		Ambrosia trifidi>		Conyza canadens>		Setaria faberi		
Pest Name	Marestail		Giant foxtail		Giant ragweed		Marestail		Giant foxtail		
Crop Code	GLXMA		GLXMA		GLXMA		GLXMA		GLXMA		
BBCH Scale	BSOY		BSOY		BSOY		BSOY		BSOY		
Crop Scientific Name	Glycine max		Glycine max		Glycine max		Glycine max		Glycine max		
Crop Name	Soybean		Soybean		Soybean		Soybean		Soybean		
Rating Date	6-5-2009		6-19-2009		6-19-2009		6-19-2009		7-22-2009		
Rating Type	CONTROL		INJURY		CONTROL		CONTROL		INJURY		
Rating Unit	PERCENT		PERCENT		PERCENT		PERCENT		PERCENT		
Number of Subsamples	1		1		1		1		1		
SE Description	BEFORE POST		2 WK AFT POS		2 WK AFT POS		2 WK AFT POS		4 WK AFT POS		
Rating Timing	4 WEEK		8 WEEK		8 WEEK		8 WEEK		12 WEEK		
Days After First/Last Applic.	36 36		50 14		50 14		50 14		83 26		
Trt-Eval Interval	0 DA-B		14 DA-C		14 DA-C		14 DA-C		14 DA-C		
Plant-Eval Interval	25 DP-1		39 DP-1		39 DP-1		39 DP-1		72 DP-1		
Days After Emergence	18 DE-		32 DE-		32 DE-		32 DE-		65 DE-		
ARM Action Codes	P		P		P		P		P		
Number of Decimals	0		0		0		0		0		
Trt No.	Treatment Name	Rate	Unit	Growth Stage	8	9	10	11	12	13	14
1	PREFIX	2	pt/a	1 WK EPP	71	0	99	99	99	0	99
	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP							
	WEEDONE LV4	1	pt/a	1 WK EPP							
	COC	1	% v/v	1 WK EPP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
	TOUCHDOWN TOTAL	24	fl oz/a	LP							
2	BOUNDARY	1.5	pt/a	1 WK EPP	90	0	99	99	99	0	99
	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP							
	WEEDONE LV4	1	pt/a	1 WK EPP							
	COC	1	% v/v	1 WK EPP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
	TOUCHDOWN TOTAL	24	fl oz/a	LP							

## 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	ERICA	SETFA	AMBTR	ERICA	SETFA	ERICA					
Pest Scientific Name	Conyza canadensis	Setaria faberi	Ambrosia trifida	Conyza canadensis	Setaria faberi	Setaria faberi					
Pest Name	Marestail	Giant foxtail	Giant ragweed	Marestail	Giant foxtail	Giant foxtail					
Crop Code		GLXMA			GLXMA						
BBCH Scale		BSOY			BSOY						
Crop Scientific Name		Glycine max			Glycine max						
Crop Name		Soybean			Soybean						
Rating Date	6-5-2009	6-19-2009	6-19-2009	6-19-2009	6-19-2009	7-22-2009					
Rating Type	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY					
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT					
Number of Subsamples	1	1	1	1	1	1					
SE Description	BEFORE POST	2 WK AFT POS	2 WK AFT POS	2 WK AFT POS	2 WK AFT POS	4 WK AFT POS					
Rating Timing	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	12 WEEK					
Days After First/Last Applic.	36 36	50 14	50 14	50 14	50 14	83 26					
Trt-Eval Interval	0 DA-B	14 DA-C	14 DA-C	14 DA-C	14 DA-C						
Plant-Eval Interval	25 DP-1	39 DP-1	39 DP-1	39 DP-1	39 DP-1	72 DP-1					
Days After Emergence	18 DE-	32 DE-	32 DE-	32 DE-	32 DE-	65 DE-					
ARM Action Codes	P	P	P	P	P	P					
Number of Decimals	0	0	0	0	0	0					
Trt No.	Treatment	Rate	Unit	Growth Stage	8	9	10	11	12	13	14
3	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP	92	0	99	99	99	0	99
	WEEDONE LV4	1	pt/a	1 WK EPP							
	COC	1	% v/v	1 WK EPP							
	N-PAK AMS LIQUID	2.5	% v/v	2 TR							
	TOUCHDOWN TOTAL	24	fl oz/a	2 TR							
	N-PAK AMS LIQUID	2.5	% v/v	+21D							
	TOUCHDOWN TOTAL	24	fl oz/a	+21D							
4	BOUNDARY	1.5	pt/a	1 WK EPP	83	10	99	99	99	0	99
	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP							
	WEEDONE LV4	1	pt/a	1 WK EPP							
	COC	1	% v/v	1 WK EPP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
	FLEXSTAR GT	3	pt/a	LP							
	COC	1	% v/v	LP							
5	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP	87	0	99	99	99	0	99
	WEEDONE LV4	1	pt/a	1 WK EPP							
	COC	1	% v/v	1 WK EPP							
	N-PAK AMS LIQUID	2.5	% v/v	2 TR							
	TOUCHDOWN TOTAL	24	fl oz/a	2 TR							
	PREFIX	2	pt/a	2 TR							
	N-PAK AMS LIQUID	2.5	% v/v	+21D							
	TOUCHDOWN TOTAL	24	fl oz/a	+21D							

## 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	ERICA	SETFA	AMBTR	ERICA	SETFA	ERICA
Pest Scientific Name	Conyza canadensis	Setaria faberi	Ambrosia trifida	Conyza canadensis	Setaria faberi	Conyza canadensis
Pest Name	Marestail	Giant foxtail	Giant ragweed	Marestail	Giant foxtail	Marestail
Crop Code		GLXMA			GLXMA	
BBCH Scale		BSOY			BSOY	
Crop Scientific Name		Glycine max			Glycine max	
Crop Name		Soybean			Soybean	
Rating Date	6-5-2009	6-19-2009	6-19-2009	6-19-2009	6-19-2009	7-22-2009
Rating Type	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1	1
SE Description	BEFORE POST	2 WK AFT POS	2 WK AFT POS	2 WK AFT POS	2 WK AFT POS	4 WK AFT POS
Rating Timing	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	12 WEEK
Days After First/Last Applic.	36 36	50 14	50 14	50 14	50 14	83 26
Trt-Eval Interval	0 DA-B	14 DA-C	14 DA-C	14 DA-C	14 DA-C	
Plant-Eval Interval	25 DP-1	39 DP-1	39 DP-1	39 DP-1	39 DP-1	72 DP-1
Days After Emergence	18 DE-	32 DE-	32 DE-	32 DE-	32 DE-	65 DE-
ARM Action Codes	P	P	P	P	P	P
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	8	9	10	11	12	13	14
6	N-PAK AMS LIQUID	2.5	% v/v	1 WK EPP	90	0	99	99	99	0	99
	SONIC	3.22	oz/a	1 WK EPP							
	DURANGO DMA	24	fl oz/a	1 WK EPP							
	WEEDONE LV4	1	pt/a	1 WKEPP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
	DURANGO DMA	24	fl oz/a	LP							
7	N-PAK AMS LIQUID	2.5	% v/v	1 WKEPP	96	0	99	99	99	0	99
	VALOR XLT	3	oz/a	1 WK EPP							
	ROUNDUP POWERMAX	22	fl oz/a	1 WKEPP							
	WEEDONE LV4	1	pt/a	1 WK EPP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
	ROUNDUP POWERMAX	22	fl oz/a	LP							
8	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP	82	0	99	99	99	0	99
	WEEDONE LV4	1	pt/a	1 WK EPP							
	COC	1	% v/v	1 WK EPP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
	TOUCHDOWN TOTAL	24	fl oz/a	LP							
9	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP	95	0	99	99	99	0	99
	WEEDONE LV4	1	pt/a	1 WK EPP							
	INDUCE	0.25	% v/v	1 WK EPP							
	ENVIVE	3.5	oz/a	1 WK EPP							
	N-PAK AMS LIQUID	2.5	% v/v	LP							
	TOUCHDOWN TOTAL	24	fl oz/a	LP							





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

Pest Type		W Weed	W Weed	
Pest Code		AMBTR	ERICA	
Pest Scientific Name		Ambrosia trifi>	Conyza canaden>	
Pest Name		Giant ragweed	Marestail	
Crop Code				GLXMA
BBCH Scale				BSOY
Crop Scientific Name				Glycine max
Crop Name				Soybean
Rating Date		7-22-2009	7-22-2009	10-5-2009
Rating Type		CONTROL	CONTROL	YIELD
Rating Unit		PERCENT	PERCENT	BU 13.5%
Number of Subsamples		1	1	1
SE Description		4 WK AFT POS	4 WK AFT POS	
Rating Timing		12 WEEK	12 WEEK	
Days After First/Last Applic.		83 26	83 26	158 101
Trt-Eval Interval				
Plant-Eval Interval		72 DP-1	72 DP-1	147 DP-1
Days After Emergence		65 DE-	65 DE-	140 DE
ARM Action Codes		P	P	TY1
Number of Decimals		0	0	0

  

Trt No.	Treatment Name	Rate	Unit	Growth Stage	15	16	20
1	PREFIX	2	pt/a	1 WK EPP	90	99	45
	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP			
	WEEDONE LV4	1	pt/a	1 WK EPP			
	COC	1	% v/v	1 WK EPP			
	N-PAK AMS LIQUID	2.5	% v/v	LP			
	TOUCHDOWN TOTAL	24	fl oz/a	LP			
2	BOUNDARY	1.5	pt/a	1 WK EPP	90	99	36
	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP			
	WEEDONE LV4	1	pt/a	1 WK EPP			
	COC	1	% v/v	1 WK EPP			
	N-PAK AMS LIQUID	2.5	% v/v	LP			
	TOUCHDOWN TOTAL	24	fl oz/a	LP			

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

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	ERICA	
Pest Scientific Name	Ambrosia trifi>	Conyza canad>	
Pest Name	Giant ragweed	Marestail	
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Rating Date	7-22-2009	7-22-2009	10-5-2009
Rating Type	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	BU 13.5%
Number of Subsamples	1	1	1
SE Description	4 WK AFT POS	4 WK AFT POS	
Rating Timing	12 WEEK	12 WEEK	
Days After First/Last Applic.	83 26	83 26	158 101
Trt-Eval Interval			
Plant-Eval Interval	72 DP-1	72 DP-1	147 DP-1
Days After Emergence	65 DE-	65 DE-	140 DE
ARM Action Codes	P	P	TY1
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	15	16	20
3	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP	98	99	44
	WEEDONE LV4	1	pt/a	1 WK EPP			
	COC	1	% v/v	1 WK EPP			
	N-PAK AMS LIQUID	2.5	% v/v	2 TR			
	TOUCHDOWN TOTAL	24	fl oz/a	2 TR			
	N-PAK AMS LIQUID	2.5	% v/v	+21D			
	TOUCHDOWN TOTAL	24	fl oz/a	+21D			
4	BOUNDARY	1.5	pt/a	1 WK EPP	93	99	44
	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP			
	WEEDONE LV4	1	pt/a	1 WK EPP			
	COC	1	% v/v	1 WK EPP			
	N-PAK AMS LIQUID	2.5	% v/v	LP			
	FLEXSTAR GT	3	pt/a	LP			
	COC	1	% v/v	LP			
5	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP	98	99	42
	WEEDONE LV4	1	pt/a	1 WK EPP			
	COC	1	% v/v	1 WK EPP			
	N-PAK AMS LIQUID	2.5	% v/v	2 TR			
	TOUCHDOWN TOTAL	24	fl oz/a	2 TR			
	PREFIX	2	pt/a	2 TR			
	N-PAK AMS LIQUID	2.5	% v/v	+21D			
	TOUCHDOWN TOTAL	24	fl oz/a	+21D			

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

Pest Type	W Weed	W Weed					
Pest Code	AMBTR	ERICA					
Pest Scientific Name	Ambrosia trifi>	Conyza canaden>					
Pest Name	Giant ragweed	Marestail					
Crop Code			GLXMA				
BBCH Scale			BSOY				
Crop Scientific Name			Glycine max				
Crop Name			Soybean				
Rating Date	7-22-2009	7-22-2009	10-5-2009				
Rating Type	CONTROL	CONTROL	YIELD				
Rating Unit	PERCENT	PERCENT	BU 13.5%				
Number of Subsamples	1	1	1				
SE Description	4 WK AFT POS	4 WK AFT POS					
Rating Timing	12 WEEK	12 WEEK					
Days After First/Last Applic.	83 26	83 26	158 101				
Trt-Eval Interval							
Plant-Eval Interval	72 DP-1	72 DP-1	147 DP-1				
Days After Emergence	65 DE-	65 DE-	140 DE				
ARM Action Codes	P	P	TY1				
Number of Decimals	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	15	16	20
6	N-PAK AMS LIQUID	2.5	% v/v	1 WK EPP	91	99	40
	SONIC	3.22	oz/a	1 WK EPP			
	DURANGO DMA	24	fl oz/a	1 WK EPP			
	WEEDONE LV4	1	pt/a	1 WKEPP			
	N-PAK AMS LIQUID	2.5	% v/v	LP			
	DURANGO DMA	24	fl oz/a	LP			
7	N-PAK AMS LIQUID	2.5	% v/v	1 WKEPP	88	99	50
	VALOR XLT	3	oz/a	1 WK EPP			
	ROUNDUP POWERMAX	22	fl oz/a	1 WKEPP			
	WEEDONE LV4	1	pt/a	1 WK EPP			
	N-PAK AMS LIQUID	2.5	% v/v	LP			
	ROUNDUP POWERMAX	22	fl oz/a	LP			
8	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP	89	98	45
	WEEDONE LV4	1	pt/a	1 WK EPP			
	COC	1	% v/v	1 WK EPP			
	N-PAK AMS LIQUID	2.5	% v/v	LP			
	TOUCHDOWN TOTAL	24	fl oz/a	LP			
9	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP	98	99	43
	WEEDONE LV4	1	pt/a	1 WK EPP			
	INDUCE	0.25	% v/v	1 WK EPP			
	ENVIVE	3.5	oz/a	1 WK EPP			
	N-PAK AMS LIQUID	2.5	% v/v	LP			
	TOUCHDOWN TOTAL	24	fl oz/a	LP			

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

Pest Type		W Weed	W Weed				
Pest Code		AMBTR	ERICA				
Pest Scientific Name		Ambrosia trifi>	Conyza canadens>				
Pest Name		Giant ragweed	Marestail				
Crop Code				GLXMA			
BBCH Scale				BSOY			
Crop Scientific Name				Glycine max			
Crop Name				Soybean			
Rating Date		7-22-2009	7-22-2009	10-5-2009			
Rating Type		CONTROL	CONTROL	YIELD			
Rating Unit		PERCENT	PERCENT	BU 13.5%			
Number of Subsamples		1	1	1			
SE Description		4 WK AFT POS	4 WK AFT POS				
Rating Timing		12 WEEK	12 WEEK				
Days After First/Last Applic.		83 26	83 26	158 101			
Trt-Eval Interval							
Plant-Eval Interval		72 DP-1	72 DP-1	147 DP-1			
Days After Emergence		65 DE-	65 DE-	140 DE			
ARM Action Codes		P	P	TY1			
Number of Decimals		0	0	0			
Trt No.	Treatment Name	Rate	Unit	Growth Stage	15	16	20
10	GRAMOXONE INTEON	48	fl oz/a	1 WK EPP	99	99	49
	WEEDONE LV4	1	pt/a	1 WK EPP			
	INDUCE	0.25	% v/v	1 WK EPP			
	CANOPY EX	1.5	oz/a	1 WK EPP			
	N-PAK AMS LIQUID	2.5	% v/v	LP			
	TOUCHDOWN TOTAL	24	fl oz/a	LP			
LSD (P=.05)					9.4	1.3	4.7
Standard Deviation					5.5	0.7	2.8
CV					5.86	0.74	6.29
Bartlett's X2					8.091	0.0	4.759
P(Bartlett's X2)					0.425	.	0.855
Replicate F					0.163	1.000	0.018
Replicate Prob(F)					0.8504	0.3874	0.9820
Treatment F					1.757	1.000	6.517
Treatment Prob(F)					0.1477	0.4742	0.0004

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

NO TILL SOYBEAN EPP VIII

Trial ID: S9028      Protocol ID: SYNGENTA SOY HAJ03X4  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact: SCOTT CULLEY

### Pest Type

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

### Pest Code

STEME, *Stellaria media*, = US  
LAMPU, *Lamium purpureum*, = US  
LACSE, *Lactuca serriola*, = US  
ERICA, *Conyza canadensis*, = US  
SETFA, *Setaria faberi*, = US  
AMBTR, *Ambrosia trifida*, = US

### Crop Code

GLXMA, BSOY, *Glycine max*, = US

### Rating Type

YIELD = yield

### Rating Unit

PERCENT = percent

### Plant-Eval Interval

4 DP-1 = 1 5-11-2009  
25 DP-1 = 1 5-11-2009  
39 DP-1 = 1 5-11-2009  
72 DP-1 = 1 5-11-2009  
147 DP-1 = 1 5-11-2009

### ARM Action Codes

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

TY1 = 3.724705\*[C19]

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

NO TILL SOYBEAN EPP VIII

Trial ID: S9028      Protocol ID: SYNGENTA SOY HAJ03X4  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact: SCOTT CULLEY

### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-30-2009

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

### Trial Location

### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

### Crop Description

<b>Crop 1:</b> GLXMA      Glycine max      Soybean
<b>Variety:</b> AGR 4403
<b>BBCH Scale:</b> BSOY <b>Planting Date:</b> 5-11-2009
<b>Planting Method:</b> DRILLE      drilled <b>Rate, Unit:</b> 200000      S/A
<b>Depth, Unit:</b> 1.25      IN
<b>Row Spacing, Unit:</b> 7.5      IN
<b>Seed Bed:</b> MEDIUM      medium <b>Soil Temperature, Unit:</b> 64      F
<b>Soil Moisture:</b> GOOD      good <b>Emergence Date:</b> 5-18-2009
<b>Harvest Date:</b> 10-5-2009 <b>Harvest Equipment:</b> HEGE COMBINE
<b>Harvested Width, Unit:</b> 5      FT <b>Harvested Length, Unit:</b> 37      FT

### Pest Description

**Pest 1 Type:** W      **Code:** STEME      Stellaria media

# Plant and Soil Science, U of KY

## Weed Science Research

**Common Name:** Common chickweed

**Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel

**Pest 3 Type:** W **Code:** LACSE *Lactuca serriola*  
**Common Name:** Prickly lettuce

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

**Pest 5 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 6 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest 7 Type:** W **Code:** IPOSS *Ipomoea sp.*  
**Common Name:** Morning glory

### Site and Design

**Plot Width, Unit:** 8.5 FT **Site Type:** FIELD field  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 374 FT<sup>2</sup> **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:** 17 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

### Application Description



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

	A	B	C	D
<b>Application Date:</b>	4-30-2009	6-5-2009	6-5-2009	6-26-2009
<b>Time of Day:</b>	4 PM	10 AM	10 AM	11 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	1 WK	2 TR	LP	+21D
<b>Application Placement:</b>	BROFOL	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	72 F	72 F	72 F	80 F
<b>% Relative Humidity:</b>	61	46	46	58
<b>Wind Velocity, Unit:</b>	8 MPH	6 MPH	6 MPH	3 MPH
<b>Wind Direction:</b>	SSW	NW	NW	N
<b>Soil Temperature, Unit:</b>	62 F	67 F	67 F	78 F
<b>Soil Moisture:</b>	NORMAL	GOOD	GOOD	GOOD
<b>% Cloud Cover:</b>	80	0	0	0

**Crop Stage At Each Application**

	A	B	C	D
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
<b>Height, Unit:</b>		6 IN	6 IN	10 IN

**Pest Stage At Each Application**

	A	B	C	D
<b>Pest 1 Code, Type, Scale:</b>	STEME W	STEME W	STEME W	STEME W
<b>Height, Unit:</b>	4 IN			
<b>Pest 2 Code, Type, Scale:</b>	LAMPU W	LAMPU W	LAMPU W	LAMPU W
<b>Height, Unit:</b>	5 IN			
<b>Pest 3 Code, Type, Scale:</b>	LACSE W	LACSE W	LACSE W	LACSE W
<b>Height, Unit:</b>	4 IN	3 IN		
<b>Pest 4 Code, Type, Scale:</b>	ERICA W	ERICA W	ERICA W	ERICA W
<b>Height, Unit:</b>	1 IN	3 IN	3 IN	6 IN
<b>Pest 5 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W	SETFA W
<b>Height, Unit:</b>		2 IN	2 IN	5 IN
<b>Pest 6 Code, Type, Scale:</b>	AMBTR W	AMBTR W	AMBTR W	AMBTR W
<b>Height, Unit:</b>		4 IN	4 IN	8 IN
<b>Pest 7 Code, Type, Scale:</b>	IPOSS W	IPOSS W	IPOSS W	IPOSS W
<b>Height, Unit:</b>		2 IN	2 IN	4 IN

**Application Equipment**

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

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







## 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	ERICA	AMBTR		SETFA	LACSE	ERICA	AMBTR					
Pest Scientific Name	Conyza canadensis	Ambrosia trifida		Setaria faberii	Lactuca scariola	Conyza canadensis	Ambrosia trifida					
Pest Name	Marestail	Giant ragweed		Giant foxtail	Prickly lettuce	Marestail	Giant ragweed					
Crop Code			GLXMA					GLXMA				
BBCH Scale			BSOY					BSOY				
Crop Scientific Name			Glycine max					Glycine max				
Crop Name			Soybean					Soybean				
Rating Date	5-25-2009	5-25-2009	6-10-2009	6-10-2009	6-10-2009	6-10-2009	6-10-2009	7-8-2009				
Rating Type	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1	1				
SE Description	AFTPRE	AFTPRE	AFF LP	AFT LP	AFT LP	AFTLP	AFT LP	AFT LP				
Rating Timing	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK				
Days After First/Last Applic.	26 13	26 13	42 5	42 5	42 5	42 5	42 5	70 33				
Trt-Eval Interval												
Plant-Eval Interval	14 DP-1	14 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1	58 DP-1				
Days After Emergence	7 DE-1	7 DE-1	23 DE-	23 DE-	23 DE-	23 DE-	23 DE-	51 DE-				
ARM Action Codes	P	P	P	P	P	P	P	P				
Number of Decimals	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
4	ROUNDUP POWERMAX	0.75	lb ai/a	PRE	98	93	0	99	99	98	87	0
	AMS	3.75	% v/v	PRE								
	AUTHORITY ASSIST	5	fl oz/a	PRE								
	ROUNDUP POWERMAX	22	fl oz/a	LP								
	AMS	3.75	% v/v	LP								
5	ROUNDUP POWERMAX	0.75	lb ai/a	PRE	93	95	0	99	99	95	91	0
	AMS	3.75	% v/v	PRE								
	CADET	0.6	fl oz/a	LP								
	ROUNDUP POWERMAX	22	fl oz/a	LP								
	AMS	3.75	% v/v	LP								
	INDUCE	0.125	% v/v	LP								
6	CHECK UNTREATED				0	0	0	0	0	0	0	0
	LSD (P=.05)				3.8	4.5	0.0	0.0	3.9	4.5	4.5	0.0
	Standard Deviation				2.1	2.5	0.0	0.0	2.1	2.5	2.5	0.0
	CV				2.58	3.1	0.0	0.0	2.6	3.08	3.26	0.0
	Bartlett's X2				0.839	0.888	0.0	0.0	0.0	1.327	1.921	0.0
	P(Bartlett's X2)				0.657	0.642	.	.	.	0.249	0.75	.
	Replicate F				1.183	0.554	0.000	0.000	1.000	0.871	6.041	0.000
	Replicate Prob(F)				0.3458	0.5916	1.0000	1.0000	0.4019	0.4481	0.0190	1.0000
	Treatment F				1085.588	749.258	0.000	0.000	1066.600	761.185	680.460	0.000
	Treatment Prob(F)				0.0001	0.0001	1.0000	1.0000	0.0001	0.0001	0.0001	1.0000

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

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	LACSE	ERICA	AMBTR
Pest Scientific Name	Setaria faberi	Lactuca serrio>	Conyza canadens>	Ambrosia trifi>
Pest Name	Giant foxtail	Prickly lettuce	Marestail	Giant ragweed
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	7-8-2009	7-8-2009	7-8-2009	7-8-2009
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
SE Description	AFT LP	AFT LP	AFT LP	AFT LP
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	70 33	70 33	70 33	70 33
Trt-Eval Interval				
Plant-Eval Interval	58 DP-1	58 DP-1	58 DP-1	58 DP-1
Days After Emergence	51 DE-	51 DE-	51 DE-	51 DE-
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	17	18	19	20
1	AUTHORITY FIRST	3.2	oz/a	2WK	99	93	99	96
	RAGE D-TECH	12	oz/a	2WK				
	ROUNDUP POWERMAX	0.75	lb ai/a	2WK				
	ROUNDUP POWERMAX	22	fl oz/a	LP				
	AMS	3.75	% v/v	LP				
2	SPARTAN	0.125	lb ai/a	2WK	99	99	99	92
	CLASSIC	0.0156	lb ai/a	2WK				
	COC	1	qt/a	2WK				
	ROUNDUP POWERMAX	22	fl oz/a	LP				
	AMS	3.75	% v/v	LP				
3	SPARTAN	0.125	lb ai/a	2WK	99	99	94	92
	CLASSIC	0.0156	lb ai/a	2WK				
	RAGE D-TECH	12	oz/a	2WK				
	ROUNDUP POWERMAX	22	fl oz/a	2WK				
	ROUNDUP POWERMAX	22	fl oz/a	LP				
	AMS	3.75	% v/v	LP				

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

Pest Type	W Weed	W Weed	W Weed	W Weed				
Pest Code	SETFA	LACSE	ERICA	AMBTR				
Pest Scientific Name	Setaria faberi	Lactuca serrio>	Conyza canaden>	Ambrosia trifi>				
Pest Name	Giant foxtail	Prickly lettuce	Marestail	Giant ragweed				
Crop Code								
BBCH Scale								
Crop Scientific Name								
Crop Name								
Rating Date	7-8-2009	7-8-2009	7-8-2009	7-8-2009				
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1				
SE Description	AFT LP	AFT LP	AFT LP	AFT LP				
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK				
Days After First/Last Applic.	70 33	70 33	70 33	70 33				
Trt-Eval Interval								
Plant-Eval Interval	58 DP-1	58 DP-1	58 DP-1	58 DP-1				
Days After Emergence	51 DE-	51 DE-	51 DE-	51 DE-				
ARM Action Codes	P	P	P	P				
Number of Decimals	0	0	0	0				
Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	17	18	19	20
4	ROUNDUP POWERMAX	0.75	lb ai/a	PRE	99	99	98	87
	AMS	3.75	% v/v	PRE				
	AUTHORITY ASSIST	5	fl oz/a	PRE				
	ROUNDUP POWERMAX	22	fl oz/a	LP				
	AMS	3.75	% v/v	LP				
5	ROUNDUP POWERMAX	0.75	lb ai/a	PRE	99	99	93	91
	AMS	3.75	% v/v	PRE				
	CADET	0.6	fl oz/a	LP				
	ROUNDUP POWERMAX	22	fl oz/a	LP				
	AMS	3.75	% v/v	LP				
	INDUCE	0.125	% v/v	LP				
6	CHECK UNTREATED				0	0	0	0
	LSD (P=.05)				0.0	3.9	5.3	4.5
	Standard Deviation				0.0	2.1	2.9	2.5
	CV				0.0	2.6	3.63	3.26
	Bartlett's X2				0.0	0.0	1.294	1.921
	P(Bartlett's X2)				.	.	0.524	0.75
	Replicate F				0.000	1.000	1.180	6.041
	Replicate Prob(F)				1.0000	0.4019	0.3467	0.0190
	Treatment F				0.000	1066.600	548.424	680.460
	Treatment Prob(F)				1.0000	0.0001	0.0001	0.0001



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

NO TILL SOYBEAN EPP IX

Trial ID: S9029      Protocol ID: FMC SOYEPP  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact: ROBERT HOOTEN

### Pest Type

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

### Pest Code

STEME, Stellaria media, = US  
LAMPU, Lamium purpureum, = US  
LACSE, Lactuca serriola, = US  
ERICA, Conyza canadensis, = US  
AMBTR, Ambrosia trifida, = US  
SETFA, Setaria faberi, = US

### Crop Code

GLXMA, BSOY, Glycine max, = US

### Rating Unit

PERCENT = percent

### Plant-Eval Interval

1 DP-1 = 1 5-11-2009  
14 DP-1 = 1 5-11-2009  
30 DP-1 = 1 5-11-2009  
58 DP-1 = 1 5-11-2009

### 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 EPP IX

Trial ID: S9029      Protocol ID: FMC SOYEPP  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact: ROBERT HOOTEN

## General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 4-29-2009

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

## Trial Location

## Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

## Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

## Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AGR 4403  
**BBCH Scale:** BSOY      **Planting Date:** 5-11-2009  
**Planting Method:** DRILLE drilled      **Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDIUM medium      **Soil Temperature, Unit:** 63 F  
**Soil Moisture:** GOOD good      **Emergence Date:** 5-18-2009

## Pest Description

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

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

**Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel

**Pest 3 Type:** W **Code:** LACSE *Lactuca serriola*  
**Common Name:** Prickly lettuce

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

**Pest 5 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 6 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

### Site and Design

**Plot Width, Unit:** 8.5 FT **Site Type:** FIELD field  
**Plot Length, Unit:** 44 FT  
**Plot Area, Unit:** 374 FT<sup>2</sup> **Tillage Type:** NOTILL no-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:** 17 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

### Application Description

	A	B	C
<b>Application Date:</b>	4-29-2009	5-12-2009	6-5-2009
<b>Time of Day:</b>	4 PM	3 PM	10 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	1 WK	PRE	LP
<b>Application Placement:</b>	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	72 F	70 F	68 F
<b>% Relative Humidity:</b>	61	30	46
<b>Wind Velocity, Unit:</b>	8 MPH	4 MPH	6 MPH
<b>Wind Direction:</b>	SSW	SW	NW
<b>Soil Temperature, Unit:</b>	63 F	62 F	67 F
<b>Soil Moisture:</b>	NORMAL	NORMAL	GOOD
<b>% Cloud Cover:</b>	80	0	0

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

**Crop Stage At Each Application**

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

**Pest Stage At Each Application**

	A	B	C
<b>Pest 1 Code, Type, Scale:</b>	STEME W	STEME W	STEME W
<b>Height, Unit:</b>	4	IN	
<b>Pest 2 Code, Type, Scale:</b>	LAMPU W	LAMPU W	LAMPU W
<b>Height, Unit:</b>	5	IN	
<b>Pest 3 Code, Type, Scale:</b>	LACSE W	LACSE W	LACSE W
<b>Height, Unit:</b>	4	IN	
<b>Pest 4 Code, Type, Scale:</b>	ERICA W	ERICA W	ERICA W
<b>Height, Unit:</b>	2	IN	3.5
			8
			IN
<b>Pest 5 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W
<b>Height, Unit:</b>			5
			IN
<b>Pest 6 Code, Type, Scale:</b>	AMBTR W	AMBTR W	AMBTR W
<b>Height, Unit:</b>	2	IN	3
			IN
			6
			IN

**Application Equipment**

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



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

Pest Type		W Weed	W Weed	W Weed		W Weed	W Weed	W Weed				
Pest Code		SETFA	AMBTR	AMACH		SETFA	AMBTR	AMACH				
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>				
Pest Name		Giant foxtail	Giant ragweed	Smooth pigweed		Giant foxtail	Giant ragweed	Smooth pigweed				
Crop Code	GLXMA				GLXMA							
BBCH Scale	BSOY				BSOY							
Crop Scientific Name	Glycine max				Glycine max							
Crop Name	Soybean				Soybean							
Rating Date	6-5-2009	6-5-2009	6-5-2009	6-5-2009	6-19-2009	6-19-2009	6-19-2009	6-19-2009				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1	1				
Rating Timing	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	2 WEEK	2 WEEK	2 WEEK	2 WEEK				
Days After First/Last Applic.	25 25	25 25	25 25	25 25	39 14	39 14	39 14	39 14				
Plant-Eval Interval	25 DP-1	25 DP-1	25 DP-1	25 DP-1	39 DP-1	39 DP-1	39 DP-1	39 DP-1				
Days After Emergence	18 DE-	18 DE-	18 DE-	18 DE-	32 DE-	32 DE-	32 DE-	32 DE-				
ARM Action Codes	P	P	P	P	P	P	P	P				
Number of Decimals	0	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4	5	6	7	8
6	SONIC	3.22	oz/a	PRE	0	91	91	93	0	99	99	99
	AMS	2.5	% v/v	LP								
	DURANGO DMA	24	fl oz/a	LP								
7	VALOR XLT	3	oz/a	PRE	0	92	90	93	0	99	99	99
	AMS	2.5	% v/v	LP								
	ROUNDUP POWERMAX	22	fl oz/a	LP								
8	AMS	2.5	% v/v	LP	0	20	17	23	0	99	99	99
	TOUCHDOWN TOTAL	24	fl oz/a	LP								
9	ENVIVE	3.5	oz/a	PRE	0	86	93	96	0	99	99	99
	N-PAK AMS LIQUID	2.5	% v/v	LP								
	TOUCHDOWN TOTAL	24	fl oz/a	LP								
10	CANOPY EX	1.5	oz/a	PRE	0	79	91	95	0	99	99	99
	N-PAK AMS LIQUID	2.5	% v/v	LP								
	TOUCHDOWN TOTAL	24	fl oz/a	LP								
	LSD (P=.05)				0.0	17.0	10.7	8.4	0.0	0.0	0.0	0.0
	Standard Deviation				0.0	9.9	6.2	4.9	0.0	0.0	0.0	0.0
	CV				0.0	12.1	8.14	6.0	0.0	0.0	0.0	0.0
	Bartlett's X2				0.0	10.221	5.656	5.683	0.0	0.0	0.0	0.0
	P(Bartlett's X2)				.	0.176	0.774	0.683	.	.	.	.
	Replicate F				0.000	0.428	4.495	4.680	0.000	0.000	0.000	0.000
	Replicate Prob(F)				1.0000	0.6583	0.0261	0.0231	1.0000	1.0000	1.0000	1.0000
	Treatment F				0.000	16.277	41.266	63.965	0.000	0.000	0.000	0.000
	Treatment Prob(F)				1.0000	0.0001	0.0001	0.0001	1.0000	1.0000	1.0000	1.0000



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

Pest Type		W Weed	W Weed	W Weed		W Weed	W Weed	W Weed					
Pest Code		SETFA	AMBTR	AMACH		SETFA	AMBTR	AMACH					
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>					
Pest Name		Giant foxtail	Giant ragweed	Smooth pigweed		Giant foxtail	Giant ragweed	Smooth pigweed					
Crop Code	GLXMA				GLXMA				GLXMA				
BBCH Scale	BSOY				BSOY				BSOY				
Crop Scientific Name	Glycine max				Glycine max				Glycine max				
Crop Name	Soybean				Soybean				Soybean				
Rating Date	7-3-2009	7-3-2009	7-3-2009	7-3-2009	7-31-2009	7-31-2009	7-31-2009	7-31-2009	10-5-2009				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	YIELD				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	BU 13.5%				
Number of Subsamples	1	1	1	1	1	1	1	1	1				
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK					
Days After First/Last Applic.	53 7	53 7	53 7	53 7	81 35	81 35	81 35	81 35	147 101				
Plant-Eval Interval	53 DP-1	53 DP-1	53 DP-1	53 DP-1	81 DP-1	81 DP-1	81 DP-1	81 DP-1	147 DP-1				
Days After Emergence	46 DE-	46 DE-	46 DE-	46 DE-	74 DE-	74 DE-	74 DE-	74 DE-	140 DE				
ARM Action Codes	P	P	P	P	P	P	P	P	TY1				
Number of Decimals	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
6	SONIC	3.22	oz/a	PRE	0	99	99	99	0	99	98	99	67
	AMS	2.5	% v/v	LP									
	DURANGO DMA	24	fl oz/a	LP									
7	VALOR XLT	3	oz/a	PRE	0	99	99	99	0	99	96	99	65
	AMS	2.5	% v/v	LP									
	ROUNDUP POWERMAX	22	fl oz/a	LP									
8	AMS	2.5	% v/v	LP	0	99	99	99	0	99	93	99	59
	TOUCHDOWN TOTAL	24	fl oz/a	LP									
9	ENVIVE	3.5	oz/a	PRE	0	99	99	99	0	99	98	99	68
	N-PAK AMS LIQUID	2.5	% v/v	LP									
	TOUCHDOWN TOTAL	24	fl oz/a	LP									
10	CANOPY EX	1.5	oz/a	PRE	0	99	99	99	0	99	96	99	71
	N-PAK AMS LIQUID	2.5	% v/v	LP									
	TOUCHDOWN TOTAL	24	fl oz/a	LP									
	LSD (P=.05)				0.0	0.0	0.0	0.0	0.0	0.0	5.3	0.0	2.9
	Standard Deviation				0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.0	1.7
	CV				0.0	0.0	0.0	0.0	0.0	0.0	3.22	0.0	2.59
	Bartlett's X2				0.0	0.0	0.0	0.0	0.0	0.0	3.308	0.0	8.968
	P(Bartlett's X2)				.	.	.	.	.	.	0.769	.	0.44
	Replicate F				0.000	0.000	0.000	0.000	0.000	0.000	2.115	0.000	9.083
	Replicate Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.1496	1.0000	0.0019
	Treatment F				0.000	0.000	0.000	0.000	0.000	0.000	3.796	0.000	40.912
	Treatment Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0077	1.0000	0.0001



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

## SOYBEAN PREEMERGENCE & POSTEMGERENCE

Trial ID: S9030                      Protocol ID: SYNGENTA SOYBEAN HAJ0  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:                              Investigator: Charles H Slack  
Sponsor Contact: SCOTT CULLEY

### 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

### Crop Code

GLXMA, BSOY, Glycine max, = US

### Rating Type

YIELD = yield

### Rating Unit

PERCENT = percent

### Plant-Eval Interval

25 DP-1 = 1 5-11-2009

39 DP-1 = 1 5-11-2009

53 DP-1 = 1 5-11-2009

81 DP-1 = 1 5-11-2009

147 DP-1 = 1 5-11-2009

### ARM Action Codes

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

TY1 = 3.838125\*[C19]

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

SOYBEAN PREEMERGENCE & POSTEMGERENCE

Trial ID: S9030                      Protocol ID: SYNGENTA SOYBEAN HAJ0  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: SCOTT CULLEY

**General Trial Information**

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-11-2009

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

**Trial Location**

**Personnel**

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

**Other Personnel**

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

**Crop Description**

<b>Crop 1:</b> GLXMA    Glycine max    Soybean	
<b>Variety:</b> AGR 4403	
<b>BBCH Scale:</b> BSOY	<b>Planting Date:</b> 5-11-2009
<b>Planting Method:</b> DRILLE    drilled	<b>Rate, Unit:</b> 200000    S/A
<b>Depth, Unit:</b> 1.25    IN	
<b>Row Spacing, Unit:</b> 7.5    IN	
<b>Seed Bed:</b> MEDIUM    medium	<b>Soil Temperature, Unit:</b> 63    F
<b>Soil Moisture:</b> GOOD    good	<b>Emergence Date:</b> 5-18-2009
<b>Harvest Date:</b> 10-5-2009	<b>Harvest Equipment:</b> HEGE COMBINE
<b>Harvested Width, Unit:</b> 5    FT	<b>Harvested Length, Unit:</b> 37    FT

**Pest Description**

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

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

**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

### 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:** 17      **Fert. Level:** E            excellent  
**Soil Drainage:** E            excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP      **Distance, Unit:** 2 MI

### Application Description

	A	B	C	D
<b>Application Date:</b>	5-11-2009	6-5-2009	6-5-2009	6-26-2009
<b>Time of Day:</b>	11 AM	11 AM	11 AM	11 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	2TR	LP	+21D
<b>Application Placement:</b>	BROSOI	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	65 F	70 F	70 F	80 F
<b>% Relative Humidity:</b>	50	46	46	58
<b>Wind Velocity, Unit:</b>	4 MPH	6 MPH	6 MPH	3 MPH
<b>Wind Direction:</b>	N	NW	NW	N
<b>Soil Temperature, Unit:</b>	63 F	67 F	67 F	77 F
<b>Soil Moisture:</b>	GOOD	GOOD	GOOD	GOOD
<b>% Cloud Cover:</b>	0	0	0	0

### Crop Stage At Each Application

	A	B	C	D
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
<b>Height, Unit:</b>	5 IN	5 IN	7 IN	7 IN

### Pest Stage At Each Application

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

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

### Application Equipment

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



## 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	AMACH		SETFA	AMBTR	AMACH			
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>			
Pest Name		Giant foxtail	Giant ragweed	Smooth pigweed		Giant foxtail	Giant ragweed	Smooth pigweed			
Crop Code	GLXMA				GLXMA						
BBCH Scale	BSOY				BSOY						
Crop Scientific Name	Glycine max				Glycine max						
Crop Name	Soybean				Soybean						
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL			
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
Number of Subsamples	1	1	1	1	1	1	1	1			
SE Description	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	AFT POST	AFT POST	AFT POST	AFT POST			
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK			
ARM Action Codes	P	P	P	P	P	P	P	P			
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
9	AUTHORITY FIRST	3.2 oz/a	PRE	0	75	95	96	0	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	+28D								
	AMS	3.7 % v/v	+28D								
10	PURSUIT PLUS	2.5 pt/a	PRE	0	96	96	98	0	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	+28D								
	AMS	3.7 % v/v	+28D								
11	VALOR SX	2.5 oz/a	PRE	0	87	73	95	0	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	+28D								
	AMS	3.7 % v/v	+28D								
12	VALOR XLT	3 oz/a	PRE	0	91	95	98	0	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	+28D								
	AMS	3.7 % v/v	+28D								
13	V-10233	3.35 oz/a	PRE	0	95	85	96	0	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	+28D								
	AMS	3.7 % v/v	+28D								
14	VALOR SX	2 oz/a	PRE	0	83	73	95	0	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	+28D								
	AMS	3.7 % v/v	+28D								
15	STALWART C	1.5 pt/a	+28D	0	0	0	0	0	99	99	99
	ROUNDUP POWERMAX	22 fl oz/a	+28D								
	AMS	3.75 % v/v	+28D								
	LSD (P=.05)			0.0	11.1	9.5	2.7	0.0	0.0	0.0	0.0
	Standard Deviation			0.0	6.6	5.7	1.6	0.0	0.0	0.0	0.0
	CV			0.0	9.44	8.03	2.06	0.0	0.0	0.0	0.0
	Bartlett's X2			0.0	13.525	17.421	0.0	0.0	0.0	0.0	0.0
	P(Bartlett's X2)			.	0.14	0.066	1.00	.	.	.	.
	Replicate F			0.000	2.167	0.986	2.970	0.000	0.000	0.000	0.000
	Replicate Prob(F)			1.0000	0.1333	0.3857	0.0677	1.0000	1.0000	1.0000	1.0000
	Treatment F			0.000	96.411	130.210	1899.417	0.000	0.000	0.000	0.000
	Treatment Prob(F)			1.0000	0.0001	0.0001	0.0001	1.0000	1.0000	1.0000	1.0000

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

### SOYBEAN PREEMERGENCE & POSTEMERGENCE II

Trial ID: S9031                      Protocol ID: VALENT SOY PRE&POST  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:                              Investigator: Charles H Slack  
   Sponsor Contact: JOHN CRANMER

#### Pest Type

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

#### Pest Code

SETFA, Setaria faberi, = US

AMBTR, Ambrosia trifida, = US

AMACH, Amaranthus hybridus, = 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 & POSTEMERGENCE II

Trial ID: S9031      Protocol ID: VALENT SOY PRE&POST  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact: JOHN CRANMER

#### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-11-2009

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

#### Trial Location

#### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

#### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

#### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4303  
**BBCH Scale:** BSOY      **Planting Date:** 5-11-2009  
**Planting Method:** DRILLE drilled      **Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDIUM medium      **Soil Temperature, Unit:** 64 F  
**Soil Moisture:** NORMAL normal      **Emergence Date:** 5-17-2009

#### Pest Description

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



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

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

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

### Site and Design

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 17 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

### Application Description

	A	B
<b>Application Date:</b>	5-11-2009	6-15-2009
<b>Time of Day:</b>	11 AM	11 AM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	+ 28D
<b>Application Placement:</b>	BROSOL	BROFOL
<b>Applied By:</b>	C H SLACK	SARA CARTER
<b>Air Temperature, Unit:</b>	75 F	76 F
<b>% Relative Humidity:</b>	30	74
<b>Wind Velocity, Unit:</b>	6 MPH	2 MPH
<b>Wind Direction:</b>	SW	SW
<b>Soil Temperature, Unit:</b>	64 F	75 F
<b>Soil Moisture:</b>	NORMAL	EXCELL
<b>% Cloud Cover:</b>	10	10

### Crop Stage At Each Application

	A	B
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA BSOY	GLXMA BSOY
<b>Stage Scale Used:</b>		V4

### Pest Stage At Each Application

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

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

### Application Equipment

	A	B
<b>Appl. Equipment:</b>	ATV	BACKPACK
<b>Operating Pressure, Unit:</b>	30 PSI	30 PSI
<b>Nozzle Type:</b>	FLAT FAN	FLAT FAN
<b>Nozzle Size:</b>	8002 DG	8004 DG
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN
<b>Boom Length, Unit:</b>	10 FT	10 FT
<b>Boom Height, Unit:</b>	30 IN	30 IN
<b>Ground Speed, Unit:</b>	4 MPH	3.5 MPH
<b>Carrier:</b>	WATER	WATER
<b>Spray Volume, Unit:</b>	24 GPA	24 GPA
<b>Propellant:</b>	CO2	CO2



## 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	AMACH		SETFA	AMBTR	AMACH
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>
Pest Name		Giant foxtail	Giant ragweed	Smooth pigweed		Giant foxtail	Giant ragweed	Smooth pigweed
Crop Code	GLXMA				GLXMA			
BBCH Scale	BSOY				BSOY			
Crop Scientific Name	Glycine max				Glycine max			
Crop Name	Soybean				Soybean			
Rating Date	5-29-2009	5-29-2009	5-29-2009	5-29-2009				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1	1	1	1	1
SE Description	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	AFT POST	AFT POST	AFT POST	AFT POST
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	16 16	16 16	16 16	16 16				
Plant-Eval Interval	17 DP-1	17 DP-1	17 DP-1	17 DP-1				
Days After Emergence	9 DE-1	9 DE-1	9 DE-1	9 DE-1				
ARM Action Codes	P	P	P	P	P	P	P	P
Number of Decimals	0	0	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4	5	6	7	8
7	IGNITE 280	22	oz/a	EP	0	0	0	0	0	99	99	99
	AMS	8.5	lb/100 gal	EP								
	IGNITE 280	22	oz/a	MP								
	AMS	8.5	lb/100 gal	MP								
8	SHARPEN	2	fl oz/a	PRE	0	23	90	77	0	99	99	99
	IGNITE 280	22	oz/a	MP								
	AMS	8.5	lb/100 gal	MP								
	IGNITE 280	22	oz/a	LP								
	AMS	8.5	lb/100 gal	LP								
9	PREFIX	2	pt/a	PRE	0	99	92	92	0	99	99	99
	IGNITE 280	22	oz/a	MP								
	AMS	8.5	lb/100 gal	MP								
	IGNITE 280	22	oz/a	LP								
	AMS	8.5	lb/100 gal	LP								
10	VALOR XLT	3	oz/a	PRE	0	77	82	90	0	99	99	99
	IGNITE 280	22	oz/a	MP								
	AMS	8.5	lb/100 gal	MP								
	IGNITE 280	22	oz/a	LP								
	AMS	8.5	lb/100 gal	LP								
	LSD (P=.05)				0.0	6.6	6.8	3.4	0.0	0.0	0.0	0.0
	Standard Deviation				0.0	3.8	4.0	2.0	0.0	0.0	0.0	0.0
	CV				0.0	7.72	6.75	3.18	0.0	0.0	0.0	0.0
	Bartlett's X2				0.0	1.034	11.832	0.871	0.0	0.0	0.0	0.0
	P(Bartlett's X2)				.	0.905	0.037*	0.351	.	.	.	.
	Replicate F				0.000	0.057	0.667	1.465	0.000	0.000	0.000	0.000
	Replicate Prob(F)				1.0000	0.9451	0.5255	0.2573	1.0000	1.0000	1.0000	1.0000
	Treatment F				0.000	311.768	322.051	1435.837	0.000	0.000	0.000	0.000
	Treatment Prob(F)				1.0000	0.0001	0.0001	0.0001	1.0000	1.0000	1.0000	1.0000

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

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	AMACH
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>
Pest Name		Giant foxtail	Giant ragweed	Smooth pigweed
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
SE Description	AFT POST	AFT POST	AFT POST	AFT POST
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.				
Plant-Eval Interval				
Days After Emergence				
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	9	10	11	12
1	UNTREATED				0	0	0	0
2	VALOR	2 oz/a		PRE	0	99	99	99
	IGNITE 280	22 oz/a		MP				
	AMS	8.5 lb/100 gal		MP				
	IGNITE 280	22 oz/a		LP				
	AMS	8.5 lb/100 gal		LP				
3	VALOR	2 oz/a		PRE	0	99	90	99
	IGNITE 280	36 oz/a		MP				
	AMS	8.5 lb/100 gal		MP				
4	AUTHORITY FIRST	4 oz/a		PRE	0	99	99	99
	IGNITE 280	22 oz/a		MP				
	AMS	8.5 lb/100 gal		MP				
	IGNITE 280	22 oz/a		LP				
	AMS	8.5 lb/100 gal		LP				
5	AUTHORITY FIRST	4 oz/a		PRE	0	99	90	99
	IGNITE 280	36 oz/a		MP				
	AMS	8.5 lb/100 gal		MP				
6	IGNITE 280	36 oz/a		MP	0	99	85	99
	AMS	8.5 lb/100 gal		MP				

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

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	AMACH
Pest Scientific Name		Setaria faberi	Ambrosia trifida	Amaranthus hybridus
Pest Name		Giant foxtail	Giant ragweed	Smooth pigweed
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Number of Subsamples	1	1	1	1
SE Description	AFT POST	AFT POST	AFT POST	AFT POST
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.				
Plant-Eval Interval				
Days After Emergence				
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Growth Stage	9	10	11	12
7	IGNITE 280	22	oz/a	EP	0	99	99	99
	AMS	8.5	lb/100 gal	EP				
	IGNITE 280	22	oz/a	MP				
	AMS	8.5	lb/100 gal	MP				
8	SHARPEN	2	fl oz/a	PRE	0	99	99	99
	IGNITE 280	22	oz/a	MP				
	AMS	8.5	lb/100 gal	MP				
	IGNITE 280	22	oz/a	LP				
	AMS	8.5	lb/100 gal	LP				
9	PREFIX	2	pt/a	PRE	0	99	96	99
	IGNITE 280	22	oz/a	MP				
	AMS	8.5	lb/100 gal	MP				
	IGNITE 280	22	oz/a	LP				
	AMS	8.5	lb/100 gal	LP				
10	VALOR XLT	3	oz/a	PRE	0	99	96	99
	IGNITE 280	22	oz/a	MP				
	AMS	8.5	lb/100 gal	MP				
	IGNITE 280	22	oz/a	LP				
	AMS	8.5	lb/100 gal	LP				
	LSD (P= .05)				0.0	0.0	4.7	0.0
	Standard Deviation				0.0	0.0	2.8	0.0
	CV				0.0	0.0	3.23	0.0
	Bartlett's X2				0.0	0.0	1.866	0.0
	P(Bartlett's X2)				.	.	0.76	.
	Replicate F				0.000	0.000	0.607	0.000
	Replicate Prob(F)				1.0000	1.0000	0.5558	1.0000
	Treatment F				0.000	0.000	363.213	0.000
	Treatment Prob(F)				1.0000	1.0000	0.0001	1.0000

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

## SOYBEAN PREEMERGENCE & POSTEMERGENCE LIBERTY

Trial ID: S9032      Protocol ID: BAYER HP09NARMRC  
Location: LEXINGTON, KY      Study Director: CHARLES SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact: DAVE LAMORE

### 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

### Crop Code

GLXMA, BSOY, Glycine max, = US

### Rating Unit

PERCENT = percent

### Plant-Eval Interval

17 DP-1 = 1 5-12-2009

### 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 & POSTEMERGENCE LIBERTY

Trial ID: S9032      Protocol ID: BAYER HP09NARMRC  
Location: LEXINGTON, KY      Study Director: CHARLES SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact: DAVE LAMORE

### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-12-2009

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

### Trial Location

### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** S070147  
**BBCH Scale:** BSOY      **Planting Date:** 5-12-2009  
**Planting Method:** DRILLE drilled      **Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDIUM medium      **Soil Temperature, Unit:** 62 F  
**Soil Moisture:** NORMAL normal      **Emergence Date:** 5-20-2009

### Pest Description

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



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

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

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

### Site and Design

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 17 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

### Application Description

	A	B	C	D
<b>Application Date:</b>	5-13-2009	5-29-2009	6-5-2009	6-23-2009
<b>Time of Day:</b>	11 AM	10 AM	11 AM	11 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	EP	MP	LP
<b>Application Placement:</b>	BROSOI	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	SARA CARTER	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	61 F	65 F	70 F	80 F
<b>% Relative Humidity:</b>	78	40	46	58
<b>Wind Velocity, Unit:</b>	6 MPH	6 MPH	6 MPH	3 MPH
<b>Wind Direction:</b>	SSE	NW	NW	N
<b>Soil Temperature, Unit:</b>	63 F	72 F	69 F	79 F
<b>Soil Moisture:</b>	NORMAL	GOOD	GOOD	GOOD
<b>% Cloud Cover:</b>	95	0	0	0

### Crop Stage At Each Application

	A	B	C	D
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
<b>Height, Unit:</b>	2 IN	4 IN	6 IN	

### Pest Stage At Each Application

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

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

### Application Equipment

	A	B	C	D
<b>Appl. Equipment:</b>	BACKPACK	ATV	ATV	ATV
<b>Operating Pressure, Unit:</b>	30 PSI	30 PSI	30 PSI	30 PSI
<b>Nozzle Type:</b>	FLAT FAN	FLAT FAN	FLAT FAN	FLAT FAN
<b>Nozzle Size:</b>	8004 DG	8004 DG	8004 DG	8004 DG
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN	20 IN	20 IN
<b>Boom Length, Unit:</b>	10 FT	10 FT	10 FT	10 FT
<b>Boom Height, Unit:</b>	25 IN	30 IN	30 IN	30 IN
<b>Ground Speed, Unit:</b>	3.5 MPH	4 MPH	4 MPH	4 MPH
<b>Carrier:</b>	WATER	WATER	WATER	WATER
<b>Spray Volume, Unit:</b>	24 GPA	24 GPA	24 GPA	24 GPA
<b>Propellant:</b>	CO2	CO2	CO2	CO2



## 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	AMACH		SETFA	AMBTR	AMACH					
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>					
Pest Name		Giant foxtail	Giant ragweed	Smooth pigweed		Giant foxtail	Giant ragweed	Smooth pigweed					
Crop Code	GLXMA					GLXMA			GLXMA				
BBCH Scale	BSOY					BSOY			BSOY				
Crop Scientific Name	Glycine max					Glycine max			Glycine max				
Crop Name	Soybean					Soybean			Soybean				
Rating Date	5-12-2009	5-12-2009	5-12-2009	5-12-2009	6-19-2009	6-19-2009	6-19-2009	6-19-2009	7-3-2009				
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1	1	1				
SE Description	AT POST	AT POST	AT POST	AT POST	AFT POST	AFT POST	AFT POST	AFT POST	AFT POST				
Rating Timing	3 WEEK	3 WEEK	3 WEEK	3 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK				
Days After First/Last Applic.	-1 -1	-1 -1	-1 -1	-1 -1	37 14	37 14	37 14	37 14	51 28				
Plant-Eval Interval	0 DP-1	0 DP-1	0 DP-1	0 DP-1	38 DP-1	38 DP-1	38 DP-1	38 DP-1	52 DP-1				
Days After Emergence	-8 DE-	-8 DE-	-8 DE-	-8 DE-	30 DE-	30 DE-	30 DE-	30 DE-	44 DE-				
ARM Action Codes	P	P	P	P	P	P	P	P	P				
Number of Decimals	0	0	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4	5	6	7	8	9
6	AUTHORITY ASSIST IGNITE 280 AMS	6 fl oz/a 22 fl oz/a 3.75 % v/v	PRE MP MP		5	77	92	99	0	99	99	99	0
7	CHECK UNTREATED				0	0	0	0	0	0	0	0	0
	LSD (P=.05)				3.0	7.1	3.7	1.6	0.0	0.0	0.0	0.0	0.0
	Standard Deviation				1.7	4.0	2.1	0.9	0.0	0.0	0.0	0.0	0.0
	CV				33.33	9.73	4.0	1.55	0.0	0.0	0.0	0.0	0.0
	Bartlett's X2				0.0	0.0	0.127	0.0	0.0	0.0	0.0	0.0	0.0
	P(Bartlett's X2)				.	.	0.988	.	.	.	.	.	.
	Replicate F				0.000	0.300	0.874	1.000	0.000	0.000	0.000	0.000	0.000
	Replicate Prob(F)				1.0000	0.7462	0.4422	0.3966	1.0000	1.0000	1.0000	1.0000	1.0000
	Treatment F				34.000	279.100	1647.763	10952.876	0.000	0.000	0.000	0.000	0.000
	Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	1.0000	1.0000	1.0000	1.0000	1.0000

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

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	SETFA	AMBTR	AMACH		SETFA	AMBTR	AMACH				
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Amaranthus hyb>		Setaria faberi	Ambrosia trifi>	Amaranthus hyb>				
Pest Name	Giant foxtail	Giant ragweed	Smooth pigweed		Giant foxtail	Giant ragweed	Smooth pigweed				
Crop Code				GLXMA							
BBCH Scale				BSOY							
Crop Scientific Name				Glycine max							
Crop Name				Soybean							
Rating Date	7-3-2009	7-3-2009	7-3-2009	7-31-2009	7-31-2009	7-31-2009	7-31-2009				
Rating Type	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1				
SE Description											
Rating Timing	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK				
Days After First/Last Applic.	51 28	51 28	51 28	79 56	79 56	79 56	79 56				
Plant-Eval Interval	52 DP-1	52 DP-1	52 DP-1	80 DP-1	80 DP-1	80 DP-1	80 DP-1				
Days After Emergence	44 DE-	44 DE-	44 DE-	72 DE-	72 DE-	72 DE-	72 DE-				
ARM Action Codes	P	P	P	P	P	P	P				
Number of Decimals	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	10	11	12	13	14	15	16
1	CANOPY EX	1.5 oz/a		PRE	99	99	99	0	99	99	99
	IGNITE 280	22 fl oz/a		MP							
	SYNCHRONY XP	0.375 oz/a		MP							
	AMS	3 lb ai/a		MP							
2	ENVIVE	3.5 oz/a		PRE	99	99	99	0	99	99	99
	IGNITE 280	22 fl oz/a		MP							
	SYNCHRONY XP	0.375 oz/a		MP							
	AMS	3 lb ai/a		MP							
3	CANOPY	4 oz/a		PRE	99	99	99	0	99	99	99
	IGNITE 280	22 fl oz/a		MP							
	SYNCHRONY XP	0.375 oz/a		MP							
	AMS	3 lb ai/a		MP							
4	IGNITE 280	22 fl oz/a		MP	99	99	99	0	99	99	99
	SYNCHRONY XP	0.375 oz/a		MP							
	AMS	3 lb ai/a		MP							
5	IGNITE 280	22 fl oz/a		MP	99	99	99	0	99	99	99
	CLASSIC	0.5 oz/a		MP							
	AMS	3 lb ai/a		MP							



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

## SOYBEAN PREEMERGENCE & POSTEMERGENCE LIBERTY II

Trial ID: S9033                      Protocol ID: DUPONT 294-09-01  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:                              Investigator: Charles H Slack  
Sponsor Contact: HELEN FLANIGAN

### 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

### Crop Code

GLXMA, BSOY, Glycine max, = US

### Rating Unit

PERCENT = percent

### Plant-Eval Interval

0 DP-1 = 1 5-12-2009

38 DP-1 = 1 5-12-2009

52 DP-1 = 1 5-12-2009

80 DP-1 = 1 5-12-2009

### 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 & POSTEMERGENCE LIBERTY II

Trial ID: S9033      Protocol ID: DUPONT 294-09-01  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact: HELEN FLANIGAN

#### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-12-2009

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

#### Trial Location

#### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

#### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

#### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** S070147  
**BBCH Scale:** BSOY      **Planting Date:** 5-12-2009  
**Planting Method:** DRILLE drilled      **Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDIUM medium      **Soil Temperature, Unit:** 63 F  
**Soil Moisture:** NORMAL normal      **Emergence Date:** 5-20-2009

#### Pest Description

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



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

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

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

### Site and Design

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 17 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

### Application Description

	A	B
<b>Application Date:</b>	5-13-2009	6-5-2009
<b>Time of Day:</b>	11 AM	11 AM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	MP
<b>Application Placement:</b>	BROSOI	BROFOL
<b>Applied By:</b>	SARA CARTER	C H SLACK
<b>Air Temperature, Unit:</b>	61 F	70 F
<b>% Relative Humidity:</b>	78	46
<b>Wind Velocity, Unit:</b>	6 MPH	6 MPH
<b>Wind Direction:</b>	SSE	NW
<b>Soil Temperature, Unit:</b>	63 F	69 F
<b>Soil Moisture:</b>	NORMAL	GOOD
<b>% Cloud Cover:</b>	95	0

### Crop Stage At Each Application

	A	B
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA BSOY	GLXMA BSOY
<b>Stage Scale Used:</b>		2 TR

### Pest Stage At Each Application

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

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

### Application Equipment

	A	B
<b>Appl. Equipment:</b>	BACKPACK	ATV
<b>Operating Pressure, Unit:</b>	30 PSI	30 PSI
<b>Nozzle Type:</b>	FLAT FAN	FLAT FAN
<b>Nozzle Size:</b>	8004 DG	8004 DG
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN
<b>Boom Length, Unit:</b>	10 FT	10 FT
<b>Boom Height, Unit:</b>	30 IN	30 IN
<b>Ground Speed, Unit:</b>	3.5 MPH	4 MPH
<b>Carrier:</b>	WATER	WATER
<b>Spray Volume, Unit:</b>	24 GPA	24 GPA
<b>Propellant:</b>	CO2	CO2



## 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	AMACH	CHEAL	AMBTR		SETFA	AMACH				
Pest Scientific Name		Setaria faberi	Amaranthus hyb>	Chenopodium al>	Ambrosia trifi>		Setaria faberi	Amaranthus hyb>				
Pest Name		Giant foxtail	Smooth pigweed	Common lambsqu>	Giant ragweed		Giant foxtail	Smooth pigweed				
Crop Code	GLXMA					GLXMA						
BBCH Scale	BSOY					BSOY						
Crop Scientific Name	Glycine max					Glycine max						
Crop Name	Soybean					Soybean						
Rating Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Number of Subsamples	1	1	1	1	1	1	1	1				
SE Description	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST	AFT POST	AFT POST	AFT POST				
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK	4 WEEK				
ARM Action Codes	P	P	P	P	P	P	P	P				
Number of Decimals	0	0	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4	5	6	7	8
8	STALWART C	1.5	pt/a	+28D	0	0	0	0	0	0	99	99
	ROUNDUP POWERMAX	22	fl oz/a	+28D								
	AMS	3.75	% v/v	+28D								
	LSD (P=.05)				0.0	4.8	2.9	4.0	7.1	0.0	0.0	0.0
	Standard Deviation				0.0	2.7	1.7	2.3	4.1	0.0	0.0	0.0
	CV				0.0	4.76	2.77	3.72	7.27	0.0	0.0	0.0
	Bartlett's X2				0.0	1.697	0.119	1.717	3.95	0.0	0.0	0.0
	P(Bartlett's X2)				.	0.428	0.942	0.19	0.267	.	.	.
	Replicate F				0.000	0.679	0.914	1.808	1.553	0.000	0.000	0.000
	Replicate Prob(F)				1.0000	0.5230	0.4234	0.2002	0.2460	1.0000	1.0000	1.0000
	Treatment F				0.000	926.453	2695.347	1489.410	396.045	0.000	0.000	0.000
	Treatment Prob(F)				1.0000	0.0001	0.0001	0.0001	0.0001	1.0000	1.0000	1.0000

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

Pest Type	W Weed	W Weed
Pest Code	CHEAL	AMBTR
Pest Scientific Name	Chenopodium al>	Ambrosia trifi>
Pest Name	Common lambsqu>	Giant ragweed
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
Number of Subsamples	1	1
SE Description	AFT POST	AFT POST
Rating Timing	4 WEEK	4 WEEK
ARM Action Codes	P	P
Number of Decimals	0	0

Trt	Treatment	Rate	Growth	9	10
No.	Name	Rate	Unit	Stage	
1	CHECK UNTREATED				0
2	ROUNDUP POWERMAX	22 fl oz/a	+28D		99
	AMS	3.7 % v/v	+28D		99
3	VALOR SX	2.5 oz/a	PRE		99
	ROUNDUP POWERMAX	22 fl oz/a	+28D		99
	AMS	3.7 % v/v	+28D		99
4	VALOR XLT	3 oz/a	PRE		99
	ROUNDUP POWERMAX	22 fl oz/a	+28D		99
	AMS	3.7 % v/v	+28D		99
5	GANGSTER FR	0.4 oz/a	PRE		99
	GANGSTER V	2 oz/a	PRE		99
	ROUNDUP POWERMAX	22 fl oz/a	+28D		99
	AMS	3.7 % v/v	+28D		99
6	V-10233	3 oz/a	PRE		99
	ROUNDUP POWERMAX	22 fl oz/a	+28D		99
	AMS	3.7 % v/v	+28D		99
7	VALOR SX	2 oz/a	PRE		99
	ROUNDUP POWERMAX	22 fl oz/a	+28D		99
	AMS	3.7 % v/v	+28D		99

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

Pest Type		W Weed	W Weed		
Pest Code		CHEAL	AMBTR		
Pest Scientific Name		Chenopodium al>	Ambrosia trifi>		
Pest Name		Common lambsqu>	Giant ragweed		
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Type		CONTROL	CONTROL		
Rating Unit		PERCENT	PERCENT		
Number of Subsamples		1	1		
SE Description		AFT POST	AFT POST		
Rating Timing		4 WEEK	4 WEEK		
ARM Action Codes		P	P		
Number of Decimals		0	0		

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Trt	Treatment	Rate	Growth	9	10
No.	Name	Rate	Unit	Stage	
8	STALWART C	1.5	pt/a	+28D	99
	ROUNDUP POWERMAX	22	fl oz/a	+28D	99
	AMS	3.75	% v/v	+28D	
	LSD (P=.05)				0.0
	Standard Deviation				0.0
	CV				0.0
	Bartlett's X2				0.0
	P(Bartlett's X2)				.
	Replicate F				0.000
	Replicate Prob(F)				1.0000
	Treatment F				0.000
	Treatment Prob(F)				1.0000

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

### SOYBEAN PREEMERGENCE & POSTEMERGENCE III

Trial ID: S9034                      Protocol ID: VALENT SOY PRE&POST II  
Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
Project ID:                              Investigator: Charles H Slack  
Sponsor Contact:

#### 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

AMBTR, Ambrosia trifida, = 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 & POSTEMERGENCE III

Trial ID: S9034      Protocol ID: VALENT SOY PRE&POST II  
 Location: LEXINGTON, KY      Study Director: CHARLES H. SLACK  
 Project ID:      Investigator: Charles H Slack  
 Sponsor Contact:

#### General Trial Information

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-21-2009

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

#### Trial Location

#### Personnel

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

#### Other Personnel

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

#### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4303  
**BBCH Scale:** BSOY      **Planting Date:** 5-21-2009  
**Planting Method:** DRILLE drilled      **Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** MEDIUM medium      **Soil Temperature, Unit:** 64 F  
**Soil Moisture:** NORMAL normal      **Emergence Date:** 5-27-2009

#### Pest Description

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



# Plant and Soil Science, U of KY

## Weed Science Research

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

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

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

### Site and Design

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

### Soil Description

**Description Name:** MAURY  
**% Sand:** 6      **% OM:** 2.6      **Texture:** SIL            silt loam  
**% Silt:** 62      **pH:** 6.4      **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32      **CEC:** 17      **Fert. Level:** E            excellent  
**Soil Drainage:** E            excellent

Analyzed By:

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP      **Distance, Unit:** 1.25 MI

### Application Description

	A	B
<b>Application Date:</b>	5-21-2009	6-18-2009
<b>Time of Day:</b>	5 PM	10 AM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	+28D
<b>Application Placement:</b>	BROSOI	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	81 F	75 F
<b>% Relative Humidity:</b>	34	82
<b>Wind Velocity, Unit:</b>	4 MPH	3 MPH
<b>Wind Direction:</b>	SE	WSW
<b>Soil Temperature, Unit:</b>	64 F	76 F
<b>Soil Moisture:</b>	NORMAL	EXCELL
<b>% Cloud Cover:</b>	5	99

### Crop Stage At Each Application

# Plant and Soil Science, U of KY

## Weed Science Research

	A	B
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA BSOY	GLXMA BSOY
<b>Stage Scale Used:</b>	V4	

### Pest Stage At Each Application

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

### Application Equipment

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





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

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9
10	VALOR	0.0625	lb ai/a	PRE	3	3	0	3	0	2	0	0	1
	DUAL II MAGNUM	1.25	lb ai/a	V3									
	ROUNDUP POWERMAX	0.75	lb ae/a	V3									
	AMS PREMIUM BLEND	2	% w/v	V3									
11	VALOR	0.0625	lb ai/a	PRE	0	0	0	10	10	10	0	0	1
	COBRA	0.195	lb ai/a	V6									
	COC	0.25	% v/v	V6									
12	VALOR	0.0625	lb ai/a	PRE	0	0	0	10	10	10	0	0	1
	COBRA	0.195	lb ai/a	V6									
	COC	0.25	% v/v	V6									
	MON 63410	1.125	lb ai/a	V6									
	LSD (P=.05)				3.2	3.2	0.0	2.3	0.8	1.6	0.0	0.0	0.7
	Standard Deviation				2.2	2.2	0.0	1.6	0.6	1.1	0.0	0.0	0.5
	CV				192.18	192.18	0.0	39.59	34.02	28.48	0.0	0.0	94.28
	Bartlett's X2				2.395	2.395	0.0	7.278	0.685	3.077	0.0	0.0	2.55
	P(Bartlett's X2)				0.88	0.88	.	0.401	0.408	0.799	.	.	0.923
	Replicate F				3.075	3.075	0.000	1.860	1.000	2.868	0.000	0.000	1.750
	Replicate Prob(F)				0.0411	0.0411	1.0000	0.1555	0.4051	0.0513	1.0000	1.0000	0.1759
	Treatment F				1.223	1.223	0.000	16.202	188.703	30.677	0.000	0.000	2.250
	Treatment Prob(F)				0.3111	0.3111	1.0000	0.0001	0.0001	0.0001	1.0000	1.0000	0.0356

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

Pest Type	W Weed	W Weed	W Weed	W Weed					
Pest Code	AMACH	CHEAL	AMACH	CHEAL					
Pest Scientific Name	Amaranthus hyb>	Chenopodium al>	Amaranthus hyb>	Chenopodium al>					
Pest Name	Smooth pigweed	Common lambsqu>	Smooth pigweed	Common lambsqu>					
Crop Code									
BBCH Scale									
Crop Scientific Name									
Crop Name									
Rating Date	6-24-2009	6-24-2009	7-5-2009	7-5-2009	10-20-2009				
Rating Type	CONTOL	CONTROL	CONTROL	CONTROL	YIELD				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	BU				
Number of Subsamples	1	1	1	1	1				
Days After First/Last Applic.	43 6	43 6	54 17	54 17	162 124				
Trt-Eval Interval	20 DA-B	20 DA-B	17 DA-C	17 DA-C					
Plant-Eval Interval	44 DP-1	44 DP-1	55 DP-1	55 DP-1	162 DP-1				
Days After Emergence					155 DE				
ARM Action Codes	P	P	P	P	TY1				
Number of Decimals	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	10	11	12	13	18
1	VALOR	0.0313	lb ai/a	PRE	99	99	99	98	87
	MON 63410	1.125	lb ai/a	V3					
	ROUNDUP POWERMAX	0.75	lb ae/a	V3					
	AMS PREMIUM BLEND	2	% w/v	V3					
2	VALOR	0.0625	lb ai/a	PRE	99	99	99	99	94
	MON 63410	1.125	lb ai/a	V3					
	ROUNDUP POWERMAX	0.75	lb ae/a	V3					
	AMS PREMIUM BLEND	2	% w/v	V3					
3	VALOR	0.0313	lb ai/a	PRE	99	99	51	38	84
	MON 63410	1.125	lb ai/a	V6					
	ROUNDUP POWERMAX	0.75	lb ae/a	V6					
	AMS PREMIUM BLEND	2	% w/v	V6					
4	VALOR	0.0625	lb ai/a	PRE	99	99	55	49	90
	MON 63410	1.125	lb ai/a	V6					
	ROUNDUP POWERMAX	0.75	lb ae/a	V6					
	AMS PREMIUM BLEND	2	% w/v	V6					

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

Pest Type	W Weed	W Weed	W Weed	W Weed					
Pest Code	AMACH	CHEAL	AMACH	CHEAL					
Pest Scientific Name	Amaranthus hyb>	Chenopodium al>	Amaranthus hyb>	Chenopodium al>					
Pest Name	Smooth pigweed	Common lambsqu>	Smooth pigweed	Common lambsqu>					
Crop Code									
BBCH Scale									
Crop Scientific Name									
Crop Name									
Rating Date	6-24-2009	6-24-2009	7-5-2009	7-5-2009	10-20-2009				
Rating Type	CONTTOL	CONTROL	CONTROL	CONTROL	YIELD				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	BU				
Number of Subsamples	1	1	1	1	1				
Days After First/Last Applic.	43 6	43 6	54 17	54 17	162 124				
Trt-Eval Interval	20 DA-B	20 DA-B	17 DA-C	17 DA-C					
Plant-Eval Interval	44 DP-1	44 DP-1	55 DP-1	55 DP-1	162 DP-1				
Days After Emergence					155 DE				
ARM Action Codes	P	P	P	P	TY1				
Number of Decimals	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	10	11	12	13	18
5	VALOR	0.0313	lb ai/a	PRE	99	99	99	99	95
	MON 63410	1.125	lb ai/a	V3					
	ROUNDUP POWERMAX	0.75	lb ae/a	V3					
	AMS PREMIUM BLEND	2	% w/v	V3					
	MON 63410	1.125	lb ai/a	V6					
	ROUNDUP POWERMAX	0.75	lb ae/a	V6					
	AMS PREMIUM BLEND	2	% w/v	V6					
6	VALOR	0.0625	lb ai/a	PRE	99	99	98	93	89
	MON 63410	1.125	lb ai/a	V3					
	ROUNDUP POWERMAX	0.75	lb ae/a	V3					
	AMS PREMIUM BLEND	2	% w/v	V3					
	MON 63410	1.125	lb ai/a	V6					
	ROUNDUP POWERMAX	0.75	lb ae/a	V6					
	AMS PREMIUM BLEND	2	% w/v	V6					
7	VALOR	0.0313	lb ai/a	PRE	99	99	99	97	92
	MON 63410	1.5	lb ai/a	V3					
	ROUNDUP POWERMAX	0.75	lb ae/a	V3					
	AMS PREMIUM BLEND	2	% w/v	V3					
8	VALOR	0.0625	lb ai/a	PRE	99	99	98	95	94
	MON 63410	1.5	lb ai/a	V3					
	ROUNDUP POWERMAX	0.75	lb ae/a	V3					
	AMS PREMIUM BLEND	2	% w/v	V3					
9	VALOR	0.0313	lb ai/a	PRE	99	99	99	99	91
	DUAL II MAGNUM	1.25	lb ai/a	V3					
	ROUNDUP POWERMAX	0.75	lb ae/a	V3					
	AMS PREMIUM BLEND	2	% w/v	V3					

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

Pest Type	W Weed	W Weed	W Weed	W Weed					
Pest Code	AMACH	CHEAL	AMACH	CHEAL					
Pest Scientific Name	Amaranthus hyb>	Chenopodium al>	Amaranthus hyb>	Chenopodium al>					
Pest Name	Smooth pigweed	Common lambsqu>	Smooth pigweed	Common lambsqu>					
Crop Code									
BBCH Scale									
Crop Scientific Name									
Crop Name									
Rating Date	6-24-2009	6-24-2009	7-5-2009	7-5-2009 10-20-2009					
Rating Type	CONTTOL	CONTROL	CONTROL	CONTROL YIELD					
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT BU					
Number of Subsamples	1	1	1	1					
Days After First/Last Applic.	43 6	43 6	54 17	54 17 162 124					
Trt-Eval Interval	20 DA-B	20 DA-B	17 DA-C	17 DA-C					
Plant-Eval Interval	44 DP-1	44 DP-1	55 DP-1	55 DP-1 162 DP-1					
Days After Emergence				155 DE					
ARM Action Codes	P	P	P	P TY1					
Number of Decimals	0	0	0	0					
Trt No.	Treatment Name	Rate	Unit	Growth Stage	10	11	12	13	18
10	VALOR	0.0625	lb ai/a	PRE	99	99	99	99	87
	DUAL II MAGNUM	1.25	lb ai/a	V3					
	ROUNDUP POWERMAX	0.75	lb ae/a	V3					
	AMS PREMIUM BLEND	2	% w/v	V3					
11	VALOR	0.0625	lb ai/a	PRE	99	99	93	77	98
	COBRA	0.195	lb ai/a	V6					
	COC	0.25	% v/v	V6					
12	VALOR	0.0625	lb ai/a	PRE	99	99	93	78	91
	COBRA	0.195	lb ai/a	V6					
	COC	0.25	% v/v	V6					
	MON 63410	1.125	lb ai/a	V6					
	LSD (P=.05)				0.0	0.0	25.5	17.5	8.7
	Standard Deviation				0.0	0.0	17.7	12.1	6.0
	CV				0.0	0.0	19.62	14.3	6.62
	Bartlett's X2				0.0	0.0	47.295	28.213	4.694
	P(Bartlett's X2)				.	.	0.001*	0.001*	0.945
	Replicate F				0.000	0.000	1.148	1.307	17.339
	Replicate Prob(F)				1.0000	1.0000	0.3443	0.2885	0.0001
	Treatment F				0.000	0.000	3.974	12.180	1.621
	Treatment Prob(F)				1.0000	1.0000	0.0010	0.0001	0.1384



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

### SOYBEAN PREEMERGENCE & POSTEMERGENCE IV

Trial ID: S9041      Protocol ID: MON 2009-01-04-08  
Location: LEXINGTON, KY      Study Director: CHARLES SLACK  
Project ID:      Investigator: Charles H Slack  
Sponsor Contact: GLEN MURPHY

#### Pest Type

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

#### Pest Code

AMACH, Amaranthus hybridus, = 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

32 DP-1 = 1 5-11-2009

44 DP-1 = 1 5-11-2009

55 DP-1 = 1 5-11-2009

162 DP-1 = 1 5-11-2009

#### ARM Action Codes

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

TY1 = 5.42321\*[C16]

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

SOYBEAN PREEMERGENCE & POSTEMERGENCE IV

Trial ID: S9041                      Protocol ID: MON 2009-01-04-08  
 Location: LEXINGTON, KY      Study Director: CHARLES SLACK  
 Project ID:                              Investigator: Charles H Slack  
    Sponsor Contact: GLEN MURPHY

**General Trial Information**

**Study Director:** CHARLES H. SLACK  
**Investigator:** Charles H Slack

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-11-2009

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

**Trial Location**

**Personnel**

**Study Director:** CHARLES H. SLACK  
**Affiliation:** UNIVERSITY OF KENTUCKY  
**Location:** LEXINGTON, KY  
**Postal Code:** 40546      **E-mail:** cslack@uky.edu  
**Investigator:** Charles H Slack

**Other Personnel**

Role	Name
Research Analyst	Sara Carter
Research Analyst	Ted Hicks

**Crop Description**

<b>Crop 1:</b> GLXMA    Glycine max	Soybean
<b>Variety:</b> AGR 4403	
<b>BBCH Scale:</b> BSOY	<b>Planting Date:</b> 5-11-2009
<b>Planting Method:</b> ROW	<b>Rate, Unit:</b> 180000 S/A
<b>Depth, Unit:</b> 1.25 IN	
<b>Row Spacing, Unit:</b> 30 IN	
<b>Seed Bed:</b> MEDIUM    medium	<b>Soil Temperature, Unit:</b> 63    F
<b>Soil Moisture:</b> NORMAL    normal	<b>Emergence Date:</b> 5-18-2009
<b>Harvest Date:</b> 10-20-2009	<b>Harvest Equipment:</b> HEGE COMBINE
<b>Harvested Width, Unit:</b> 5    FT	<b>Harvested Length, Unit:</b> 26    FT

**Pest Description**

**Pest 1 Type:** W    **Code:** AMACH    Amaranthus hybridus

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

**Common Name:** Smooth pigweed

**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 FT<sup>2</sup>    **Tillage Type:** CONTIL    conventional-till  
**Replications:** 4            **Study Design:** RACOB    Randomized Complete Block (RCB)

## Soil Description

**Description Name:** MAURY  
**% Sand:** 6      **% OM:** 2.6      **Texture:** SIL            silt loam  
**% Silt:** 62      **pH:** 6.4      **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32      **CEC:** 17      **Fert. Level:** E            excellent  
**Soil Drainage:** E            excellent

## Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIWET slightly wet  
**Closest Weather Station:** SPINDLETOP      **Distance, Unit:** 2 MI

## Application Description

	A	B	C
<b>Application Date:</b>	5-11-2009	6-5-2009	6-18-2009
<b>Time of Day:</b>	3 PM	1 PM	11 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	V3	V6
<b>Application Placement:</b>	BROSOI	BROFOL	BROFOL
<b>Applied By:</b>	C H SLACK	C H SLACK	C H SLACK
<b>Air Temperature, Unit:</b>	70 F	72 F	75 F
<b>% Relative Humidity:</b>	30	46	82
<b>Wind Velocity, Unit:</b>	4 MPH	6 MPH	3 MPH
<b>Wind Direction:</b>	SW	NW	WSW
<b>Soil Temperature, Unit:</b>	63 F	69 F	79 F
<b>Soil Moisture:</b>	NORMAL	GOOD	EXCELL
<b>% Cloud Cover:</b>	0	0	99

## Crop Stage At Each Application

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
<b>Stage Scale Used:</b>		V3	V6

## Pest Stage At Each Application

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

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

### Application Equipment

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