



2020 Herbicide Evaluation Trials

Dr. Travis Legleiter and Sara Carter

Acknowledgements
Chemicals Used
Definitions
Climatology

Trials

UKREC

20-1	20-3	20-5	20-6	20-7	20-9	20-10
20-12	20-13	20-18	20-20	20-21	20-23	20-27

Caldwell

20-11	20-17	20-19
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Spindletop

20-8	20-16	20-22	20-24	20-28	20-29	HEMP
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Disclaimer

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PESTICIDES USED

<u>TRADE NAME</u>	<u>COMMON NAME</u>	<u>COMPANY</u>
AATREX	ATRAZINE	SYNGENTA
ACURON	S-METOLACHLOR + ATRAZINE + MESOTRIONE + BICYCLOPYRONE	SYNGENTA
ACURON FLEXI XR	S-METOLACHLOR + MESOTRIONE+ BICYCLOPYRONE	SYNGENTA
ACURON GT	S-METOLACHLOR + ATRAZINE + MESOTRIONE + BICYCLOPYRONE + GLYPHOSATE	SYNGENTA
ACTIVATOR 90	NON-IONIC SURFACTANT	LOVELAND
ALITE 27	ISOXAFLUTOLE	BAYER
AMS	AMMONIUM SULFATE	CLEAN CROP
AMSOL	AMMONIUM SULFATE	WINFIELD
ANTHEM FLEX	CARFENTRAZONE-ETHYL + PYROXASULFONE	FMC
ANTHEM MAXX	PYROXASULFONT + FLUTHIACET-METHYL	FMC
ARMEZON PRO	DIMETHENAMID-P + TOPRAMEZONE	BASF
ATRAZINE		VARIOUS
AUTHORITY EDGE	PYROXASULFONE + SULFENTRAZONE	FMC
AUTHORITY ELITE	S-METOLACHLOR + SULFENTRAZONE	FMC
AUTHORITY SUPREME	PYROXASULFONE + SULFENTRAZONE	FMC
AXIAL BOLD	FENOXAPROP-P-ETHYL + PINOXADEN	SYNGENTA
BICEP II MAGNUM	ATRAZINE + S-METOLACHLOR	SYNGENTA
BOUNDARY	S-METOLACHLOR + METRIBUZIN	SYNGENTA
BROADAXE XC	SULFENTRAZONE + S-METOLACHLOR	SYNGENTA
CAPRENO	THIENCARBOZONE + TEMBOTRIONE	BAYER
CLASS ACT RIDION	WATER CONDITIONER + SURFACTANT	WINFIELD
COBRA	LACTOFEN	VALENT
CORVUS	ISOXAFLUTOLE + THIENCARBAZONE-METHYL	BAYER
CROP OIL CONCENTRATE (COC)		LOVELAND
DELARO	PROTHIOCONAZOLE + TRIFLOXYSTROBIN	SYNGENTA
DUAL II MAGNUM	S-METOLACHLOR	SYNGENTA
DURANGO DMA	GLYPHOSATE	CORTEVA
ENGENIA	DICAMBA	BASF
ENGENIA PRIME	DICAMBA + PYROXASULFONE + IMAZETHAPYR	BASF
ENGENIA PRO	DICAMBA + PYROXASULFONE	BASF
ENLIST DUO	2,4-D(CHOLINE) + GLYPHOSATE	CORTEVA
ENLIST ONE	2,4-D(CHOLINE)	CORTEVA
EVERPREX	S-METOLACHLOR	CORTEVA

PESTICIDES USED (CONTINUED)

<u>TRADE NAME</u>	<u>COMMON NAME</u>	<u>COMPANY</u>
FIERCE	FLUMIOXAZIN + PYROXASULFONE	VALENT
FIERCE EZ	FLUMIOXAZIN + PYROXASULFONE	VALENT
FIERCE MTZ	FLUMIOXAZIN + PYROXASULFONE + METRIBUZIN	VALENT
FINESSE CEREAL & FALLOW	CHLORSULFURON + METSULFURON METHYL	FMC
GRAMOXONE	PARAQUAT	SYNGENTA
HALEX GT	GLYPHOSATE (PS) + MESOTRIONE + S-METOLACHLOR	SYNGENTA
HARMONY EXTRA	THIFENSULFURON + TRIBENURON METHYL	CORTEVA
HARNESS	ACETOCHLOR	BAYER
HARNESS XTRA	ACETOCHLOR + ATRAZINE	BAYER
HARNESS MAX	ACETOCHLOR + MESOTRIONE	BAYER
IMPACT	TOPRAMEZONE	AMVAC
IMPACTZ	TOPRAMEZONE + ATRAZINE	AMVAC
INDUCE	NONIONIC SURFACTANT	HELENA
INTACT	DRIFT CONTROL + DEPOSITION AID	PRECISION LABS
LAUDIS	TEMBOTRIONE	BAYER
LEADOFF	RIMSULFURON + THIFENSULFURON METHYL	CORTEVA
LIBERTY 280	GLUFOSINATE AMMONIUM	BASF
MATADOR	IMAZETHAPYR + METRIBUZIN + METOLACHLOR	LOVELAND
MAULER	METRIBUZIN	VALENT
MSO	METHYLATED SEED OIL	LOVELAND
NIS	NON-IONIC SURFACTANT	
NPAK AMS LIQUID	AMMONIUM SULFATE	WINFIELD
ONTARGET	DRIFT CONTROL + DEPOSITION AID	WINFIELD
OSPREY	MESOSULFURON-METHYL	BAYER
OUTLOOK	DIMETHENAMID-P	BASF
POWERFLEX HL	PYROXSULAM	CORTEVA
PREFIX	S-METOLACHLOR + BENOXACOR	SYNGENTA
QUELEX	HALAUXIFEN-METHYL + FLORASULAM	CORTEVA
REALM Q	RIMSULFURON + MESOTRIONE	CORTEVA
RESICORE	ACETOCHLOR + CLOPYRALID + MESOTRIONE	CORTEVA
REVULIN Q	NICOSULFURON + MESOTRIONE	CORTEVA
ROUNDUP POWERMAX	GLYPHOSATE (POTASSIUM SALT)	BAYER
ROUNDUP WEATHERMAX	GLYPHOSATE (POTASSIUM SALT)	BAYER

PESTICIDES USED (CONTINUED)

<u>TRADE NAME</u>	<u>COMMON NAME</u>	<u>COMPANY</u>
SELECT MAX	CLETHODIM	VALENT
SENCOR	METRIBUZIN	BAYER
SHIELD EX	TOLPYRALATE	SUMMIT AGRO USA
SINATE	TOPRAMEZONE + GLUFOSINATE-AMMONIUM	AMVAC
SONIC	SULFENTRAZONE + CLORANSULAM-METHYL	CORTEVA
STATUS	DICAMBA + DIFLUENZOPYR	BASF
SUPERB HC	CROP OIL CONCENTRATE	AGRISOLUTIONS
SURESTART II	ACETOCHLOR + CLOPYRALID + FLUMETSULAM	CORTEVA
TAVIUM	S-METOLACHLOR + DICAMBA	SYNGENTA
VALOR XLT	FLUMIOXAZIN + CHLORIMURON	VALENT
VERDICT	DIMETHENAMID-P + SAFLUFENACIL	BASF
WARRANT	ACETOCHLOR	BAYER
WARRANT ULTRA	ACETOCHLOR + FOMESAFEN	BAYER
XTENDIMAX WITH VAPORGRIP	DICAMBA + VAPROGRIP TECHNOLOGY	BAYER
ZIDUA	PYROXASULFONE	BASF
ZIDUA PRO	PYROXASULFONE + SAFLUFENACIL + IMAZETHAPYR	BASF
2,4-D LV6	2,4-D LOW VOL ESTER	WINFIELD

APPLICATION TIMING

PREEMERGENCE

14DPP	14 DAYS PREPLANT
EARPRE	2 WK PREPLANT
BURNDOWN	BURNDOWN EXISTING VEGETATION
PPI	PREPLANT INCORPORATED
PRE, PREEM	PREEMERGENCE
PREMLA	DELAYED PREEMERGENCE

POSTEMERGENCE

POST	3-4 " WEEDS, 1-2 TILLERS
POEMAE	3-4 LF WHEAT
POEMSE	SPRING GREENUP
EP	EARLY POSTEMERGENCE, WEEDS 0-2"
MP	MID-POSTEMERGENCE, WEEDS 2-4"
EPOST	3-5" WEEDS
LP	LATE POSTEMERGENCE, WEEDS 4-6"
V1	FIRST TRIFOLIATE (SOYBEAN), ONE LEAF WITH COLLAR VISABLE CORN
V2	SECOND TRIFOLIATE (SOYBEAN), 2 COLLAR CORN
V3	THIRD TRIFOLIATE (SOYBEAN), 3 COLLAR CORN
V4	FOURTH TRIFOLIATE (SOYBEAN), 4 COLLAR CORN
V6	SIX TRIFOLIATE (SOYBEAN), 6 COLLAR CORN
25-30DAA	25-30 DAYS AFTER APPLICATION TIMING "A"

ACCOS	Hop-hornbeam copperleaf	<i>Acalypha ostryfolia</i>
ALLVI	Wild garlic	<i>Allium vineale</i>
AMACH	Smooth(Green) pigweed	<i>Amaranthus hybridus</i>
AMAHH		<i>Amaranthus hybridus</i>
AMARE	Redroot pigweed	<i>Amaranthus retroflexus</i>
AMATA	Common waterhemp	<i>Amaranthus rudis</i>
AMBEL	Common ragweed	<i>Ambrosia artemisiifolia</i>
AMBTR	Giant ragweed	<i>Ambrosia trifida</i>
BROSS	Bromegrass	<i>Bromus sp</i>
CAPBP	Shepherd's purse	<i>Capsella bursa-pastori</i>
CERAR	Field chickweed	<i>Cerastium arvense</i>
CERSS	Chickweed	<i>Cerastium sp</i>
CERVU	Mouse ear chickweed	<i>Cerastium fontanum vulgare</i>
CHEAL	Common Lambsquarter	<i>Chenopodium album</i>
CYPES	Yellow nutsedge	<i>Cyperus esculentus</i>
DIGSA	large crabgrass	<i>Digitaria sanguinalis</i>
DIGSS	Crabgrass	<i>Digitaria sp</i>
DRBSS	Whitlow-grass	<i>Draba sp</i>
ECHSS	Barnyardgrass	<i>Echinochloa sp.</i>
ELEIN	Goosegrass	<i>Eleusine indica</i>
ERICA	Canada horseweed (Marestail)	<i>Erigeron canadensis (Conyza</i>
ERPVE	Spring whitlowgrass	<i>Draba verna</i>
GERSS	Cranesbill	<i>Geranium sp</i>
GLXMA	Soybean	<i>Glycine max</i>
IPOHE	Ivyleaf morningglory	<i>Ipomoea hederacea</i>
IPOLA	Pitted morningglory	<i>Ipomoea lacunosa</i>
IPOSS	Morningglory	<i>Ipomoea sp</i>
LAMAM	Henbit	<i>Lamium amplexicaule</i>
LOLMG	Annual ryegrass	<i>Lolium multiflorum</i>
MOLVE	Carpetweed	<i>Mollugo verticillata</i>
OXAST	European wood sorrel	<i>Oxalis stricta</i>
SETFA	Giant foxtail	<i>Setaria faberi</i>
SETSS	Foxtail millet	<i>Setaria sp.</i>
SIDSP	Prickly sida	<i>Sida spinosa</i>
SOLAM	American black nightshade	<i>Solanum americanum</i>
SORHA	Johnsongrass	<i>Sorghum halepense</i>
STEME	Common chickweed	<i>Stellaria media</i>
TAROF	Blowball	<i>Taraxacum officinale</i>
TARSS	Dandelion	<i>Taraxacum sp</i>
THLAR	Fanweed/Field pennycress	<i>Thlaspi arvense</i>
TRFPR	Red clover	<i>Trifolium pratense</i>
TRZAW	Winter wheat	<i>Triticum aestivum</i>
VERAR	Corn speedwell	<i>Veronica arvensis</i>
VICVI	Hairy vetch	<i>Vicia villosa</i>
XANST	Common cocklebur	<i>Xanthium strumarium</i>
ZEAMX	Corn	<i>Zea mays</i>

May 2020

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				
	MX	MN	AV		MX	MN	MX	MN	MX	MN	EVAP
05-01-2020	76	40	58		100	28	61	55			
05-02-2020	84	56	70		78	44	70	61			
05-03-2020	78	62	70	0.01	96	66	71	66			
05-04-2020	76	53	64	0.20	94	33	73	60			
05-05-2020	65	49	57		99	65	69	63			
05-06-2020	60	43	51		100	43	64	56			
05-07-2020	68	39	53		96	37	63	56			
05-08-2020	60	38	49	0.67	99	42	65	59			
05-09-2020	62	32	47		100	31	63	58			
05-10-2020	71	39	55		97	30	65	58			
05-11-2020	62	35	48		98	35	64	56			
05-12-2020	56	47	51	0.11	97	60	59	52			
05-13-2020	61	50	55	0.65	100	96	60	56			
05-14-2020	82	59	70		99	49	63	57			
05-15-2020	79	65	72	0.94	100	62	67	62			
05-16-2020	80	63	71	0.72	100	68	67	62			
05-17-2020	80	68	74	0.02	97	66	75	69			
05-18-2020	70	59	64	0.76	100	58	69	66			
05-19-2020	67	55	61	0.09	100	76	74	73			
05-20-2020	67	55	61	0.05	100	77	69	63			
05-21-2020	72	55	63		99	62	65	61			
05-22-2020	79	60	69	0.01	100	61	72	66			
05-23-2020	87	63	75		98	48	75	69			
05-24-2020	82	68	75		98	63	77	71			
05-25-2020	89	63	76	0.14	100	47	73	66			
05-26-2020	80	68	74	0.44	99	68	76	70			
05-27-2020	75	67	71	0.65	99	78	76	69			
05-28-2020	81	66	73	0.01	100	57	80	69			
05-29-2020	76	60	68	0.01	99	58	78	69			
05-30-2020	76	56	66		98	51	80	64			
05-31-2020	77	54	65		97	39	82	64			

Summary for the period 5-1-2020 through 5-31-2020:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
	73	54	64	5.48	98	55	70	63			
(Deviation from normal)	-7	-2	-5	+0.52							

June 2020

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
06-01-2020	80	53	66		85	29	84	64			
06-02-2020	87	61	74		92	36	87	70			
06-03-2020	87	63	75		94	50	89	71			
06-04-2020	84	69	76	0.17	100	66	86	74			
06-05-2020	87	65	76		100	52	89	73			
06-06-2020	90	69	79		100	47	94	76			
06-07-2020	90	68	79		100	40	94	77			
06-08-2020	86	68	77		85	58	90	76			
06-09-2020	84	74	79	0.33	97	76	125	125			
06-10-2020	83	68	75		89	48	83	77			
06-11-2020	83	58	70		100	33	79	71			
06-12-2020	86	56	71		100	32	89	71			
06-13-2020	87	62	74	0.01	96	34	89	74			
06-14-2020	76	61	68		98	62	87	74			
06-15-2020	79	54	66		98	39	86	69			
06-16-2020	81	57	69		95	49	87	71			
06-17-2020	81	57	69		98	47	88	72			
06-18-2020	84	60	72		100	46	88	73			
06-19-2020	88	62	75		100	40	91	74			
06-20-2020	90	65	77		96	41	92	76			
06-21-2020	81	67	74	0.29	99	64	89	77			
06-22-2020	84	66	75	0.24	100	65	84	73			
06-23-2020	83	65	74		98	48	84	76			
06-24-2020	84	62	73		100	38	85	72			
06-25-2020	86	58	72		100	41	90	72			
06-26-2020	84	65	74		93	66	87	75			
06-27-2020	85	71	78	0.16	97	70	76	73			
06-28-2020	88	70	79	0.46	99	69	75	72			
06-29-2020	89	71	80	0.43	99	59	91	77			
06-30-2020	80	68	74	3.04	99	82	88	71			

Summary for the period 6-1-2020 through 6-30-2020:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
	85	64	74	5.13	97	51	88	75			
(Deviation from normal)	-3	+0	-1	+1.28							

July 2020

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
07-01-2020	80	68	74	0.04	100	80	82	75			
07-02-2020	87	68	77		100	62	88	79			
07-03-2020	89	71	80		99	49	87	77			
07-04-2020	89	68	78		99	51	82	76			
07-05-2020	90	70	80	0.72	99	56	89	78			
07-06-2020	88	68	78		100	54	82	77			
07-07-2020	91	70	80	0.04	99	54	82	78			
07-08-2020	89	72	80		100	56	87	79			
07-09-2020 E	87	69	78		84	50	83	77			
07-10-2020	89	68	78		99	49	80	75			
07-11-2020	91	64	77		99	48	78	74			
07-12-2020	86	67	76	2.21	100	67	77	74			
07-13-2020	86	65	75		100	56	79	75			
07-14-2020	88	63	75		100	47	89	74			
07-15-2020	89	66	77		100	53	79	73			
07-16-2020	84	75	79		99	77	79	75			
07-17-2020	87	71	79	0.73	100	72	87	79			
07-18-2020	91	71	81		100	59	80	74			
07-19-2020	91	73	82		100	58	80	76			
07-20-2020	91	73	82		100	53	83	80			
07-21-2020	90	69	79		100	57	81	76			
07-22-2020	87	72	79	1.26	100	69	82	76			
07-23-2020	86	72	79	0.02	99	67	80	77			
07-24-2020	88	72	80		100	61	80	76			
07-25-2020	88	71	79		100	68	78	76			
07-26-2020	90	72	81		100	60	85	78			
07-27-2020	90	73	81		100	59	80	76			
07-28-2020	82	73	77	0.05	100	74	92	82			
07-29-2020	88	72	80		100	62	80	77			
07-30-2020	86	74	80	0.80	100	75	81	78			
07-31-2020	86	72	79	0.44	100	69	88	77			

Summary for the period 7-1-2020 through 7-31-2020:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
	88	70	79	6.31	99	60	83	77			
(Deviation from normal)	-2	+4	+1	+2.02							

August 2020

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
08-01-2020	81	64	72	0.39	100	77	77	75			
08-02-2020	83	64	73		100	57	79	74			
08-03-2020	84	68	76	0.01	99	63	80	76			
08-04-2020	78	63	70		100	61	77	74			
08-05-2020	78	59	68		97	59	83	71			
08-06-2020	80	60	70		97	54	81	71			
08-07-2020	82	60	71		98	53	79	72			
08-08-2020	86	62	74		99	53	80	75			
08-09-2020	88	72	80	0.02	98	64	83	79			
08-10-2020	90	70	80	0.12	98	63	85	77			
08-11-2020	86	69	77	0.29	100	72	80	75			
08-12-2020	81	71	76	0.21	100	81	79	75			
08-13-2020	87	71	79	0.33	100	65	89	78			
08-14-2020	84	70	77	0.96	100	67	84	79			
08-15-2020	87	68	77		100	57	86	77			
08-16-2020	83	65	74		100	49	81	76			
08-17-2020	85	61	73		100	55	84	74			
08-18-2020	84	65	74	0.22	100	57	80	77			
08-19-2020	80	64	72		96	58	80	76			
08-20-2020	82	61	71		95	59	82	73			
08-21-2020	81	66	73		100	74	81	75			
08-22-2020	82	65	73	0.21	100	70	82	74			
08-23-2020	86	66	76		100	50	82	75			
08-24-2020	87	64	75		100	52	86	75			
08-25-2020	90	66	78		100	51	87	76			
08-26-2020	86	69	77	0.13	100	73	85	78			
08-27-2020	85	73	79	0.04	100	74	84	78			
08-28-2020	82	73	77	0.39	100	80	79	78			
08-29-2020	88	72	80	0.36	100	67	85	77			
08-30-2020	75	70	72	0.09	100	86	76	74			
08-31-2020	86	69	77		100	66	85	76			

Summary for the period 8-1-2020 through 8-31-2020:

AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
MX	MN	AV		MX	MN	MX	MN	MX	MN	
84	66	75	3.77	99	63	82	75			
(Deviation from normal)	-4	+2	-1	-0.24						

September 2020

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
09-01-2020	78	69	73	0.11	100	82	77	75			
09-02-2020	83	72	77	3.17	100	74	80	76			
09-03-2020	83	71	77	0.38	100	70	82	77			
09-04-2020	78	59	68		100	41	74	73			
09-05-2020	82	56	69		100	38	84	71			
09-06-2020	84	55	69		100	41	78	70			
09-07-2020	87	63	75		99	51	85	72			
09-08-2020	86	65	75		100	50	82	74			
09-09-2020	87	63	75		100	51	82	74			
09-10-2020	88	65	76		100	51	86	75			
09-11-2020	86	68	77		100	64	86	76			
09-12-2020	84	69	76	0.05	100	74	79	75			
09-13-2020	82	66	74		100	69	79	76			
09-14-2020	82	62	72		100	52	79	73			
09-15-2020	80	60	70		97	57	78	71			
09-16-2020	83	60	71		100	60	80	71			
09-17-2020	82	63	72		100	38	81	73			
09-18-2020	72	52	62		93	47	73	70			
09-19-2020	72	47	59		94	44	73	65			
09-20-2020	75	48	61		97	43	72	65			
09-21-2020	76	49	62		99	45	76	66			
09-22-2020	71	49	60	0.01	100	54	72	66			
09-23-2020	68	57	62	0.01	100	61	72	67			
09-24-2020	66	60	63	0.11	99	72	71	67			
09-25-2020	72	60	66		100	76	73	67			
09-26-2020	74	60	67		100	65	73	68			
09-27-2020	79	60	69		100	58	76	67			
09-28-2020	67	48	57	1.09	100	61	69	64			
09-29-2020	67	44	55		100	49	67	60			
09-30-2020	80	46	63		100	34	69	59			

Summary for the period 9-1-2020 through 9-30-2020:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
	78	59	69	4.93	99	56	77	70			
(Deviation from normal)	-3	+1	-1	+1.60							

October 2020

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
10-01-2020	72	44	58	0.01	100	26	67	60			
10-02-2020	63	39	51	0.01	100	45	66	57			
10-03-2020	68	39	53		100	39	66	60			
10-04-2020	66	42	54		96	62	66	61			
10-05-2020	65	35	50		100	45	67	55			
10-06-2020	72	36	54		100	39	67	56			
10-07-2020	82	45	63		100	51	70	58			
10-08-2020	79	52	65	0.01	100	60	71	62			
10-09-2020	77	56	66	0.01	100	62	70	64			
10-10-2020	75	64	69	0.02	97	71	69	66			
10-11-2020	80	61	70	0.04	100	65	73	67			
10-12-2020	76	48	62	0.01	100	66	71	66			
10-13-2020	72	39	55		100	36	69	60			
10-14-2020	79	42	60		100	21	69	59			
10-15-2020	62	48	55	0.08	99	60	67	61			
10-16-2020	61	34	47		100	25	63	56			
10-17-2020	67	33	50		99	23	62	53			
10-18-2020	60	52	56	0.25	100	50	60	57			
10-19-2020	64	56	60	3.43	100	93	61	58			
10-20-2020	76	54	65	0.31	100	75	65	60			
10-21-2020	82	60	71		100	51	69	61			
10-22-2020	84	57	70		100	50	70	63			
10-23-2020	82	47	64	0.37	99	63	68	64			
10-24-2020	50	45	47	0.04	99	80	68	59			
10-25-2020	52	48	50	0.02	100	93	60	58			
10-26-2020	53	48	50	0.01	99	78	59	57			
10-27-2020	55	48	51	0.04	100	88	58	56			
10-28-2020	59	48	53	1.65	100	88	59	56			
10-29-2020	57	45	51	1.14	100	88	59	57			
10-30-2020	54	36	45		99	49	57	52			
10-31-2020	66	33	49		100	44	59	51			

Summary for the period 10-1-2020 through 10-31-2020:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
	68	46	57	7.45	100	58	65	59			
(Deviation from normal)	-3	-2	-2	+4.40							

November 2020

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
11-01-2020	58	35	46		92	21	58	53			
11-02-2020	53	25	39		96	25	54	52			
11-03-2020	67	37	52		78	35	56	49			
11-04-2020	72	44	58		87	37	59	51			
11-05-2020	70	46	58		91	45	59	53			
11-06-2020	71	39	55		100	41	60	51			
11-07-2020	76	44	60		99	46	62	53			
11-08-2020	80	60	70		88	45	65	58			
11-09-2020	78	62	70		94	63	66	60			
11-10-2020	75	64	69	0.30	100	72	65	62			
11-11-2020	69	41	55		99	54	65	60			
11-12-2020	61	33	47		97	35	60	52			
11-13-2020	55	34	44		95	35	57	52			
11-14-2020	68	36	52	0.15	95	55	56	51			
11-15-2020	69	43	56	0.66	96	45	57	55			
11-16-2020	61	31	46		95	25	55	48			
11-17-2020	51	31	41		81	30	53	48			
11-18-2020	56	27	41		90	25	52	45			
11-19-2020	66	45	55		49	25	53	47			
11-20-2020	68	54	61		84	34	57	49			
11-21-2020	62	49	55		99	74	57	53			
11-22-2020	58	35	46	0.09	100	81	56	53			
11-23-2020	55	32	43		100	40	54	48			
11-24-2020	57	39	48		92	41	53	48			
11-25-2020	66	50	58	0.72	99	58	56	51			
11-26-2020	51	40	45		96	81	55	52			
11-27-2020	59	32	45		100	61	54	47			
11-28-2020	52	30	41		100	38	54	47			
11-29-2020	50	28	39	0.44	97	60	51	44			
11-30-2020	42	30	36		96	66	49	43			

Summary for the period 11-1-2020 through 11-30-2020:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
	63	40	51	2.36	93	46	57	51			
(Deviation from normal)	+4	+2	+3	-2.27							

Spindletop Weather

May 2020

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS MX	GRASS MN	BARE MX	BARE MN	
05-01-2020	69	43	56		89	50	54	52	57	53	
05-02-2020	80	50	65	0.01	91	42	55	53	60	54	
05-03-2020	81	57	69	0.15	97	59	57	55	62	58	
05-04-2020	76	47	61		98	41	58	55	62	58	
05-05-2020	56	47	51	0.42	97	63	57	55	60	57	
05-06-2020	57	42	49		95	34	64	60			
05-07-2020 E	65	39	52		79	42	64	58			
05-08-2020	53	32	42	0.67	95	50	53	52	56	53	
05-09-2020	57	29	43		73	32	52	50	54	51	
05-10-2020 E	65	38	51		85	39	65	58			
05-11-2020 E	60	37	48		95	38	64	56			
05-12-2020 E	58	44	51	0.05	93	50	56	52			
05-13-2020 E	53	48	50	0.08	100	64	62	58			
05-14-2020 E	83	49	66		100	42	69	58			
05-15-2020 E	78	63	70		92	57	69	65			
05-16-2020 E	80	64	72	0.10	98	56	67	62			
05-17-2020 E	82	63	72		98	47	67	64			
05-18-2020 E	75	59	67	1.35	100	74	67	65			
05-19-2020	64	57	60	1.00	98	90	63	62	65	64	
05-20-2020 E	61	53	57		98	77	69	65			
05-21-2020 E	68	53	60		96	67	68	63			
05-22-2020 E	76	58	67	0.02	100	58	72	66			
05-23-2020 E	81	64	72	0.79	100	67	69	65			
05-24-2020 E	83	64	73	0.79	100	52	71	67			
05-25-2020 E	85	64	74		98	53	82	73			
05-26-2020	85	66	75	0.12	95	51	71	69	77	73	
05-27-2020 E	78	67	72	0.01	93	51	72	70	76	74	
05-28-2020	84	66	75		93	50	72	70	76	73	
05-29-2020 E	79	64	71	0.13	96	57	73	70			
05-30-2020 E	75	61	68		100	50	80	73			
05-31-2020 E	78	53	65		98	33	72	68			

Summary for the period 5-1-2020 through 5-31-2020:

(Deviation from normal)	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS MX	GRASS MN	BARE MX	BARE MN	
	72	53	62	5.69	95	53	66	62	64	61	
	-4	-2	-3	+1.22							

June 2020

DATE		AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
		MX	MN	AV		MX	MN	MX	MN	MX	MN	
06-01-2020	E	75	51	63		72	26	81	69			
06-02-2020	E	86	61	73		74	44	82	73			
06-03-2020	E	86	68	77		79	42	83	74			
06-04-2020	E	83	68	75	0.52	100	68	83	75			
06-05-2020	E	84	67	75	0.18	100	56	84	75			
06-06-2020	E	88	68	78		97	51	86	77			
06-07-2020		82	68	75		83	34	87	78			
06-08-2020		84	63	73		68	44	88	76			
06-09-2020		85	69	77	0.12	95	64	86	78			
06-10-2020	E	88	69	78		93	51	86	79			
06-11-2020		78	61	69		84	40	76	72			
06-12-2020	E	83	59	71		74	30	87	75			
06-13-2020	E	81	60	70	0.02	76	34	87	76			
06-14-2020	E	71	60	65	0.01	93	59	86	75			
06-15-2020	E	74	55	64		93	56	84	73			
06-16-2020	E	76	57	66		86	50	85	74			
06-17-2020	E	77	60	68		87	48	82	74			
06-18-2020		79	62	70	0.44	99	55	85	75			
06-19-2020	E	84	61	72	0.16	100	48	85	77			
06-20-2020	E	86	64	75		97	49	88	77			
06-21-2020	E	85	68	76	0.44	100	52	88	77			
06-22-2020	E	83	68	75	0.01	99	56	85	77			
06-23-2020	E	79	66	72	0.07	94	54	85	78			
06-24-2020	E	80	63	71		90	46	85	76			
06-25-2020	E	82	60	71		91	44	85	76			
06-26-2020	E	85	62	73		92	51	85	77			
06-27-2020	E	76	68	72	0.26	98	75	75	73			
06-28-2020	E	76	67	71	0.25	99	86	74	72			
06-29-2020	E	84	68	76	0.07	100	67	84	75			
06-30-2020	E	82	67	74	0.01	100	65	84	77			

Summary for the period 6-1-2020 through 6-30-2020:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	MX	MN	MX	MN	
	81	64	72	2.56	90	52	84	75			
(Deviation from normal)	-2	+1	-0	-1.10							

July 2020

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP	
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN		
07-01-2020	E	84	70	77	1.21	98	62	78	74			
07-02-2020	E	86	69	77		99	46	80	76			
07-03-2020		88	67	77		95	46	79	75			
07-04-2020		88	69	78		91	39	80	75			
07-05-2020		90	72	81		86	47	81	76			
07-06-2020		90	70	80	0.23	96	52	81	77			
07-07-2020		89	69	79	0.15	94	47	81	77			
07-08-2020		87	70	78	0.27	95	57	81	77			
07-09-2020		88	71	79	0.02	97	46	76	74	78	76	
07-10-2020		91	72	81		91	52	76	74	78	76	
07-11-2020		89	68	78	0.31	97	44	76	74	78	75	
07-12-2020		86	66	76		93	54	75	72	77	74	
07-13-2020		87	62	74		97	37	75	71	77	74	
07-14-2020		85	63	74		96	42	75	70	77	73	
07-15-2020		92	65	78		87	33	75	71	77	73	
07-16-2020		89	75	82	0.33	92	64	75	72	77	75	
07-17-2020		88	72	80		93	58	75	73	77	76	
07-18-2020		90	69	79		100	56	81	76			
07-19-2020		93	75	84		87	45	77	74	80	77	
07-20-2020		91	73	82		90	55	77	75	79	77	
07-21-2020		91	71	81		94	37	78	74	81	77	
07-22-2020		90	72	81		92	49	78	75	80	77	
07-23-2020		85	72	78		89	54	76	75	79	77	
07-24-2020		92	70	81		95	35	78	74	79	76	
07-25-2020		92	68	80		92	39	77	74	80	76	
07-26-2020		90	70	80	0.02	92	39	77	74	80	76	
07-27-2020		90	69	79		96	54	77	74	80	76	
07-28-2020		92	71	81		92	74	78	74	80	76	
07-29-2020		92	77	84		89	38	78	74	81	77	
07-30-2020		82	72	77	0.38	99	79	77	75	79	77	
07-31-2020		81	69	75	0.31	97	73	76	74	77	76	

Summary for the period 7-1-2020 through 7-31-2020:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
	89	70	79	3.23	94	50	78	74	79	76	
(Deviation from normal)+3	+3	+5	+4	-1.77							

August 2020

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
08-01-2020	83	69	76	0.27	100	66	78	76			
08-02-2020	78	65	71		97	58	75	72			
08-03-2020	84	63	73		100	49	77	73			
08-04-2020	77	63	70		100	63	77	74			
08-05-2020	79	62	70		94	56	84	75			
08-06-2020	81	64	72		87	60	75	73			
08-07-2020	82	65	73		87	49	75	73			
08-08-2020	84	63	73		90	47	76	72			
08-09-2020	88	63	75		98	41	80	73			
08-10-2020	79	70	74	0.44	99	75	76	74			
08-11-2020	84	67	75	0.04	97	63	77	74			
08-12-2020	86	71	78		92	60	77	74			
08-13-2020	86	72	79		95	56	87	82			
08-14-2020	82	72	77	0.02	93	65	78	76			
08-15-2020	85	70	77		99	58	77	75			
08-16-2020	86	66	76	0.26	98	55	77	74			
08-17-2020	83	62	72		96	48	76	73			
08-18-2020	84	64	74	0.54	98	53	75	73			
08-19-2020	78	63	70		99	55	74	72			
08-20-2020	82	61	71		81	50	75	71			
08-21-2020	79	67	73		98	70	77	72			
08-22-2020	83	67	75		100	60	77	73			
08-23-2020	82	65	73	0.02	97	57	77	73	76	72	
08-24-2020	87	66	76		100	45	78	73			
08-25-2020	90	69	79		95	51	78	74			
08-26-2020	88	69	78		99	55	79	75			
08-27-2020	86	72	79		97	69	78	76			
08-28-2020	86	72	79	0.89	100	58	85	83			
08-29-2020	82	70	76	0.15	96	60	77	75	77	76	
08-30-2020	80	62	71		87	51	77	74			
08-31-2020	80	65	72	0.78	100	71	76	74			

Summary for the period 8-1-2020 through 8-31-2020:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
	83	66	75	3.41	96	57	78	74	76	74	
(Deviation from normal)	-1	+4	+2	-0.52							

September 2020

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS MX	GRASS MN	BARE MX	BARE MN	
09-01-2020	84	70	77		100	66	77	75			
09-02-2020	84	72	78	0.81	99	68	78	75			
09-03-2020	82	71	76	0.38	100	71	78	76			
09-04-2020	79	64	71		99	34	77	76			
09-05-2020	78	55	66		92	34	85	75	0100		
09-06-2020	81	56	68		99	46	75	71			
09-07-2020	83	64	73		86	53	76	72			
09-08-2020	84	63	73		99	50	76	72			
09-09-2020	84	66	75		98	50	76	73			
09-10-2020	85	67	76		96	57	76	73			
09-11-2020	77	68	72		98	78	76	74			
09-12-2020	82	65	73	0.28	100	73	76	73			
09-13-2020	77	69	73	1.88	100	84	76	73			
09-14-2020	77	64	70		98	59	75	73			
09-15-2020	72	55	63		91	57	74	71			
09-16-2020	77	57	67		99	70	73	70			
09-17-2020	76	64	70		99	54	73	71			
09-18-2020	67	55	61		89	48	72	70			
09-19-2020	68	46	57		77	52	71	67			
09-20-2020	70	49	59		80	41	70	66			
09-21-2020	71	48	59		86	42	69	66			
09-22-2020	71	47	59		98	53	70	64			
09-23-2020	70	53	61		97	59	68	65			
09-24-2020	71	59	65	0.02	98	59	69	67			
09-25-2020	74	58	66		97	66	69	67			
09-26-2020	76	59	67		100	66	70	67			
09-27-2020	78	59	68		100	61	70	67			
09-28-2020	75	56	65	0.47	99	73	73	70			
09-29-2020	60	48	54	0.19	100	68	68	66			
09-30-2020	72	45	58		98	45	66	64			

Summary for the period 9-1-2020 through 9-30-2020:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS MX	GRASS MN	BARE MX	BARE MN	
	76	59	68	4.03	96	58	73	70	0100		
(Deviation from normal)	-1	+4	+1	+0.83							

October 2020

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS MX	GRASS MN	BARE MX	BARE MN	
10-01-2020	67	50	58			84	32	65	64		
10-02-2020	61	41	51			97	46	65	61		
10-03-2020	65	41	53			100	43	63	60		
10-04-2020	68	48	58	0.01		94	50	63	62		
10-05-2020	61	40	50			100	49	63	60		
10-06-2020	70	39	54			100	34	63	58		
10-07-2020	80	54	67			77	46	64	60		
10-08-2020	75	56	65			89	36	65	62		
10-09-2020	77	54	65			90	52	65	62		
10-10-2020	68	63	65	0.02		98	87	65	65		
10-11-2020	68	63	65	0.11		100	91	66	65		
10-12-2020	75	56	65	0.04		100	71	67	66		
10-13-2020	66	44	55			100	38	67	63		
10-14-2020	75	44	59			97	33	65	61		
10-15-2020	68	51	59	0.01		94	47	64	62		
10-16-2020	57	38	47	0.01		97	25	63	60		
10-17-2020	60	32	46			92	27	62	56		
10-18-2020	59	43	51	0.02		88	63	59	57		
10-19-2020	63	54	58	0.71		99	83	61	59		
10-20-2020	71	61	66	2.00		99	78	65	60		
10-21-2020	77	58	67			96	57	69	64		
10-22-2020	79	57	68			100	53	68	63		
10-23-2020	78	58	68	0.82		98	65	65	62		
10-24-2020	63	46	54	0.06		100	77	65	62		
10-25-2020	50	46	48	0.04		99	93	58	58	60	59
10-26-2020	54	49	51			99	90	60	58		
10-27-2020	63	47	55			96	76	61	59		
10-28-2020	63	52	57			100	83	62	60		
10-29-2020	60	45	52	1.12		100	97	63	61		
10-30-2020	48	38	43	0.01		98	64	56	55	58	57
10-31-2020	58	35	46			96	51	59	53		

Summary for the period 10-1-2020 through 10-31-2020:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS MX	GRASS MN	BARE MX	BARE MN	
	66	48	57	4.98	96	59	63	61	59	58	
(Deviation from normal)	-1	+3	+1	+2.41							

November 2020

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS		BARE		
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11-01-2020	55	34	44			85	24	58	53		
11-02-2020	48	27	37			81	31	56	50		
11-03-2020	61	36	48			70	37	54	51		
11-04-2020	67	37	52			88	38	56	50		
11-05-2020	65	44	54			81	46	56	51		
11-06-2020	68	40	54			96	41	60	55		
11-07-2020	72	41	56			95	40	60	55		
11-08-2020	76	50	63			87	46	64	59		
11-09-2020	78	55	66			87	47	66	61		
11-10-2020	78	55	66	0.02		91	55	67	63		
11-11-2020	68	47	57	0.68		100	72	65	60		
11-12-2020	53	35	44			94	59	55	54	56	55
11-13-2020	57	38	47			94	44	60	55		
11-14-2020	55	37	46			83	56	58	53		
11-15-2020	61	43	52	0.20		96	44	53	52	55	53
11-16-2020	53	35	44			75	33	55	51		
11-17-2020	47	31	39			75	43	49	48	51	49
11-18-2020	47	28	37			79	38	55	47		
11-19-2020	64	37	50			58	28	53	47		
11-20-2020	63	44	53			77	41	50	47	52	48
11-21-2020	59	50	54			100	73	56	52		
11-22-2020	57	39	48	0.15		100	78	52	51	54	53
11-23-2020	47	34	40			98	65	56	50		
11-24-2020	53	36	44			91	55	54	50		
11-25-2020	60	46	53	0.23		96	60	50	49	52	50
11-26-2020	55	47	51			92	81	55	54		
11-27-2020	56	46	51			90	60	56	53		
11-28-2020	48	36	42			95	51	50	50	52	51
11-29-2020	54	30	42			97	66	54	48		
11-30-2020	47	29	38	0.90		100	91	51	46		

Summary for the period 11-1-2020 through 11-30-2020:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS		BARE		
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	59	40	49	2.18	88	51	56	52	53	51	
(Deviation from normal)	+3	+6	+5	-1.21							

University of Kentucky

Axial Bold - University testing program in wheat and barley - University of Kentucky 20-1_WHT-REC

Trial ID: USNG0H3522019 Location: Cully Scott FS Trial Year: 2019
 Protocol ID: HPX152A4-2019US Investigator (Creator): Scott Cully
 Master Protocol ID: Study Director:
 Sponsor Contact:
 Conducted Under GEP: No Trial Origin:

Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	Amt to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	UNTREATED CHECK									101	202	304	405
2	AXIAL BOLD 0.685 EC	82.11 gA/L		EC	90 g Al/ha			A	15.62 mL/mx	102	203	301	401
3	FINESSE CEREAL AND FALLOW HERBICIDE	62.5 %AW/W		WG	21 g Al/ha			A	0.4789 g/mx	103	204	305	402
	METRIBUZIN 75 DF	75 %AW/W		DF	158 g Al/ha			A	3.003 g/mx				
	NIS			SL	0.5 % V/V			A	10.0 mL/mx				
4	OSPREY 4.5 WDG	4.5 %AW/W		WG	15 g Al/ha			A	4.751 g/mx	104	201	302	403
	NIS			SL	0.5 % V/V			A	10.0 mL/mx				
	N-PAK AMS LIQUID			SL	5.9 % V/V			A	118.0 mL/mx				
5	POWERFLEX HL 13.13 WG	13.13 %AW/W		WG	18.2 g Al/ha			A	1.976 g/mx	105	205	303	404
	NIS			SL	0.5 % V/V			A	10.0 mL/mx				
	N-PAK AMS LIQUID			SL	5.9 % V/V			A	118.0 mL/mx				

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
19.530	mL	AXIAL BOLD 0.685 EC	82.11	gA/L	EC	
0.599	g	FINESSE CEREAL AND FALLOW HERBICIDE	62.5	%AW/W	WG	
3.754	g	METRIBUZIN 75 DF	75	%AW/W	DF	
37.500	mL	NIS			SL	
5.939	g	OSPREY 4.5 WDG	4.5	%AW/W	WG	
295.000	mL	N-PAK AMS LIQUID			SL	
2.470	g	POWERFLEX HL 13.13 WG	13.13	%AW/W	WG	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.

General Trial Information

Study Director: Travis Legleiter **Title:** Assistant Professor
Investigator: Scott Cully

Discipline: H herbicide
Trial Status: E established

Trial Status Date: 3-24-2020 12:00 AM **Last Export Date:** 8-26-2020 2:03 PM **Last Changed By:** Travis Legleiter

ARM Trial Created On: 4-8-2019

Initiation Date: 10-25-2019

Completion Date: 6-25-2020

Protocol Revision Number: 2.0

Protocol Revision Date: 4-8-2019

University of Kentucky

Trial Location

Address (Location): University of Kentucky Research and Education Center
City: Princeton **Country:** USA United States
State/Prov.: Kentucky
Postal Code: 42445

Latitude of LL Corner °: 37.099577 N
Longitude of LL Corner °: -87.863921 W

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Role: STYDIR study director
Study Director: Travis Legleiter **Title:** Assistant Professor
Organization: University of Kentucky
Address 1: 348 University Drive
City: Princeton, KY **E-mail:** Travis.Legleiter@uky.edu **Postal Code:** 42445

Role: INVEST investigator
Investigator: Scott Cully
Organization: Syngenta
Address 1: 17256 New Dennison Rd. **Phone No.:** 618-982-9224 **Mobile No.:** 618-751-0715
United States **E-mail:** scott.cully@syngenta.com
City: Marion, IL **Postal Code:** 62959

Crop Description

Crop 1: C TRZAW Triticum aestivum Winter wheat **BBCH Scale:** BCER
Variety: Pioneer 26R10
Attributes: Description
Stage Scale: BBCH
Planting Rate: 109 LB/A
Planting Date: 10-25-2019
Depth: 1 IN
Planting Method: DRILLE drilled
Rows per Plot: 6 **Planting Equipment:** DD disc drill
Row Spacing: 7.5 IN
Soil Moisture: DAMP damp
Emergence Date: 11-1-2019
Harvested Width: 3.75 FT
% Standard Moisture: 13.5

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Pest Description	
Pest 1 Type: W Code: LOLMG Lolium multiflorum gaudini Common Name: Annual ryegrass	Stage Scale: BBCH Artificial Population: X
Pest 2 Type: W Code: ALLVI Allium vineale Common Name: Wild garlic	Stage Scale: BBCH Artificial Population: N
Pest 3 Type: W Code: LAMAM Lamium amplexicaule Common Name: Henbit	Stage Scale: BBCH Artificial Population: N
Pest 4 Type: W Code: THLAR Thlaspi arvense Common Name: Fanweed	Stage Scale: BBCH Artificial Population: N
Pest 5 Type: W Code: CERVU Cerastium fontanum vulgare Common Name: Mouse-ear chickweed	Stage Scale: BBCH Artificial Population: N
Pest 6 Type: W Code: VICVI Vicia villosa Common Name: Hairy vetch	Stage Scale: BBCH Artificial Population: N
Pest 7 Type: W Code: ERPVE Draba verna Common Name: Spring whitlowgrass	Stage Scale: BBCH Artificial Population: N

Site and Design	
Treated Plot Width: 10 FT	Site Type: FIELD field
Treated Plot Length: 30 FT	Experimental Unit: 1 PLOT plot
Treated Plot Area: 300.0 FT2 Treatments: 5	Tillage Type: CONTIL conventional-till
Replications: 4	Study Design: RACOB� Randomized Complete Block (RCB)
Trial Initiation Comments: Ryegrass was spread over the study 7 times using the honda recon and seed sewer after being disked on 10/23/19 with Kings ryegrass	

Maintenance								
No.	Date	Type	Maintenance Product Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit
1.	2-27-2020	FERT	UAN 28-0-0			SL	40	LB A/A
2.	3-23-2020	HERB	HARMONY EXTRA 50 SG	50	%AW/W	SG	0.9	OZ/A
3.	3-23-2020	INSE	WARRIOR II 2.09 CS	250	gA/L	CS	1.5	OZ/A
4.	3-23-2020	ADJ	NIS			SL	0.25	% V/V

Soil Description	
Description Name: 109-B3	Texture: SIL silt loam
% Sand: 6.2 % OM: 2.6	Soil Name: Crider Silt Loam
% Silt: 78.2 pH: 5.96	Fert. Level: F fair
% Clay: 15.6 CEC: 13.56	Soil Drainage: G good

University of Kentucky

Analyzed By:
UK SOIL LAB

Application Description

	A
Application Date	3-10-2020
Appl. Start Time	11:15 AM
Appl. Stop Time	11:22 AM
Application Method	NONINC
Application Timing	POSPOS
Application Placement	BROFOL
Applied By	JG
Air Temperature Start, Stop	54.4 F
% Relative Humidity Start, Stop	74.4
Wind Velocity+Dir. Start	3.4 MPH NW
Wind Velocity+Dir. Max	6.5 MPH NW
Wet Leaves (Y/N)	Y yes
Soil Temperature	50 F
Soil Moisture	WET
% Cloud Cover	100

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale	TRZAW BCER
Stage Scale Used	BBCH
Stage Majority, Percent	23
Stage Minimum, Percent	22
Stage Maximum, Percent	23
Height Average	5 IN
Height Minimum, Maximum	3 7

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Pest Stage At Each Application	
	A
Pest 1 Code, Type, Scale	LOLMG W BBCH
Stage Majority, Percent	22
Stage Minimum, Percent	22
Stage Maximum, Percent	28
Height Average	3 IN
Height Minimum, Maximum	1.75 5.5
Density Average	18.5 FT2
Density Minimum, Maximum	16 22
Pest 2 Code, Type, Scale	ALLVI W NOSC
Height Average	3.33 IN
Height Minimum, Maximum	2.5 4
Density Average	4.5 FT2
Density Minimum, Maximum	0 9
Pest 3 Code, Type, Scale	LAMAM W BBCH
Height Average	0.75 IN
Height Minimum, Maximum	0.5 1.5
Density Average	7.5 FT2
Density Minimum, Maximum	6 9
Pest 4 Code, Type, Scale	THLAR W BBCH
Height Average	3.75 IN
Height Minimum, Maximum	2 5.5
Density Average	1 FT2
Density Minimum, Maximum	0 2
Pest 5 Code, Type, Scale	CERVU W BBCH
Height Average	0.85 IN
Height Minimum, Maximum	0.5 1.5
Density Average	2.5 FT2
Density Minimum, Maximum	2 3
Pest 6 Code, Type, Scale	VICVI W BBCH
Height Average	2.25 IN
Height Minimum, Maximum	2 2.5
Density Average	1 FT2
Density Minimum, Maximum	0 2
Pest 7 Code, Type, Scale	ERPVE W BBCH
Height Average	0.75 IN
Height Minimum, Maximum	0.25 1.75
Density Average	7 FT2
Density Minimum, Maximum	2 12

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Application Equipment	
	A
Appl. Equipment	Backpack
Equipment Type	BACCAI
Operation Pressure	32 PSI
Nozzle Type	FLAFXR
Nozzle Size	02
Nozzle Spacing	20 IN
Boom Length	10 FT
Boom Height	18 IN
Ground Speed	3 MPH
Carrier	WATER
Application Amount	15 GAL/AC
Mix Overage	436 mL
Mix Size	2 L
Propellant	COMCO2

University of Kentucky

Pest ID Code				1 W Weed	1 W Weed	
Pest Code				LOLMG	LOLMG	
Pest Scientific Name				Lolium multiflo>	Lolium multiflo>	
Pest Name				Annual ryegrass	Annual ryegrass	
Crop ID Code	1 TRZAW	1 TRZAW	1 TRZAW	1 TRZAW	1 TRZAW	1 TRZAW
BBCH Scale	BCER	BCER	BCER	BCER	BCER	BCER
Crop Scientific Name	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>
Crop Name	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat
Crop Variety	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10
Rating Date	3-20-2020	3-26-2020	3-30-2020	3-30-2020	4-28-2020	6-25-2020
Rating Time						
SE Group No.	1	2	3	4	5	6
SE Name						
SE Description						
Part Rated	PLANT C	PLANT C	PLANT C	PLANT P	PLANT P	PLANT C
Rating Type	PHYGEN	PHYGEN	PHYGEN	CONTRO	CONTRO	LENGTH
Rating Unit	%	%	%	%	%	FT
Calculation	EF	EF	EF	EF	EF	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis						
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	8-5-2020	8-5-2020	8-5-2020	8-5-2020	8-5-2020	8-26-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	10 10	16 16	20 20	20 20	49 49	107 107
Trt-Eval Interval	10 DA-A	16 DA-A	20 DA-A	20 DA-A	49 DA-A	107 DA-A
Plant-Eval Interval	147 DP-1	153 DP-1	157 DP-1	157 DP-1	186 DP-1	244 DP-1
Days After Emergence	140 DE-1	146 DE-1	150 DE-1	150 DE-1	179 DE-1	237 DE-1
ARM Action Codes				AL		
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	1	2	3	4
1 UNTREATED CHECK		101	0.0	0.0	0.0	0.0
		202	0.0	0.0	0.0	0.0
		304	0.0	0.0	0.0	0.0
		405	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0
2 AXIAL BOLD 0.685 EC	90 g Al/ha A	102	0.0	0.0	0.0	60.0
		203	0.0	0.0	0.0	60.0
		301	0.0	0.0	0.0	60.0
		401	0.0	0.0	0.0	65.0
		Mean =	0.0	0.0	0.0	61.2d
						98.0
						70.0
						95.0
						90.0
						88.3
						25.60
						24.70
						25.60
						25.50
						25.35

University of Kentucky

Pest ID Code				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop ID Code	1 TRZAW	1 TRZAW	1 TRZAW	1 TRZAW
BBCH Scale	BCER	BCER	BCER	BCER
Crop Scientific Name	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>
Crop Name	Winter wheat	Winter wheat	Winter wheat	Winter wheat
Crop Variety	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10
Rating Date	6-25-2020	6-25-2020	6-25-2020	6-25-2020
Rating Time				
SE Group No.	7	8	9	10
SE Name				
SE Description				
Part Rated	PLANT C	PLANT C	PLANT C	PLANT C
Rating Type	WEIGHT	CONMOI	WEITES	YIELD
Rating Unit	lb/plot	%	LB	BU
Calculation	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 A
Collection Basis				
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1
Crop Stage Scale				
Crop Stage Majority/Min/Max				
Crop Density				
Pest Stage Majority/Min/Max				
Pest Density				
Footnote Number				
Assessed By				
Data Entry Date	8-26-2020	8-26-2020	8-26-2020	
First Export Date				
Equipment				
Rating Timing				
Days After First/Last Applic.	107 107	107 107	107 107	107 107
Trt-Eval Interval	107 DA-A	107 DA-A	107 DA-A	107 DA-A
Plant-Eval Interval	244 DP-1	244 DP-1	244 DP-1	244 DP-1
Days After Emergence	237 DE-1	237 DE-1	237 DE-1	237 DE-1
ARM Action Codes				TY1
Number of Decimals				1
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	7	8
1 UNTREATED CHECK		101	5.340	16.00
		202	5.670	15.90
		304	5.470	15.90
		405	4.130	16.00
		Mean =	5.153	15.95
2 AXIAL BOLD 0.685 EC	90 g Al/ha A	102	10.660	16.30
		203	9.650	16.00
		301	9.480	16.60
		401	7.560	17.00
		Mean =	9.338	16.48
				50.80
				50.80
				52.60
				52.50
				51.68
				78.0
				73.5
				69.1
				55.1
				54.33
				68.9

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Pest ID Code				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop ID Code	1 TRZAW	1 TRZAW	1 TRZAW	1 TRZAW
BBCH Scale	BCER	BCER	BCER	BCER
Crop Scientific Name	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>
Crop Name	Winter wheat	Winter wheat	Winter wheat	Winter wheat
Crop Variety	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10
Rating Date	6-25-2020	6-25-2020	6-25-2020	6-25-2020
Rating Time				
SE Group No.	7	8	9	10
SE Name				
SE Description				
Part Rated				
Rating Type	PLANT C	PLANT C	PLANT C	PLANT C
Rating Unit	WEIGHT	CONMOI	WEITES	YIELD
Calculation	lb/plot	%	LB	BU
Sample Size	NC	NC	NC	NC
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 A
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1
Crop Stage Scale				
Crop Stage Majority/Min/Max				
Crop Density				
Pest Stage Majority/Min/Max				
Pest Density				
Footnote Number				
Assessed By				
Data Entry Date	8-26-2020	8-26-2020	8-26-2020	
First Export Date				
Equipment				
Rating Timing				
Days After First/Last Applic.	107 107	107 107	107 107	107 107
Trt-Eval Interval	107 DA-A	107 DA-A	107 DA-A	107 DA-A
Plant-Eval Interval	244 DP-1	244 DP-1	244 DP-1	244 DP-1
Days After Emergence	237 DE-1	237 DE-1	237 DE-1	237 DE-1
ARM Action Codes				TY1
Number of Decimals				1
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	7	8
3 FINESSE CEREAL AND FALLOW HERBICIDE	21 g Al/ha A	103	6.410	16.10
METRIBUZIN 75 DF	158 g Al/ha A	204	7.900	15.80
NIS	0.5 % V/V A	305	5.880	15.60
		402	6.220	16.80
		Mean =	6.603	16.08
4 OSPREY 4.5 WDG	15 g Al/ha A	104	10.550	16.10
NIS	0.5 % V/V A	201	9.200	16.20
N-PAK AMS LIQUID	5.9 % V/V A	302	8.900	16.80
		403	8.140	16.50
		Mean =	9.198	16.40
5 POWERFLEX HL 13.13 WG	18.2 g Al/ha A	105	10.340	16.20
NIS	0.5 % V/V A	205	9.650	16.10
N-PAK AMS LIQUID	5.9 % V/V A	303	8.810	16.20
		404	8.440	16.50
		Mean =	9.310	16.25
				52.70
				53.90
				52.40
				54.10
				53.28
				55.30
				55.20
				56.00
				55.60
				55.53
				54.60
				54.20
				54.70
				56.00
				54.88
				46.8
				60.5
				43.7
				46.9
				49.5
				77.4
				69.9
				64.5
				60.8
				68.1
				77.0
				73.4
				64.3
				63.1
				69.4

University of Kentucky

Axial Bold - University testing program in wheat and barley - University of Kentucky 20-1_WHT-REC

Trial ID: USNG0H3522019	Location: Cully Scott FS	Trial Year: 2019
Protocol ID: HPX152A4-2019US	Investigator (Creator): Scott Cully	
Master Protocol ID:	Study Director:	
	Sponsor Contact:	
Conducted Under GEP: No	Trial Origin:	

Pest ID Code

1, W, Weed, LOLMG, Lolium multiflorum gaudini, Annual ryegrass, = X

Crop ID Code

1, TRZAW, BCER, Triticum aestivum, Winter wheat, Pioneer 26R10 = Description

Part Rated

PLANT = plant

C = Crop is Part Rated

P = Pest is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

LENGTH = length

WEIGHT = weight

CONMOI = content - moisture

WEITES = weight - test

YIELD = yield

Rating Unit

% = percent

FT = foot

lb/plot = pounds per plot

LB = pound

BU = bushel

Calculation

EF = efficacy

NC = no calculation

PLOT = total plot

A = acre

PLOT = total plot

Plant-Eval Interval

147 DP-1 = 1 TRZAW 10-25-2019

153 DP-1 = 1 TRZAW 10-25-2019

157 DP-1 = 1 TRZAW 10-25-2019

186 DP-1 = 1 TRZAW 10-25-2019

244 DP-1 = 1 TRZAW 10-25-2019

ARM Action Codes

AL = Automatic log transformation of X+1

TY1 = $(726 / (3.75 * [6])) * [7] * (100 - [8]) / 86.5$

University of Kentucky

Pest ID Code	1 TRZAW	1 TRZAW	1 TRZAW	1 W Weed LOLMG Lolium multiflo> Annual ryegrass	1 W Weed LOLMG Lolium multiflo> Annual ryegrass	1 TRZAW	1 TRZAW
Pest Code	BCER	BCER	BCER	1 TRZAW BCER	1 TRZAW BCER	BCER	BCER
Pest Scientific Name	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>
Pest Name	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat
Crop ID Code	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10
BBCH Scale	3-20-2020	3-26-2020	3-30-2020	3-30-2020	4-28-2020	6-25-2020	6-25-2020
Crop Scientific Name							
Crop Name							
Crop Variety							
Rating Date							
Rating Time							
SE Group No.	1	2	3	4	5	6	7
SE Name							
SE Description							
Part Rated	PLANT C	PLANT C	PLANT C	PLANT P	PLANT P	PLANT C	PLANT C
Rating Type	PHYGEN	PHYGEN	PHYGEN	CONTRO	CONTRO	LENGTH	WEIGHT
Rating Unit	%	%	%	%	%	FT	lb/plot
Calculation	EF	EF	EF	EF	EF	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis							
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1
Crop Stage Scale							
Crop Stage Majority/Min/Max							
Crop Density							
Pest Stage Majority/Min/Max							
Pest Density							
Footnote Number							
Assessed By							
Data Entry Date	8-5-2020	8-5-2020	8-5-2020	8-5-2020	8-5-2020	8-26-2020	8-26-2020
First Export Date							
Equipment							
Rating Timing							
Days After First/Last Applic.	10 10	16 16	20 20	20 20	49 49	107 107	107 107
Trt-Eval Interval	10 DA-A	16 DA-A	20 DA-A	20 DA-A	49 DA-A	107 DA-A	107 DA-A
Plant-Eval Interval	147 DP-1	153 DP-1	157 DP-1	157 DP-1	186 DP-1	244 DP-1	244 DP-1
Days After Emergence	140 DE-1	146 DE-1	150 DE-1	150 DE-1	179 DE-1	237 DE-1	237 DE-1
ARM Action Codes				AL			
Number of Decimals							
Trt Treatment							
No. Name	1	2	3	4	5	6	7
Rate							
Appl Code							
Rate Unit							
1 UNTREATED CHECK	0.0 a	0.0 a	0.0 a	0.0 b	0.0 c	25.30 a	5.153 c
2 AXIAL BOLD 0.685 EC	90 g Al/ha A	0.0 a	0.0 a	61.2 a	88.3 a	25.35 a	9.338 a
3 FINESSE CEREAL AND FALLOW HERBICIDE	21 g Al/ha A	0.0 a	0.0 a	9.1 a	17.5 b	25.10 a	6.603 b
METRIBUZIN 75 DF	158 g Al/ha A						
NIS	0.5 % V/V A						
4 OSPREY 4.5 WDG	15 g Al/ha A	0.0 a	0.0 a	21.4 a	89.3 a	25.25 a	9.198 a
NIS	0.5 % V/V A						
N-PAK AMS LIQUID	5.9 % V/V A						

University of Kentucky

Pest ID Code				1 W Weed	1 W Weed		
Pest Code				LOLMG	LOLMG		
Pest Scientific Name				Lolium multiflo>	Lolium multiflo>		
Pest Name				Annual ryegrass	Annual ryegrass		
Crop ID Code	1 TRZAW	1 TRZAW	1 TRZAW	1 TRZAW	1 TRZAW	1 TRZAW	1 TRZAW
BBCH Scale	BCER	BCER	BCER	BCER	BCER	BCER	BCER
Crop Scientific Name	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>
Crop Name	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat
Crop Variety	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10
Rating Date	3-20-2020	3-26-2020	3-30-2020	3-30-2020	4-28-2020	6-25-2020	6-25-2020
Rating Time							
SE Group No.	1	2	3	4	5	6	7
SE Name							
SE Description							
Part Rated	PLANT C	PLANT C	PLANT C	PLANT P	PLANT P	PLANT C	PLANT C
Rating Type	PHYGEN	PHYGEN	PHYGEN	CONTRO	CONTRO	LENGTH	WEIGHT
Rating Unit	%	%	%	%	%	FT	lb/plot
Calculation	EF	EF	EF	EF	EF	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis							
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1
Crop Stage Scale							
Crop Stage Majority/Min/Max							
Crop Density							
Pest Stage Majority/Min/Max							
Pest Density							
Footnote Number							
Assessed By							
Data Entry Date	8-5-2020	8-5-2020	8-5-2020	8-5-2020	8-5-2020	8-26-2020	8-26-2020
First Export Date							
Equipment							
Rating Timing							
Days After First/Last Applic.	10 10	16 16	20 20	20 20	49 49	107 107	107 107
Trt-Eval Interval	10 DA-A	16 DA-A	20 DA-A	20 DA-A	49 DA-A	107 DA-A	107 DA-A
Plant-Eval Interval	147 DP-1	153 DP-1	157 DP-1	157 DP-1	186 DP-1	244 DP-1	244 DP-1
Days After Emergence	140 DE-1	146 DE-1	150 DE-1	150 DE-1	179 DE-1	237 DE-1	237 DE-1
ARM Action Codes				AL			
Number of Decimals							
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code	1	2	3	4	5
5 POWERFLEX HL 13.13 WG	18.2 g Al/ha A		0.0 a	0.0 a	0.0 a	20.3 a	92.3 a
NIS	0.5 % V/V A						
N-PAK AMS LIQUID	5.9 % V/V A						
LSD P=.05					30.33 - 46.67	13.51	0.294
Standard Deviation	0.00	0.00	0.00	0.00	0.39t	8.77	0.191
CV	0.0	0.0	0.0	0.0	35.69t	15.26	0.76
Levene's F	0.00	0.00	0.00	0.00	2.452	1.226	0.521
Levene's Prob(F)	0.00*	0.00*	0.00*	0.00*	0.091	0.341	0.722
Skewness	.	.	.	.	-0.6719	-0.4778	-0.2291
Kurtosis	.	.	.	.	-1.1452	-1.7656	-1.6971
Replicate F	0.000	0.000	0.000	0.000	1.480	0.947	28.936
Replicate Prob(F)	1.0000	1.0000	1.0000	1.0000	0.2697	0.4485	0.0001
Treatment F	0.000	0.000	0.000	0.000	11.876	104.919	1.183
Treatment Prob(F)	1.0000	1.0000	1.0000	1.0000	0.0004	0.0001	0.3668

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Pest ID Code			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop ID Code	1 TRZAW	1 TRZAW	1 TRZAW
BBCH Scale	BCER	BCER	BCER
Crop Scientific Name	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>
Crop Name	Winter wheat	Winter wheat	Winter wheat
Crop Variety	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10
Rating Date	6-25-2020	6-25-2020	6-25-2020
Rating Time			
SE Group No.	8	9	10
SE Name			
SE Description			
Part Rated	PLANT C	PLANT C	PLANT C
Rating Type	CONMOI	WEITES	YIELD
Rating Unit	%	LB	BU
Calculation	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 A
Collection Basis			
Reporting Basis	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Crop Stage Scale			
Crop Stage Majority/Min/Max			
Crop Density			
Pest Stage Majority/Min/Max			
Pest Density			
Footnote Number			
Assessed By			
Data Entry Date	8-26-2020	8-26-2020	
First Export Date			
Equipment			
Rating Timing			
Days After First/Last Applic.	107 107	107 107	107 107
Trt-Eval Interval	107 DA-A	107 DA-A	107 DA-A
Plant-Eval Interval	244 DP-1	244 DP-1	244 DP-1
Days After Emergence	237 DE-1	237 DE-1	237 DE-1
ARM Action Codes			TY1
Number of Decimals			1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			8 9 10
1 UNTREATED CHECK			15.95 a 51.68 d 38.3 c
2 AXIAL BOLD 0.685 EC	90 g Al/ha A		16.48 a 54.33 b 68.9 a
3 FINESSE CEREAL AND FALLOW HERBICIDE	21 g Al/ha A		16.08 a 53.28 c 49.5 b
METRIBUZIN 75 DF	158 g Al/ha A		
NIS	0.5 % V/V A		
4 OSPREY 4.5 WDG	15 g Al/ha A		16.40 a 55.53 a 68.1 a
NIS	0.5 % V/V A		
N-PAK AMS LIQUID	5.9 % V/V A		

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Pest ID Code			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop ID Code	1 TRZAW	1 TRZAW	1 TRZAW
BBCH Scale	BCER	BCER	BCER
Crop Scientific Name	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>
Crop Name	Winter wheat	Winter wheat	Winter wheat
Crop Variety	Pioneer 26R10	Pioneer 26R10	Pioneer 26R10
Rating Date	6-25-2020	6-25-2020	6-25-2020
Rating Time			
SE Group No.	8	9	10
SE Name			
SE Description			
Part Rated	PLANT C	PLANT C	PLANT C
Rating Type	CONMOI	WEITES	YIELD
Rating Unit	%	LB	BU
Calculation	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 A
Collection Basis			
Reporting Basis	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Crop Stage Scale			
Crop Stage Majority/Min/Max			
Crop Density			
Pest Stage Majority/Min/Max			
Pest Density			
Footnote Number			
Assessed By			
Data Entry Date	8-26-2020	8-26-2020	
First Export Date			
Equipment			
Rating Timing			
Days After First/Last Applic.	107 107	107 107	107 107
Trt-Eval Interval	107 DA-A	107 DA-A	107 DA-A
Plant-Eval Interval	244 DP-1	244 DP-1	244 DP-1
Days After Emergence	237 DE-1	237 DE-1	237 DE-1
ARM Action Codes			TY1
Number of Decimals			1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			8 9 10
5 POWERFLEX HL 13.13 WG	18.2 g Al/ha A		16.25 a 54.88 ab 69.4 a
NIS	0.5 % V/V A		
N-PAK AMS LIQUID	5.9 % V/V A		
LSD P=.05	0.428	0.959	7.37
Standard Deviation	0.278	0.623	4.78
CV	1.71	1.15	8.12
Levene's F	2.067	1.574	0.32
Levene's Prob(F)	0.136	0.232	0.86
Skewness	0.5649	-0.6295	-0.3488
Kurtosis	-0.243	-0.3311	-1.1525
Replicate F	3.676	4.614	8.251
Replicate Prob(F)	0.0436	0.0228	0.0030
Treatment F	2.488	23.492	35.359
Treatment Prob(F)	0.0993	0.0001	0.0001

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Axial Bold - University testing program in wheat and barley - University of Kentucky 20-1_WHT-REC

Trial ID: USNG0H3522019	Location: Cully Scott FS	Trial Year: 2019
Protocol ID: HPX152A4-2019US	Investigator (Creator): Scott Cully	
Master Protocol ID:	Study Director:	
	Sponsor Contact:	
Conducted Under GEP: No	Trial Origin:	

Pest ID Code

1, W, Weed, LOLMG, Lolium multiflorum gaudini, Annual ryegrass, = X

Crop ID Code

1, TRZAW, BCER, Triticum aestivum, Winter wheat, Pioneer 26R10 = Description

Part Rated

PLANT = plant

C = Crop is Part Rated

P = Pest is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

LENGTH = length

WEIGHT = weight

CONMOI = content - moisture

WEITES = weight - test

YIELD = yield

Rating Unit

% = percent

FT = foot

lb/plot = pounds per plot

LB = pound

BU = bushel

Calculation

EF = efficacy

NC = no calculation

PLOT = total plot

A = acre

PLOT = total plot

Plant-Eval Interval

147 DP-1 = 1 TRZAW 10-25-2019

153 DP-1 = 1 TRZAW 10-25-2019

157 DP-1 = 1 TRZAW 10-25-2019

186 DP-1 = 1 TRZAW 10-25-2019

244 DP-1 = 1 TRZAW 10-25-2019

ARM Action Codes

AL = Automatic log transformation of X+1

TY1 = $(726 / (3.75 * [6])) * [7] * (100 - [8]) / 86.5$

University of Kentucky

Control of Annual Ryegrass with Fierce in Winter Wheat

Trial ID: 20-3_WHT-REC	Location: UKREC	Trial Year: 2020
Protocol ID: 66.01	Investigator (Creator): Travis Legleiter	
Project ID:	Study Director: Travis Legleiter	
	Sponsor Contact: John Cranmer	

Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	Untreated									101	208	305	403
2	Roundup PowerMax	4.5 LBAE/GAL	SL	SL	32 FL OZ/A	14 DPP	A	A	33.33 mL/mx	102	206	308	402
	NIS - Induce	100 %		SL	0.25 % V/V	14 DPP	A	A	4.999 mL/mx				
	Amsol AMS	3.4 lba/gal	SL	SL	2.5 LB AI/A	14 DPP	A	A	98.03 mL/mx				
	PowerFlex HL	13 %		WDG	2 OZ/A	1 TO 2 TLLR B			1.997 g/mx				
	NIS - Induce	100 %		SL	0.25 % V/V	1 TO 2 TLLR B			4.999 mL/mx				
3	Zidua	4.17 LBA/GAL	SC	SL	2 FL OZ/A	14 DPP	A	A	2.083 mL/mx	103	202	301	405
	Roundup PowerMax	4.5 LBAE/GAL	SL	SL	32 FL OZ/A	14 DPP	A	A	33.33 mL/mx				
	NIS - Induce	100 %		SL	0.25 % V/V	14 DPP	A	A	4.999 mL/mx				
	Amsol AMS	3.4 lba/gal	SL	SL	2.5 LB AI/A	14 DPP	A	A	98.03 mL/mx				
	PowerFlex HL	13 %		WDG	2 OZ/A	1 TO 2 TLLR B			1.997 g/mx				
	NIS - Induce	100 %		SL	0.25 % V/V	1 TO 2 TLLR B			4.999 mL/mx				
4	Fierce EZ	3.04 LBA/GAL	SC	SL	6 FL OZ/A	14 DPP	A	A	6.25 mL/mx	104	201	307	406
	Roundup PowerMax	4.5 LBAE/GAL	SL	SL	32 FL OZ/A	14 DPP	A	A	33.33 mL/mx				
	NIS - Induce	100 %		SL	0.25 % V/V	14 DPP	A	A	4.999 mL/mx				
	Amsol AMS	3.4 lba/gal	SL	SL	2.5 LB AI/A	14 DPP	A	A	98.03 mL/mx				
	PowerFlex HL	13 %		WDG	2 OZ/A	1 TO 2 TLLR B			1.997 g/mx				
	NIS - Induce	100 %		SL	0.25 % V/V	1 TO 2 TLLR B			4.999 mL/mx				
5	Fierce MTZ	2.64 LBA/GAL	SC	SL	16 FL OZ/A	14 DPP	A	A	16.67 mL/mx	105	207	306	404
	Roundup PowerMax	4.5 LBAE/GAL	SL	SL	32 FL OZ/A	14 DPP	A	A	33.33 mL/mx				
	NIS - Induce	100 %		SL	0.25 % V/V	14 DPP	A	A	4.999 mL/mx				
	Amsol AMS	3.4 lba/gal	SL	SL	2.5 LB AI/A	14 DPP	A	A	98.03 mL/mx				
	PowerFlex HL	13 %		WDG	2 OZ/A	1 TO 2 TLLR B			1.997 g/mx				
	NIS - Induce	100 %		SL	0.25 % V/V	1 TO 2 TLLR B			4.999 mL/mx				
6	Fierce EZ	3.04 LBA/GAL	SC	SL	6 FL OZ/A	14 DPP	A	A	6.25 mL/mx	106	205	303	407
	RyzUP Smartgrass	40 %W/W	SG	SG	1 OZ/A	14 DPP	A	A	0.9986 g/mx				
	Roundup PowerMax	4.5 LBAE/GAL	SL	SL	32 FL OZ/A	14 DPP	A	A	33.33 mL/mx				
	NIS - Induce	100 %		SL	0.25 % V/V	14 DPP	A	A	4.999 mL/mx				
	Amsol AMS	3.4 lba/gal	SL	SL	2.5 LB AI/A	14 DPP	A	A	98.03 mL/mx				
	PowerFlex HL	13 %		WDG	2 OZ/A	1 TO 2 TLLR B			1.997 g/mx				
	NIS - Induce	100 %		SL	0.25 % V/V	1 TO 2 TLLR B			4.999 mL/mx				
7	Fierce MTZ	2.64 LBA/GAL	SC	SL	16 FL OZ/A	14 DPP	A	A	16.67 mL/mx	107	204	302	408
	RyzUP Smartgrass	40 %W/W	SG	SG	1 OZ/A	14 DPP	A	A	0.9986 g/mx				
	Roundup PowerMax	4.5 LBAE/GAL	SL	SL	32 FL OZ/A	14 DPP	A	A	33.33 mL/mx				
	NIS - Induce	100 %		SL	0.25 % V/V	14 DPP	A	A	4.999 mL/mx				
	Amsol AMS	3.4 lba/gal	SL	SL	2.5 LB AI/A	14 DPP	A	A	98.03 mL/mx				
	PowerFlex HL	13 %		WDG	2 OZ/A	1 TO 2 TLLR B			1.997 g/mx				
	NIS - Induce	100 %		SL	0.25 % V/V	1 TO 2 TLLR B			4.999 mL/mx				

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Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Trt No.	Treatment Name	Form Conc Unit	Form Type	Rate Unit	Appl Timing	Appl Code	Amt Product to Measure	Rep 1	2	3	4
8	Fierce	76 %	WG	3 OZ/A	14 DPP	A	2.996 g/mx	108	203	304	401
	Roundup PowerMax	4.5 LBAE/GAL	SL	32 FL OZ/A	14 DPP	A	33.33 mL/mx				
	NIS - Induce	100 %	SL	0.25 % V/V	14 DPP	A	4.999 mL/mx				
	Amsol AMS	3.4 lba/gal	SL	2.5 LB AI/A	14 DPP	A	98.03 mL/mx				
	PowerFlex HL	13 %	WDG	2 OZ/A	1 TO 2 TLLR	B	1.997 g/mx				
	NIS - Induce	100 %	SL	0.25 % V/V	1 TO 2 TLLR	B	4.999 mL/mx				

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
291.666	mL	Roundup PowerMax	4.5	LBAE/GAL	SL	
81.241	mL	NIS - Induce	100	%	SL	
857.750	mL	Amsol AMS	3.4	lba/gal	SL	
17.475	g	PowerFlex HL	13	%	WDG	
6.249	mL	NIS -Induce	100	%	SL	
2.604	mL	Zidua	4.17	LBA/GAL	SC	
15.625	mL	Fierce EZ	3.04	LBA/GAL	SC	
41.667	mL	Fierce MTZ	2.64	LBA/GAL	SC	
2.496	g	RyzUP Smartgrass	40	%W/W	SG	
3.745	g	Fierce	76	%	WG	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.

General Trial Information

Study Director: Travis Legleiter **Title:** Assistant Professor
Investigator: Travis Legleiter **Title:** Assistant Extension Professor

Trial Status: E established
ARM Trial Created On: 9-27-2019
Initiation Date: 10-9-2019
Completion Date: 6-25-2020

Trial Location

City: Princeton **Country:** USA United States
State/Prov.: Kentucky
Postal Code: 42445

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Role: STYDIR study director
Study Director: Travis Legleiter **Title:** Assistant Professor

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Role: INVEST investigator
Investigator: Travis Legleiter **Title:** Assistant Extension Professor
Organization: University of Kentucky
Address 1: 1205 Hopkinsville Street **Phone No.:** 859-562-1323
Country: USA United States **E-mail:** Travis.Legleiter@uky.edu
City: Princeton, KY **Postal Code:** 42445

Role: SPONSR sponsor
Sponsor: John Cranmer

Crop Description

Crop 1: C TRZAW Triticum aestivum Winter wheat **BBCH Scale:** BCER
Stage Scale: FEEKES
Variety: Pioneer 26R10
Planting Date: 10-25-2019 **Planting Rate:** 109 LB/A
Depth: 1 IN
Planting Method: DRILLE drilled
Planting Equipment: DD disc drill
Row Spacing: 7.5 IN **Soil Moisture:** DAMP damp
Soil Temperature: 53 F
Emergence Date: 11-1-2019
Harvest Date: 6-25-2020
Harvested Width: 3.75 FT
% Standard Moisture: 13.5

Pest Description

Pest 1 Type: W **Code:** LOLMG Lolium multiflorum gaudini **Stage Scale:** BBCH
Common Name: Annual ryegrass
Pest 2 Type: W **Code:** AMBTR Ambrosia trifida **Stage Scale:** BBCH
Common Name: Giant ragweed
Pest 3 Type: W **Code:** LAMAM Lamium amplexicaule **Stage Scale:** BBCH
Common Name: Henbit
Pest 4 Type: W **Code:** STEME Stellaria media **Stage Scale:** BBCH
Common Name: Common chickweed

Site and Design

Treated Plot Width: 10 FT **Site Type:** FIELD field
Treated Plot Length: 30 FT **Experimental Unit:** 1 PLOT plot
Treated Plot Area: 300.0 FT2 **Treatments:** 8 **Tillage Type:** NOTILL no-till
Replications: 4 **Study Design:** RACOB L Randomized Complete Block (RCB)

Maintenance

No.	Date	Type	Maintenance Product Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit
1.	2-27-2020	FERT	UAN 28-0-0	28	%	L	40	LB A/A
2.	3-30-2020	INSE	Warrior II	2.08	LB/GAL	L	1.5	OZ/A

Soil Description

Description Name: 109 B1&2
% Sand: 5.3 **% OM:** 2.9 **Texture:** SIL silt loam
% Silt: 78.8 **pH:** 6.2 **Soil Name:** Crider Silt Loam
% Clay: 15.9 **CEC:** 13.32 **Fert. Level:** F fair
Soil Drainage: G good

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Analyzed By:
UK Soils Lab

Application Description

	A	B
Application Date	10-9-2019	3-10-2020
Appl. Start Time	4:30 PM	3:34 PM
Appl. Stop Time	4:56 PM	3:49 PM
Interval to Prev. Appl.		153 DAYS
Application Method	BROADC	BROADC
Application Timing	14 DPP	1 to 2 TLLR
Application Placement	SOIL	FOLIAR
Applied By	JG	JG
Air Temperature Start, Stop	88.8 F	57.4 F
% Relative Humidity Start, Stop	50.4	66.1
Wind Velocity+Dir. Start	1.5 MPH ESE	3 MPH NW
Wind Velocity+Dir. Max	5.8 MPH ESE	7.2 MPH NW
Wet Leaves (Y/N)	N no	N no
Soil Temperature	75 F	50 F
Soil Moisture	DRY	WET
% Cloud Cover	5	100

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale	TRZAW BCER	TRZAW BCER
Days after Emergence	-23	130
Stage Majority, Percent		2.0
Stage Maximum, Percent		3.0
Height Average		6 IN
Height Minimum, Maximum		4.5 7.25

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Pest Stage At Each Application				
	A		B	
Pest 1 Code, Type, Scale	LOLMG W BBCH		LOLMG W BBCH	
Stage Minimum, Percent			22	
Stage Maximum, Percent			26	
Height Average			2.75 IN	
Height Minimum, Maximum			1.5 4	
Density Average			13 FT2	
Density Minimum, Maximum			6 27	
Pest 2 Code, Type, Scale	AMBTR W BBCH		AMBTR W BBCH	
Height Average			0.25 IN	
Height Minimum, Maximum			0.25 0.25	
Density Average			0.13 FT2	
Density Minimum, Maximum			0.13 0.13	
Pest 3 Code, Type, Scale	LAMAM W BBCH		LAMAM W BBCH	
Height Average			3 IN	
Height Minimum, Maximum			3 3	
Density Average			0.07 FT2	
Density Minimum, Maximum			0.07 0.07	
Pest 4 Code, Type, Scale	STEME W BBCH		STEME W BBCH	
Height Average			1 IN	
Height Minimum, Maximum			1 1	
Density Average			0.07 FT2	
Density Minimum, Maximum			0.07 0.07	

Application Equipment				
	A		B	
Appl. Equipment	Backpack		Backpack	
Equipment Type	BACCAI		BACCAI	
Operation Pressure	32	PSI	32	PSI
Nozzle Type	FLAFXR		FLAFXR	
Nozzle Size	02		02	
Nozzle Spacing	20	IN	20	IN
Boom Length	10	FT	10	FT
Boom Height	18	IN	18	IN
Ground Speed	3	MPH	3	MPH
Carrier	H2O		H2O	
Application Amount	15	GAL/AC	15	GAL/AC
Mix Overage	436	mL	436	mL
Mix Size	2	L	2	L
Propellant	COMCO2		COMCO2	

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Control of Annual Ryegrass with Fierce in Winter Wheat

Trial ID: 20-3_WHT-REC Location: UKREC Trial Year: 2020
 Protocol ID: 66.01 Investigator (Creator): Travis Legleiter
 Project ID: Study Director: Travis Legleiter
 Sponsor Contact: John Cranmer

Pest Type		W Weed LOLMG	W Weed LAMAM		W Weed LOLMG	W Weed LAMAM		W Weed LOLMG	W Weed LAMAM		
Pest Code		Annual ryegrass	Henbit		Annual ryegrass	Henbit		Annual ryegrass	Henbit		
Pest Name	C TRZAW			C TRZAW			C TRZAW				
Crop Type, Code	Triticum aestiv>			Triticum aestiv>			Triticum aestiv>				
Crop Scientific Name	Winter wheat			Winter wheat			Winter wheat				
Crop Name	11-8-2019	11-8-2019	11-8-2019	11-20-2019	11-20-2019	11-20-2019	3-30-2020	3-30-2020	3-30-2020		
Rating Date	PLANT C	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P		
Part Rated	PHYGEN	CONTROL	CONTROL	PHYGEN	CONTROL	CONTROL	PHYGEN	CONTRO	CONTRO		
Rating Type	%	%	%	%	%	%	%	%	%		
Rating Unit	1	1	1	1	1	1	1	1	1		
Number of Subsamples	11-8-2019	11-8-2019	11-8-2019	12-18-2019	12-18-2019	12-18-2019	4-30-2020	4-30-2020	4-30-2020		
Data Entry Date	Rating Timing										
Days After First/Last Applic.	30 30	30 30	30 30	42 42	42 42	42 42	173 20	173 20	173 20		
Trt-Eval Interval	30 DA-A	30 DA-A	30 DA-A	42 DA-A	42 DA-A	42 DA-A					
Days After Emergence	7 DE-1	7 DE-1	7 DE-1	19 DE-1	19 DE-1	19 DE-1	150 DE-1	150 DE-1	150 DE-1		
ARM Action Codes	ET4			AS							
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7	8	9
1 Untreated		101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		208	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		305	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		403	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0d	0.0	0.0	0.0	0.0	0.0
2 Roundup PowerMax	32 FL OZ/A A	102	0.0	50.0	50.0	0.0	70.0	25.0	0.0	20.0	50.0
NIS - Induce	0.25 % V/V A	206	0.0	100.0	100.0	0.0	100.0	90.0	0.0	70.0	50.0
Amsol AMS	2.5 LB AI/A A	308	0.0	90.0	90.0	0.0	100.0	100.0	0.0	60.0	50.0
PowerFlex HL	2 OZ/A B	402	0.0	90.0	90.0	0.0	100.0	50.0	0.0	60.0	40.0
NIS - Induce	0.25 % V/V B										
		Mean =	0.0	82.5	82.5	0.0d	92.5	66.3	0.0	52.5	47.5
3 Zidua	2 FL OZ/A A	103	0.0	100.0	70.0	0.0	95.0	80.0	0.0	50.0	50.0
Roundup PowerMax	32 FL OZ/A A	202	0.0	90.0	90.0	0.0	100.0	50.0	0.0	50.0	60.0
NIS - Induce	0.25 % V/V A	301	0.0	100.0	100.0	0.0	100.0	100.0	0.0	60.0	50.0
Amsol AMS	2.5 LB AI/A A	405	0.0	100.0	100.0	0.0	100.0	100.0	0.0	70.0	70.0
PowerFlex HL	2 OZ/A B										
NIS - Induce	0.25 % V/V B										
		Mean =	0.0	97.5	90.0	0.0d	98.8	82.5	0.0	57.5	57.5
4 Fierce EZ	6 FL OZ/A A	104	5.0	100.0	100.0	1.0	100.0	100.0	0.0	97.0	97.0
Roundup PowerMax	32 FL OZ/A A	201	0.0	100.0	100.0	2.0	100.0	100.0	0.0	97.0	100.0
NIS - Induce	0.25 % V/V A	307	5.0	100.0	100.0	0.0	100.0	100.0	0.0	100.0	100.0
Amsol AMS	2.5 LB AI/A A	406	2.0	100.0	100.0	0.0	100.0	100.0	0.0	100.0	80.0
PowerFlex HL	2 OZ/A B										
NIS - Induce	0.25 % V/V B										
		Mean =	3.0	100.0	100.0	0.6d	100.0	100.0	0.0	98.5	94.3

d=Means are reported in de-transformed data units

University of Kentucky

Pest Type	C TRZAW	W Weed	W Weed	C TRZAW	W Weed	W Weed	C TRZAW	W Weed	W Weed		
Pest Code		LOLMG	LAMAM		LOLMG	LAMAM		LOLMG	LAMAM		
Pest Name		Annual ryegrass	Henbit		Annual ryegrass	Henbit		Annual ryegrass	Henbit		
Crop Type, Code	C TRZAW			C TRZAW			C TRZAW				
Crop Scientific Name	Triticum aestiv>			Triticum aestiv>			Triticum aestiv>				
Crop Name	Winter wheat			Winter wheat			Winter wheat				
Rating Date	11-8-2019	11-8-2019	11-8-2019	11-20-2019	11-20-2019	11-20-2019	3-30-2020	3-30-2020	3-30-2020		
Part Rated	PLANT C	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P		
Rating Type	PHYGEN	CONTROL	CONTROL	PHYGEN	CONTROL	CONTROL	PHYGEN	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Data Entry Date	11-8-2019	11-8-2019	11-8-2019	12-18-2019	12-18-2019	12-18-2019	4-30-2020	4-30-2020	4-30-2020		
Rating Timing											
Days After First/Last Applic.	30 30	30 30	30 30	42 42	42 42	42 42	173 20	173 20	173 20		
Trt-Eval Interval	30 DA-A	30 DA-A	30 DA-A	42 DA-A	42 DA-A	42 DA-A					
Days After Emergence	7 DE-1	7 DE-1	7 DE-1	19 DE-1	19 DE-1	19 DE-1	150 DE-1	150 DE-1	150 DE-1		
ARM Action Codes	ET4			AS							
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7	8	9
5 Fierce MTZ	16 FL OZ/A	A 105	5.0	100.0	100.0	3.0	100.0	100.0	0.0	100.0	100.0
Roundup PowerMax	32 FL OZ/A	A 207	5.0	100.0	100.0	3.0	100.0	100.0	0.0	100.0	95.0
NIS - Induce	0.25 % V/V	A 306	2.0	100.0	100.0	0.0	100.0	100.0	0.0	100.0	90.0
Amsol AMS	2.5 LB AI/A	A 404	5.0	100.0	100.0	2.0	100.0	100.0	0.0	100.0	100.0
PowerFlex HL	2 OZ/A	B									
NIS - Induce	0.25 % V/V	B									
Mean =			4.3	100.0	100.0	1.8d	100.0	100.0	0.0	100.0	96.3
6 Fierce EZ	6 FL OZ/A	A 106	5.0	100.0	100.0	0.0	100.0	100.0	0.0	100.0	100.0
RyzUP Smartgrass	1 OZ/A	A 205	5.0	100.0	100.0	0.0	100.0	100.0	0.0	100.0	100.0
Roundup PowerMax	32 FL OZ/A	A 303	2.0	100.0	100.0	0.0	100.0	100.0	0.0	100.0	97.0
NIS - Induce	0.25 % V/V	A 407	5.0	100.0	100.0	0.0	100.0	100.0	0.0	100.0	100.0
Amsol AMS	2.5 LB AI/A	A									
PowerFlex HL	2 OZ/A	B									
NIS - Induce	0.25 % V/V	B									
Mean =			4.3	100.0	100.0	0.0d	100.0	100.0	0.0	100.0	99.3
7 Fierce MTZ	16 FL OZ/A	A 107	5.0	100.0	100.0	3.0	100.0	100.0	0.0	100.0	90.0
RyzUP Smartgrass	1 OZ/A	A 204	2.0	100.0	100.0	0.0	100.0	100.0	0.0	100.0	90.0
Roundup PowerMax	32 FL OZ/A	A 302	5.0	100.0	100.0	0.0	100.0	100.0	0.0	100.0	100.0
NIS - Induce	0.25 % V/V	A 408	2.0	100.0	100.0	0.0	100.0	100.0	0.0	100.0	95.0
Amsol AMS	2.5 LB AI/A	A									
PowerFlex HL	2 OZ/A	B									
NIS - Induce	0.25 % V/V	B									
Mean =			3.5	100.0	100.0	0.5d	100.0	100.0	0.0	100.0	93.8
8 Fierce	3 OZ/A	A 108	5.0	100.0	100.0	4.0	100.0	100.0	0.0	100.0	95.0
Roundup PowerMax	32 FL OZ/A	A 203	2.0	100.0	100.0	0.0	100.0	100.0	0.0	97.0	90.0
NIS - Induce	0.25 % V/V	A 304	2.0	100.0	100.0	0.0	100.0	100.0	0.0	100.0	100.0
Amsol AMS	2.5 LB AI/A	A 401	2.0	100.0	100.0	1.0	100.0	100.0	0.0	100.0	90.0
PowerFlex HL	2 OZ/A	B									
NIS - Induce	0.25 % V/V	B									
Mean =			2.8	100.0	100.0	0.9d	100.0	100.0	0.0	99.3	93.8

d=Means are reported in de-transformed data units

University of Kentucky

Pest Type	W Weed							
Pest Code	LOLMG							
Pest Name	Annual ryegrass							
Crop Type, Code		C TRZAW	C TRZAW	C TRZAW	C TRZAW	C TRZAW	C TRZAW	
Crop Scientific Name		Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	
Crop Name		Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	
Rating Date	6-23-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020	
Part Rated	PLANT P	PLOT C	GRAIN C	GRAIN C	GRAIN C	GRAIN C	GRAIN C	
Rating Type	CONTRO	LENGTH	WEIGHT	CONMOI	WEITES	WEITES	YIELD	
Rating Unit	%	FT	LB	%	LB	LB	BU	
Number of Subsamples	1	1	1	1	1	1	1	
Data Entry Date	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020		
Rating Timing								
Days After First/Last Applic.	258 105	260 107	260 107	260 107	260 107	260 107	260 107	
Trt-Eval Interval								
Days After Emergence	235 DE-1	237 DE-1	237 DE-1	237 DE-1	237 DE-1	237 DE-1	237 DE-1	
ARM Action Codes					EC		ER2 TY1	
Number of Decimals							1	
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	10	11	12	13	14	
1 Untreated		101	0.0	25.50	6.030	13.80	51.20	45.6
		208	0.0	25.50	5.120	12.60	53.50	
		305	0.0	25.60	6.700	14.50	51.50	50.1
		403	0.0	25.30	5.140	12.70	48.20	39.7
		Mean =	0.0	25.48	5.748	13.40	51.10	45.1
2 Roundup PowerMax	32 FL OZ/A A	102	100.0	25.40	9.180	13.60	53.70	69.9
NIS - Induce	0.25 % V/V A	206	100.0	25.10	9.350	13.00	55.20	
Amsol AMS	2.5 LB AI/A A	308	100.0	25.50	9.530	13.50	56.00	72.4
PowerFlex HL	2 OZ/A B	402	97.0	24.80	8.080	13.80	55.10	62.9
NIS - Induce	0.25 % V/V B							
		Mean =	99.3	25.20	9.035	13.48	55.00	68.4
3 Zidua	2 FL OZ/A A	103	100.0	25.90	11.360	13.00	55.20	85.4
Roundup PowerMax	32 FL OZ/A A	202	100.0	25.50	10.150	13.40	54.90	
NIS - Induce	0.25 % V/V A	301	100.0	25.30	9.030	14.90	55.80	68.0
Amsol AMS	2.5 LB AI/A A	405	100.0	25.10	9.120	13.40	55.60	70.4
PowerFlex HL	2 OZ/A B							
NIS - Induce	0.25 % V/V B							
		Mean =	100.0	25.45	9.915	13.68	55.38	74.6
4 Fierce EZ	6 FL OZ/A A	104	100.0	25.70	12.160	14.60	54.00	90.4
Roundup PowerMax	32 FL OZ/A A	201	100.0	25.60	12.320	13.70	56.00	
NIS - Induce	0.25 % V/V A	307	100.0	25.50	10.320	13.40	56.40	78.4
Amsol AMS	2.5 LB AI/A A	406	100.0	25.10	9.410	13.50	55.70	72.6
PowerFlex HL	2 OZ/A B							
NIS - Induce	0.25 % V/V B							
		Mean =	100.0	25.48	11.053	13.80	55.53	80.5

d=Means are reported in de-transformed data units

University of Kentucky

Pest Type	W Weed	C TRZAW	C TRZAW	C TRZAW	C TRZAW	C TRZAW		
Pest Code	LOLMG							
Pest Name	Annual ryegrass							
Crop Type, Code		C TRZAW	C TRZAW	C TRZAW	C TRZAW	C TRZAW		
Crop Scientific Name		Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>		
Crop Name		Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat		
Rating Date	6-23-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020		
Part Rated	PLANT P	PLOT C	GRAIN C	GRAIN C	GRAIN C	GRAIN C		
Rating Type	CONTRO	LENGTH	WEIGHT	CONMOI	WEITES	YIELD		
Rating Unit	%	FT	LB	%	LB	BU		
Number of Subsamples	1	1	1	1	1	1		
Data Entry Date	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020			
Rating Timing								
Days After First/Last Applic.	258 105	260 107	260 107	260 107	260 107	260 107		
Trt-Eval Interval								
Days After Emergence	235 DE-1	237 DE-1	237 DE-1	237 DE-1	237 DE-1	237 DE-1		
ARM Action Codes					EC	ER2 TY1		
Number of Decimals						1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	10	11	12	13	14	15
5 Fierce MTZ	16 FL OZ/A A	105	100.0	25.80	11.990	12.90	55.40	90.6
Roundup PowerMax	32 FL OZ/A A	207	100.0	25.00	10.520	13.50	55.00	
NIS - Induce	0.25 % V/V A	306	100.0	25.40	9.780	13.50	55.20	74.5
Amsol AMS	2.5 LB AI/A A	404	100.0	25.20	9.470	13.50	56.20	72.8
PowerFlex HL	2 OZ/A B							
NIS - Induce	0.25 % V/V B							
Mean =			100.0	25.35	10.440	13.35	55.45	79.3
6 Fierce EZ	6 FL OZ/A A	106	100.0	25.80	12.230	13.30	55.50	92.0
RyzUP Smartgrass	1 OZ/A A	205	100.0	24.60	11.210	14.80	54.20	
Roundup PowerMax	32 FL OZ/A A	303	100.0	25.30	9.250	13.80	55.60	70.5
NIS - Induce	0.25 % V/V A	407	100.0	25.60	10.310	13.50	55.90	78.0
Amsol AMS	2.5 LB AI/A A							
PowerFlex HL	2 OZ/A B							
NIS - Induce	0.25 % V/V B							
Mean =			100.0	25.33	10.750	13.85	55.30	80.2
7 Fierce MTZ	16 FL OZ/A A	107	100.0	25.60	12.050	12.80	55.10	91.9
RyzUP Smartgrass	1 OZ/A A	204	100.0	24.80	10.370	14.70	54.00	
Roundup PowerMax	32 FL OZ/A A	302	100.0	25.40	9.280	14.10	55.70	70.2
NIS - Induce	0.25 % V/V A	408	100.0	25.20	10.050	13.30	56.20	77.4
Amsol AMS	2.5 LB AI/A A							
PowerFlex HL	2 OZ/A B							
NIS - Induce	0.25 % V/V B							
Mean =			100.0	25.25	10.438	13.73	55.25	79.8
8 Fierce	3 OZ/A A	108	100.0	25.40	11.730	14.00	54.30	88.9
Roundup PowerMax	32 FL OZ/A A	203	100.0	25.20	11.290	13.60	54.70	
NIS - Induce	0.25 % V/V A	304	100.0	25.80	8.620	13.80	55.60	64.5
Amsol AMS	2.5 LB AI/A A	401	100.0	25.10	10.990	13.50	56.10	84.8
PowerFlex HL	2 OZ/A B							
NIS - Induce	0.25 % V/V B							
Mean =			100.0	25.38	10.658	13.73	55.18	79.4

d=Means are reported in de-transformed data units

University of Kentucky

Control of Annual Ryegrass with Fierce in Winter Wheat

Trial ID: 20-3_WHT-REC	Location: UKREC	Trial Year: 2020
Protocol ID: 66.01	Investigator (Creator): Travis Legleiter	
Project ID:	Study Director: Travis Legleiter	
	Sponsor Contact: John Cranmer	

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

LOLMG, Lolium multiflorum gaudini, Annual ryegrass = US

LAMAM, Lamium amplexicaule, Henbit = US

Crop Type, Code

C = EPPO species (Bayer) codes

TRZAW, BCER, Triticum aestivum, Winter wheat = US

Part Rated

PLANT = plant

PLOT = plot

GRAIN = grain

C = Crop is Part Rated

P = Pest is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

LENGTH = length

WEIGHT = weight

CONMOI = content - moisture

WEITES = weight - test

YIELD = yield

Rating Unit

% = percent

FT = foot

LB = pound

BU = bushel

ARM Action Codes

ET4 = Excluded treatment 4

AS = Automatic square root transformation of X+0.5

EC = Do not analyze untreated check, while still reporting treatment mean on AOV Means Table

ER2 = Excluded replicate 2

TY1 = $(726 / (3.75 * [11])) * [12] * (100 - [13]) / 86.5$

University of Kentucky

Pest Type		W Weed LOLMG	W Weed LAMAM		W Weed LOLMG	W Weed LAMAM		W Weed LOLMG	W Weed LAMAM		
Pest Code		Annual ryegrass	Henbit		Annual ryegrass	Henbit		Annual ryegrass	Henbit		
Pest Name											
Crop Type, Code	C TRZAW			C TRZAW			C TRZAW				
Crop Scientific Name	Triticum aestiv>			Triticum aestiv>			Triticum aestiv>				
Crop Name	Winter wheat			Winter wheat			Winter wheat				
Rating Date	11-8-2019	11-8-2019	11-8-2019	11-20-2019	11-20-2019	11-20-2019	3-30-2020	3-30-2020	3-30-2020		
Part Rated	PLANT C	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P		
Rating Type	PHYGEN	CONTROL	CONTROL	PHYGEN	CONTROL	CONTROL	PHYGEN	CONTROL	CONTROL		
Rating Unit	%	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Data Entry Date	11-8-2019	11-8-2019	11-8-2019	12-18-2019	12-18-2019	12-18-2019	4-30-2020	4-30-2020	4-30-2020		
Rating Timing											
Days After First/Last Applic.	30 30	30 30	30 30	42 42	42 42	42 42	173 20	173 20	173 20		
Trt-Eval Interval	30 DA-A	30 DA-A	30 DA-A	42 DA-A	42 DA-A	42 DA-A					
Days After Emergence	7 DE-1	7 DE-1	7 DE-1	19 DE-1	19 DE-1	19 DE-1	150 DE-1	150 DE-1	150 DE-1		
ARM Action Codes	ET4			AS							
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8	9
7 Fierce MTZ	16 FL OZ/A	A	3.5 a	100.0 a	100.0 a	0.5 a	100.0 a	100.0 a	0.0 a	100.0 a	93.8 a
RyzUP Smartgrass	1 OZ/A	A									
Roundup PowerMax	32 FL OZ/A	A									
NIS - Induce	0.25 % V/V	A									
Amsol AMS	2.5 LB A/A	A									
PowerFlex HL	2 OZ/A	B									
NIS - Induce	0.25 % V/V	B									
8 Fierce	3 OZ/A	A	2.8 a	100.0 a	100.0 a	0.9 a	100.0 a	100.0 a	0.0 a	99.3 a	93.8 a
Roundup PowerMax	32 FL OZ/A	A									
NIS - Induce	0.25 % V/V	A									
Amsol AMS	2.5 LB A/A	A									
PowerFlex HL	2 OZ/A	B									
NIS - Induce	0.25 % V/V	B									
LSD P=.05	1.68			12.01	12.90	1.30 - 1.31	7.72	22.15	.	12.31	9.24
Standard Deviation	1.13			8.16	8.77	0.35t	5.25	15.07	0.00	8.37	6.28
CV	53.81			9.61	10.43	37.33t	6.08	18.58	0.0	11.02	8.63
Levene's F	1.333			1.602	1.925	1.771	0.954	10.851	0.00	1.819	1.342
Levene's Prob(F)	0.286			0.183	0.11	0.14	0.486	0.001*	0.00*	0.13	0.274
Skewness	0.4048			-2.1379*	-2.0578*	1.585*	-2.2835*	-1.6628*	.	-1.2935*	-1.1968*
Kurtosis	-1.5988			2.9662*	2.7113*	0.9763	3.56*	1.1704	.	0.3048	0.2383
Replicate F	1.583			0.750	1.990	3.148	1.389	0.848	0.000	1.393	0.087
Replicate Prob(F)	0.2282			0.5345	0.1463	0.0465	0.2738	0.4832	1.0000	0.2725	0.9662
Treatment F	12.889			72.964	62.199	2.822	177.842	21.616	0.000	76.965	126.762
Treatment Prob(F)	0.0001			0.0001	0.0001	0.0308	0.0001	0.0001	1.0000	0.0001	0.0001

University of Kentucky

Pest Type	W Weed							
Pest Code	LOLMG							
Pest Name	Annual ryegrass							
Crop Type, Code		C TRZAW	C TRZAW	C TRZAW	C TRZAW	C TRZAW		
Crop Scientific Name		Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>		
Crop Name		Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat		
Rating Date	6-23-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020		
Part Rated	PLANT P	PLOT C	GRAIN C	GRAIN C	GRAIN C	GRAIN C		
Rating Type	CONTRO	LENGTH	WEIGHT	CONMOI	WEITES	YIELD		
Rating Unit	%	FT	LB	%	LB	BU		
Number of Subsamples	1	1	1	1	1	1		
Data Entry Date	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020			
Rating Timing								
Days After First/Last Applic.	258 105	260 107	260 107	260 107	260 107	260 107		
Trt-Eval Interval								
Days After Emergence	235 DE-1	237 DE-1	237 DE-1	237 DE-1	237 DE-1	237 DE-1		
ARM Action Codes					EC	ER2 TY1		
Number of Decimals						1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	10	11	12	13	14	15
1 Untreated			0.0 b	25.48 a	5.748 c	13.40 a	51.10	45.1 b
2 Roundup PowerMax	32 FL OZ/A A		99.3 a	25.20 a	9.035 b	13.48 a	55.00 a	68.4 a
NIS - Induce	0.25 % V/V A							
Amsol AMS	2.5 LB AI/A A							
PowerFlex HL	2 OZ/A B							
NIS - Induce	0.25 % V/V B							
3 Zidua	2 FL OZ/A A		100.0 a	25.45 a	9.915 ab	13.68 a	55.38 a	74.6 a
Roundup PowerMax	32 FL OZ/A A							
NIS - Induce	0.25 % V/V A							
Amsol AMS	2.5 LB AI/A A							
PowerFlex HL	2 OZ/A B							
NIS - Induce	0.25 % V/V B							
4 Fierce EZ	6 FL OZ/A A		100.0 a	25.48 a	11.053 a	13.80 a	55.53 a	80.5 a
Roundup PowerMax	32 FL OZ/A A							
NIS - Induce	0.25 % V/V A							
Amsol AMS	2.5 LB AI/A A							
PowerFlex HL	2 OZ/A B							
NIS - Induce	0.25 % V/V B							
5 Fierce MTZ	16 FL OZ/A A		100.0 a	25.35 a	10.440 ab	13.35 a	55.45 a	79.3 a
Roundup PowerMax	32 FL OZ/A A							
NIS - Induce	0.25 % V/V A							
Amsol AMS	2.5 LB AI/A A							
PowerFlex HL	2 OZ/A B							
NIS - Induce	0.25 % V/V B							
6 Fierce EZ	6 FL OZ/A A		100.0 a	25.33 a	10.750 ab	13.85 a	55.30 a	80.2 a
RyzUP Smartgrass	1 OZ/A A							
Roundup PowerMax	32 FL OZ/A A							
NIS - Induce	0.25 % V/V A							
Amsol AMS	2.5 LB AI/A A							
PowerFlex HL	2 OZ/A B							
NIS - Induce	0.25 % V/V B							

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Pest Type	W Weed							
Pest Code	LOLMG							
Pest Name	Annual ryegrass							
Crop Type, Code		C TRZAW	C TRZAW	C TRZAW	C TRZAW	C TRZAW		
Crop Scientific Name		Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>		
Crop Name		Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat		
Rating Date	6-23-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020		
Part Rated	PLANT P	PLOT C	GRAIN C	GRAIN C	GRAIN C	GRAIN C		
Rating Type	CONTRO	LENGTH	WEIGHT	CONMOI	WEITES	YIELD		
Rating Unit	%	FT	LB	%	LB	BU		
Number of Subsamples	1	1	1	1	1	1		
Data Entry Date	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020			
Rating Timing								
Days After First/Last Applic.	258 105	260 107	260 107	260 107	260 107	260 107		
Trt-Eval Interval								
Days After Emergence	235 DE-1	237 DE-1	237 DE-1	237 DE-1	237 DE-1	237 DE-1		
ARM Action Codes					EC	ER2 TY1		
Number of Decimals						1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	10	11	12	13	14	15
7 Fierce MTZ	16 FL OZ/A	A	100.0 a	25.25 a	10.438 ab	13.73 a	55.25 a	79.8 a
RyzUP Smartgrass	1 OZ/A	A						
Roundup PowerMax	32 FL OZ/A	A						
NIS - Induce	0.25 % V/V	A						
Amsol AMS	2.5 LB AI/A	A						
PowerFlex HL	2 OZ/A	B						
NIS - Induce	0.25 % V/V	B						
8 Fierce	3 OZ/A	A	100.0 a	25.38 a	10.658 ab	13.73 a	55.18 a	79.4 a
Roundup PowerMax	32 FL OZ/A	A						
NIS - Induce	0.25 % V/V	A						
Amsol AMS	2.5 LB AI/A	A						
PowerFlex HL	2 OZ/A	B						
NIS - Induce	0.25 % V/V	B						
LSD P=.05	0.78			0.381	1.1805	0.930	0.917	11.49
Standard Deviation	0.53			0.259	0.8028	0.633	0.617	6.56
CV	0.61			1.02	8.23	4.64	1.12	8.94
Levene's F				0.71	0.462	1.248	0.364	0.329
Levene's Prob(F)				0.664	0.852	0.317	0.893	0.929
Skewness	-2.3797*			-0.4777	-0.9329*	0.5568	-0.6485	-0.7592
Kurtosis	3.906*			-0.0125	0.667	0.066	-0.3871	0.4485
Replicate F	1.000			6.480	9.133	1.101	6.092	9.966
Replicate Prob(F)	0.4123			0.0028	0.0005	0.3707	0.0048	0.0020
Treatment F	17740.684			0.627	18.645	0.360	0.327	10.283
Treatment Prob(F)	0.0001			0.7286	0.0001	0.9150	0.9142	0.0001

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Control of Annual Ryegrass with Fierce in Winter Wheat

Trial ID: 20-3_WHT-REC	Location: UKREC	Trial Year: 2020
Protocol ID: 66.01	Investigator (Creator): Travis Legleiter	
Project ID:	Study Director: Travis Legleiter	
	Sponsor Contact: John Cranmer	

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

LOLMG, Lolium multiflorum gaudini, Annual ryegrass = US

LAMAM, Lamium amplexicaule, Henbit = US

Crop Type, Code

C = EPPO species (Bayer) codes

TRZAW, BCER, Triticum aestivum, Winter wheat = US

Part Rated

PLANT = plant

PLOT = plot

GRAIN = grain

C = Crop is Part Rated

P = Pest is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

LENGTH = length

WEIGHT = weight

CONMOI = content - moisture

WEITES = weight - test

YIELD = yield

Rating Unit

% = percent

FT = foot

LB = pound

BU = bushel

ARM Action Codes

ET4 = Excluded treatment 4

AS = Automatic square root transformation of X+0.5

EC = Do not analyze untreated check, while still reporting treatment mean on AOV Means Table

ER2 = Excluded replicate 2

TY1 = $(726 / (3.75 * [11])) * [12] * (100 - [13]) / 86.5$

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Finesse and Anthem Flex Herbicides Use Following Corn in Winter Wheat

Trial ID: 20-5_WHT-REC Location: UKREC Trial Year: 2019
 Protocol ID: USA-19-782 Investigator (Creator): Travis Legleiter
 Project ID: Study Director: WIGGINS, M.
 Sponsor Contact:

Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	Amt Product to Measure	Rep 1	2	3	4
1	NO HERBICIDE									101	207	310	406
2	ANTHEM FLEX Gramoxone NIS	4 LB/GAL 2 LBA/GAL 100 %W/W	GAL GAL %	SE L SL	3 FL OZ/A 61 FL OZ/A 4.8 FL OZ/A	OZ/A	EARPRE EARPRE EARPRE	A A A	3.125 mL/mx 63.54 mL/mx 5.0 mL/mx	102	208	305	410
3	FINESSE Cereal&Fallow-0.5oz/a ANTHEM FLEX ROUNDUP POWERMAX NIS	75 %W/W 4 LB/GAL 5.5 LB/GAL 100 %W/W	%W/W GAL GAL %	WG SE SL SL	3 FL OZ/A 32 FL OZ/A 4.8 FL OZ/A	OZ/A	EARPRE EARPRE EARPRE EARPRE	A A A A	3.125 mL/mx 33.33 mL/mx 5.0 mL/mx	103	204	307	401
4	FINESSE Cereal&Fallow-0.5oz/a ROUNDUP POWERMAX METRIBUZIN ANTHEM FLEX NIS	75 %W/W 5.5 LB/GAL 75 % 4 LB/GAL 100 %W/W	%W/W GAL % GAL %	WG SL WG SE SL	3 FL OZ/A 32 FL OZ/A 3 OZ/A 2.75 FL OZ/A 4.8 FL OZ/A	OZ/A	EARPRE EARPRE POEMAE POEMAE POEMAE	A A D D D	33.33 mL/mx 2.996 g/mx 2.865 mL/mx 5.0 mL/mx	104	203	308	402
5	FINESSE Cereal&Fallow-0.5oz/a ROUNDUP POWERMAX METRIBUZIN ANTHEM FLEX NIS	75 %W/W 5.5 LB/GAL 75 % 4 LB/GAL 100 %W/W	%W/W GAL % GAL %	WG SL WG SE SL	3 FL OZ/A 32 FL OZ/A 3 OZ/A 3.2 FL OZ/A 4.8 FL OZ/A	OZ/A	EARPRE EARPRE POEMAE POEMAE POEMAE	A A D D D	33.33 mL/mx 2.996 g/mx 3.333 mL/mx 5.0 mL/mx	105	210	304	407
6	Gramoxone ANTHEM FLEX NIS	2 LBA/GAL 4 LB/GAL 100 %W/W	LBA/GAL GAL %	L SE SL	61 FL OZ/A 2.75 FL OZ/A 4.8 FL OZ/A	OZ/A	PREEM PREEM PREEM	B B B	63.54 mL/mx 2.865 mL/mx 5.0 mL/mx	106	209	303	409
7	Gramoxone ANTHEM FLEX NIS	2 LBA/GAL 4 LB/GAL 100 %W/W	LBA/GAL GAL %	L SE SL	61 FL OZ/A 3.2 FL OZ/A 4.8 FL OZ/A	OZ/A	PREEM PREEM PREEM	B B B	63.54 mL/mx 3.333 mL/mx 5.0 mL/mx	107	202	306	408
8	Gramoxone ANTHEM FLEX NIS	2 LBA/GAL 4 LB/GAL 100 %W/W	LBA/GAL GAL %	L SE SL	61 FL OZ/A 2.75 FL OZ/A 4.8 FL OZ/A	OZ/A	PREMLA PREMLA PREMLA	C C C	63.54 mL/mx 2.865 mL/mx 5.0 mL/mx	108	206	301	405
9	Gramoxone ANTHEM FLEX NIS	2 LBA/GAL 4 LB/GAL 100 %W/W	LBA/GAL GAL %	L SE SL	61 FL OZ/A 3.2 FL OZ/A 4.8 FL OZ/A	OZ/A	PREMLA PREMLA PREMLA	C C C	63.54 mL/mx 3.333 mL/mx 5.0 mL/mx	109	201	302	403
10	Gramoxone ANTHEM FLEX NIS HARMONY EXTRA WITH TOTALSOL QUELEX NIS	2 LBA/GAL 4 LB/GAL 100 %W/W 50 %W/W 20 % 100 %W/W	LBA/GAL GAL % % % %	L SE SL SG WG SL	61 FL OZ/A 2.75 FL OZ/A 4.8 FL OZ/A 0.6 OZ/A 0.75 OZ/A 4.8 FL OZ/A	OZ/A	PREMLA PREMLA PREMLA POEMSE POEMSE POEMSE	C C C E E E	63.54 mL/mx 2.865 mL/mx 5.0 mL/mx 0.5991 g/mx 0.7489 g/mx 5.0 mL/mx	110	205	309	404

Sort Order: Replicate 1

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Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
34.635	mL	ANTHEM FLEX	4	LB/GAL	SE	
476.562	mL	Gramoxone	2	LBA/GAL	L	
62.500	mL	NIS	100	%W/W	SL	
125.000	mL	ROUNDUP POWERMAX	5.5	LB/GAL	SL	
7.489	g	METRIBUZIN	75	%	WG	
0.749	g	HARMONY EXTRA WITH TOTALSOL	50	%W/W	SG	
0.936	g	QUELEX	20	%	WG	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

General Trial Information

Study Director: WIGGINS, M.

Investigator: Travis Legleiter **Title:** Assistant Extension Professor

Trial Status: E established

ARM Trial Created On: 10-4-2019

Initiation Date: 10-9-2019

Completion Date: 6-25-2020

Trial Location

City: Princeton **Country:** USA United States

State/Prov.: Kentucky

Postal Code: 42445

Conducted Under GLP: No

Conducted Under GEP: No

Contacts

Role: STYDIR study director

Study Director: WIGGINS, M.

Role: INVEST investigator

Investigator: Travis Legleiter

Title: Assistant Extension Professor

Organization: University of Kentucky

Address 1: 1205 Hopkinsville Street

Phone No.: 859-562-1323

Country: USA United States

E-mail: Travis.Legleiter@uky.edu

City: Princeton, KY

Postal Code: 42445

Crop Description

Crop 1: C TRZAW Triticum aestivum Winter wheat **BBCH Scale:** BCER

Stage Scale: BBCH

Variety: Pioneer 26R10

Planting Date: 10-25-2019

Planting Rate: 109 LB/A

Depth: 1 IN

Planting Method: DRILLE drilled

Planting Equipment: DD disc drill

Soil Moisture: DAMP damp

Row Spacing: 7.5 IN

Soil Temperature: 53 F

Emergence Date: 11-1-2019

Harvest Date: 6-25-2020

Harvested Width: 3.75 FT

% Standard Moisture: 13.5

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Pest Description

Pest 1 Type: W **Code:** LOLMG *Lolium multiflorum gaudini*
Common Name: Annual ryegrass **Stage Scale:** BBCH

Pest 2 Type: W **Code:** CERSS *Cerastium sp.*
Common Name: Chickweed **Stage Scale:** BBCH

Pest 3 Type: W **Code:** LAMAM *Lamium amplexicaule*
Common Name: Henbit **Stage Scale:** BBCH

Pest 4 Type: W **Code:** ERICA *Erigeron canadensis*
Common Name: Canada horseweed **Stage Scale:** BBCH

Pest 5 Type: W **Code:** ALLVI *Allium vineale*
Common Name: Wild garlic **Stage Scale:** BBCH

Pest 6 Type: W **Code:** DRBSS *Draba sp.*
Common Name: Whitlow-grass **Stage Scale:** BBCH

Site and Design

Treated Plot Width: 10 FT **Site Type:** FIELD field
Treated Plot Length: 30 FT **Experimental Unit:** 1 PLOT plot
Treated Plot Area: 300.0 FT² **Treatments:** 10 **Tillage Type:** NOTILL no-till
Replications: 4 **Study Design:** RACOB� Randomized Complete Block (RCB)

Maintenance

No.	Date	Type	Maintenance Product Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit
1.	2-27-2020	FERT	UAN 28-0-0	28	%	L	40	LB A/A
2.	3-30-2020	INSE	Warrior II	2.08	LB/GAL	L	1.5	OZ/A

Soil Description

Description Name: 109 B1&2
% Sand: 5.3 **% OM:** 2.9 **Texture:** SIL silt loam
% Silt: 78.8 **pH:** 6.2 **Soil Name:** Crider Silt Loam
% Clay: 15.9 **CEC:** 13.32 **Fert. Level:** F fair
Soil Drainage: G good
Analyzed By:
 UK Soils Lab

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Application Description					
	A	B	C	D	E
Application Date	10-9-2019	10-25-2019	10-29-2019	12-20-2019	3-10-2020
Appl. Start Time	5:00 PM	11:13 AM	3:08 PM	3:11 PM	3:50 PM
Appl. Stop Time	5:12 PM	11:24 AM	3:16 PM	3:16 PM	3:53 PM
Interval to Prev. Appl.		16 DAYS	4 DAYS	52 DAYS	81 DAYS
Application Method	BROADC	BROADC	BROADC	BROADC	BROADC
Application Timing	14 DPP	PRE	Delayed PRE	3-4 Lf Wheat	Spring GUP
Application Placement	SOIL	FOLIAR	FOLIAR	FOLIAR	FOLIAR
Applied By	JG	JG	JG	JG	JG
Air Temperature Start, Stop	88.8 F	58 F	64.2 F	56.7 F	57.4 F
% Relative Humidity Start, Stop	50.4	76	68.9		
Wind Velocity+Dir. Start	1.5 MPH ESE	1 MPH N	1.2 MPH NE	1.5 MPH SE	3 MPH NW
Wind Velocity+Dir. Max	5.8 MPH ESE	1.5 MPH N	2.8 MPH NE	3.9 MPH SE	7.2 MPH NW
Wet Leaves (Y/N)	N no	N no	N no	N no	N no
Soil Temperature	75 F	53 F	58 F	35 F	50 F
Soil Moisture	DRY	SLIWET	WET	WET	WET
% Cloud Cover	5	100	100	100	100

Crop Stage At Each Application					
	A	B	C	D	E
Crop 1 Code, BBCH Scale	TRZAW BCER	TRZAW BCER	TRZAW BCER	TRZAW BCER	TRZAW BCER
Days after Emergence	-23	-7	-3	49	130
Stage Majority, Percent				13	21
Stage Maximum, Percent				21	23
Height Average				2.25 IN	5.5 IN
Height Minimum, Maximum				1.5 3	4.5 6.5

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Pest Stage At Each Application					
	A	B	C	D	E
Pest 1 Code, Type, Scale	LOLMG W BBCH	LOLMG W BBCH	LOLMG W BBCH	LOLMG W BBCH	LOLMG W BBCH
Stage Majority, Percent		11	11		
Stage Minimum, Percent					23
Stage Maximum, Percent					24
Height Average		1.25 IN	1.25 IN		2.25 IN
Height Minimum, Maximum		1 1.5	1 1.5		1.5 3
Density Average		1 FT2	2 FT2		1 FT2
Density Minimum, Maximum		0 4	0 6		0 3
Pest 2 Code, Type, Scale	CERSS W BBCH	CERSS W BBCH	CERSS W BBCH	CERSS W BBCH	CERSS W BBCH
Stage Majority, Percent		10	10	10	
Height Average		0.175 IN	0.175 IN	0.25 IN	
Height Minimum, Maximum		0.1 0.25	0.1 0.25	0.25 0.25	
Density Average		10 FT2	6 FT2	1 FT2	
Density Minimum, Maximum		0 25	1 14	0 2	
Pest 3 Code, Type, Scale	LAMAM W BBCH	LAMAM W BBCH	LAMAM W BBCH	LAMAM W BBCH	LAMAM W BBCH
Stage Majority, Percent		10			
Stage Minimum, Percent			10		
Stage Maximum, Percent			11		
Height Average		0.175 IN	0.175 IN		2 IN
Height Minimum, Maximum		0.1 0.25	0.1 0.25		1 2.75
Density Average		18 FT2	27 FT2		1 FT2
Density Minimum, Maximum		1 50	0 75		0 4
Pest 4 Code, Type, Scale	ERICA W BBCH	ERICA W BBCH	ERICA W BBCH	ERICA W BBCH	ERICA W BBCH
Stage Majority, Percent		10			
Height Average		0.175 IN	0.175 IN	0.25 IN	
Height Minimum, Maximum		0.1 0.25	0.1 0.25	0.25 0.25	
Density Average		3 FT2	19 FT2	1 FT2	
Density Minimum, Maximum		0 23	0 58	0 2	
Pest 5 Code, Type, Scale	ALLVI W BBCH	ALLVI W BBCH	ALLVI W BBCH	ALLVI W BBCH	ALLVI W BBCH
Height Average				1.5 IN	
Height Minimum, Maximum				0.5 2.5	
Density Average				1.5 FT2	
Density Minimum, Maximum				0 6	
Pest 6 Code, Type, Scale	DRBSS W BBCH	DRBSS W BBCH	DRBSS W BBCH	DRBSS W BBCH	DRBSS W BBCH
Stage Majority, Percent					65
Height Average					1.75 IN
Height Minimum, Maximum					0.25 3
Density Average					4 FT2
Density Minimum, Maximum					0 7

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Pest Type	W Weed	W Weed				W Weed	W Weed
Pest Code	LOLMG	LAMAM				LOLMG	LAMAM
Pest Name	Annual ryegrass	Henbit				Annual ryegrass	Henbit
Crop Type, Code			C TRZAW	C TRZAW	C TRZAW		
Crop Scientific Name			Triticum aestiv>	Triticum aestiv>	Triticum aestiv>		
Crop Name			Winter wheat	Winter wheat	Winter wheat		
Rating Date	10-24-2019	10-24-2019	11-8-2019	11-8-2019	11-8-2019	11-8-2019	11-8-2019
Part Rated	PLANT P	PLANT P	PLANT C	PLANT C	PLANT C	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	PHYTOGEN	COLOROSIS	NECROSIS	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1	1
Data Entry Date	11-8-2019	11-8-2019	11-8-2019	11-8-2019	11-8-2019	11-8-2019	11-8-2019
Rating Timing							
Days After First/Last Applic.	15 15	15 15	30 10	30 10	30 10	30 10	30 10
Trt-Eval Interval	-1 DA-A	-1 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A
Days After Emergence	-8 DE-1	-8 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1
ARM Action Codes						ET2	ET2
Number of Decimals							
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code Plot	1	2	3	4	5
3 FINESSE Cereal&Fallow-0.5oz/a		103	100.0	100.0	0.0	0.0	0.0
ANTHEM FLEX	3 FL OZ/A A	204	100.0	100.0	0.0	0.0	100.0
ROUNDUP POWERMAX	32 FL OZ/A A	307	80.0	100.0	2.0	0.0	100.0
NIS	4.8 FL OZ/A A	401	100.0	100.0	0.0	0.0	100.0
		Mean =	95.0	100.0	0.5	0.0	100.0
4 FINESSE Cereal&Fallow-0.5oz/a		104	100.0	100.0	0.0	0.0	100.0
ROUNDUP POWERMAX	32 FL OZ/A A	203	100.0	100.0	0.0	0.0	100.0
METRIBUZIN	3 OZ/A D	308	100.0	100.0	0.0	0.0	100.0
ANTHEM FLEX	2.75 FL OZ/A D	402	100.0	100.0	0.0	0.0	100.0
NIS	4.8 FL OZ/A D						
		Mean =	100.0	100.0	0.0	0.0	100.0
5 FINESSE Cereal&Fallow-0.5oz/a		105	100.0	100.0	0.0	0.0	100.0
ROUNDUP POWERMAX	32 FL OZ/A A	210	97.0	100.0	5.0	0.0	100.0
METRIBUZIN	3 OZ/A D	304	100.0	100.0	0.0	0.0	100.0
ANTHEM FLEX	3.2 FL OZ/A D	407	100.0	100.0	0.0	0.0	100.0
NIS	4.8 FL OZ/A D						
		Mean =	99.3	100.0	1.3	0.0	100.0
6 Gramoxone	61 FL OZ/A B	106	0.0	0.0	2.0	0.0	100.0
ANTHEM FLEX	2.75 FL OZ/A B	209	0.0	0.0	2.0	0.0	100.0
NIS	4.8 FL OZ/A B	303	0.0	0.0	5.0	0.0	100.0
		409	0.0	0.0	0.0	0.0	100.0
		Mean =	0.0	0.0	2.3	0.0	100.0
7 Gramoxone	61 FL OZ/A B	107	0.0	0.0	5.0	0.0	100.0
ANTHEM FLEX	3.2 FL OZ/A B	202	0.0	0.0	0.0	0.0	100.0
NIS	4.8 FL OZ/A B	306	0.0	0.0	0.0	0.0	100.0
		408	0.0	0.0	0.0	0.0	100.0
		Mean =	0.0	0.0	1.3	0.0	100.0
8 Gramoxone	61 FL OZ/A C	108	0.0	0.0	5.0	0.0	100.0
ANTHEM FLEX	2.75 FL OZ/A C	206	0.0	0.0	2.0	0.0	100.0
NIS	4.8 FL OZ/A C	301	0.0	0.0	5.0	0.0	100.0
		405	80.0	100.0	0.0	0.0	100.0
		Mean =	20.0	25.0	3.0	0.0	100.0

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Pest Type	W Weed LOLMG Annual ryegrass	W Weed LAMAM Henbit	C TRZAW Triticum aestiv> Winter wheat	C TRZAW Triticum aestiv> Winter wheat	C TRZAW Triticum aestiv> Winter wheat	W Weed LOLMG Annual ryegrass	W Weed LAMAM Henbit		
Pest Code									
Pest Name									
Crop Type, Code									
Crop Scientific Name									
Crop Name									
Rating Date	10-24-2019	10-24-2019	11-8-2019	11-8-2019	11-8-2019	11-8-2019	11-8-2019		
Part Rated	PLANT P	PLANT P	PLANT C	PLANT C	PLANT C	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	PHYTOGEN	COLOROSIS	NECROSIS	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Data Entry Date	11-8-2019	11-8-2019	11-8-2019	11-8-2019	11-8-2019	11-8-2019	11-8-2019		
Rating Timing									
Days After First/Last Applic.	15 15	15 15	30 10	30 10	30 10	30 10	30 10		
Trt-Eval Interval	-1 DA-A	-1 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A		
Days After Emergence	-8 DE-1	-8 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1		
ARM Action Codes						ET2	ET2		
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7
9 Gramoxone	61 FL OZ/A C	109	0.0	0.0	2.0	0.0	0.0	100.0	100.0
ANTHEM FLEX	3.2 FL OZ/A C	201	0.0	0.0	2.0	0.0	0.0	100.0	100.0
NIS	4.8 FL OZ/A C	302	0.0	0.0	0.0	0.0	0.0	100.0	100.0
		403	100.0	100.0	0.0	0.0	0.0	100.0	100.0
		Mean =	25.0	25.0	1.0	0.0	0.0	100.0	100.0
10 Gramoxone	61 FL OZ/A C	110	0.0	0.0	2.0	0.0	0.0	100.0	100.0
ANTHEM FLEX	2.75 FL OZ/A C	205	97.0	100.0	2.0	0.0	0.0	100.0	100.0
NIS	4.8 FL OZ/A C	309	100.0	100.0	2.0	0.0	0.0	100.0	100.0
HARMONY EXTRA WITH TOTALSOL	0.6 OZ/A E	404	0.0	0.0	0.0	0.0	0.0	100.0	100.0
QUELEX	0.75 OZ/A E								
NIS	4.8 FL OZ/A E								
		Mean =	49.3	50.0	1.5	0.0	0.0	100.0	100.0

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Pest Type	C TRZAW		C TRZAW		C TRZAW		W Weed LOLMG Annual ryegrass	W Weed LAMAM Henbit	C TRZAW		C TRZAW	
Pest Code	Triticum aestiv>		Triticum aestiv>		Triticum aestiv>				Triticum aestiv>		Triticum aestiv>	
Pest Name	Winter wheat		Winter wheat		Winter wheat				Winter wheat		Winter wheat	
Crop Type, Code	11-18-2019		11-18-2019		11-18-2019		11-18-2019	11-18-2019	11-20-2019		12-5-2019	
Crop Scientific Name	PLANT C		PLANT C		PLANT C		PLANT P	PLANT P	PLANT C		PLANT C	
Crop Name	PHYTOGEN		CLOROSIS		NECROSIS		CONTROL	CONTROL	COUPLA		COUPLA	
Rating Date	%		%		%		%	%	/ft2		/ft2	
Part Rated	1		1		1		1	1	1		1	
Rating Type	12-25-2019		12-25-2019		12-25-2019		12-25-2019	12-25-2019	8-26-2020		8-26-2020	
Rating Unit	40 20		40 20		40 20		40 20	40 20	42 22		57 37	
Number of Subsamples	24 DA-A		24 DA-A		24 DA-A		24 DA-A	24 DA-A	19 DE-1		34 DE-1	
Data Entry Date	17 DE-1		17 DE-1		17 DE-1		17 DE-1	17 DE-1	ET9			
Rating Timing	AL				ER1							
Days After First/Last Applic.												
Trt-Eval Interval												
Days After Emergence												
ARM Action Codes												
Number of Decimals												
Trt Treatment	Rate	Appl										
No. Name	Rate Unit	Code Plot	8	9	10	11	12	13	14			
1 NO HERBICIDE		101	2.0	0.0		0.0	0.0	27.00	32.00			
		207	2.0	0.0	2.0	0.0	0.0	38.50	46.50			
		310	2.0	0.0	2.0	0.0	0.0	35.00	43.00			
		406	2.0	0.0	2.0	0.0	0.0	42.00	43.50			
		Mean =	2.0d	0.0	0.0	2.0	0.0	0.0	35.63	41.25		
2 ANTHEM FLEX	3 FL OZ/A A	102	2.0	0.0		100.0	50.0	44.00	47.00			
	Gramoxone	61 FL OZ/A A	208	2.0	0.0	2.0	100.0	100.0	44.00	38.00		
	NIS	4.8 FL OZ/A A	305	2.0	0.0	2.0	100.0	100.0	38.50	40.00		
		410	2.0	0.0	2.0	100.0	100.0	45.50	38.50			
		Mean =	2.0d	0.0	0.0	2.0	100.0	87.5	43.00	40.88		

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Pest Type				W Weed LOLMG Annual ryegrass	W Weed LAMAM Henbit				
Pest Code									
Pest Name									
Crop Type, Code	C TRZAW	C TRZAW	C TRZAW			C TRZAW	C TRZAW		
Crop Scientific Name	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>			Triticum aestiv>	Triticum aestiv>		
Crop Name	Winter wheat	Winter wheat	Winter wheat			Winter wheat	Winter wheat		
Rating Date	11-18-2019	11-18-2019	11-18-2019	11-18-2019	11-18-2019	11-20-2019	12-5-2019		
Part Rated	PLANT C	PLANT C	PLANT C	PLANT P	PLANT P	PLANT C	PLANT C		
Rating Type	PHYTOGEN	CLOROSIS	NECROSIS	CONTROL	CONTROL	COUPLA	COUPLA		
Rating Unit	%	%	%	%	%	/ft2	/ft2		
Number of Subsamples	1	1	1	1	1	1	1		
Data Entry Date	12-25-2019	12-25-2019	12-25-2019	12-25-2019	12-25-2019	8-26-2020	8-26-2020		
Rating Timing									
Days After First/Last Applic.	40 20	40 20	40 20	40 20	40 20	42 22	57 37		
Trt-Eval Interval	24 DA-A	24 DA-A	24 DA-A	24 DA-A	24 DA-A				
Days After Emergence	17 DE-1	17 DE-1	17 DE-1	17 DE-1	17 DE-1	19 DE-1	34 DE-1		
ARM Action Codes	AL		ER1			ET9			
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	8	9	10	11	12	13	14
3 FINESSE Cereal&Fallow-0.5oz/a		103	1.0	0.0		100.0	100.0	32.00	41.50
ANTHEM FLEX	3 FL OZ/A A	204	2.0	0.0	2.0	100.0	100.0	40.00	41.00
ROUNDUP POWERMAX	32 FL OZ/A A	307	2.0	0.0	2.0	100.0	100.0	42.00	41.00
NIS	4.8 FL OZ/A A	401	2.0	0.0	2.0	100.0	100.0	37.00	40.50
		Mean =	1.7d	0.0	2.0	100.0	100.0	37.75	41.00
4 FINESSE Cereal&Fallow-0.5oz/a		104	2.0	0.0		100.0	100.0	40.00	38.00
ROUNDUP POWERMAX	32 FL OZ/A A	203	2.0	0.0	2.0	100.0	100.0	40.00	34.00
METRIBUZIN	3 OZ/A D	308	2.0	0.0	2.0	100.0	100.0	40.00	33.00
ANTHEM FLEX	2.75 FL OZ/A D	402	2.0	0.0	2.0	100.0	100.0	47.00	43.50
NIS	4.8 FL OZ/A D								
		Mean =	2.0d	0.0	2.0	100.0	100.0	41.75	37.13
5 FINESSE Cereal&Fallow-0.5oz/a		105	1.0	0.0		100.0	100.0	34.50	31.00
ROUNDUP POWERMAX	32 FL OZ/A A	210	2.0	0.0	2.0	100.0	100.0	39.00	38.50
METRIBUZIN	3 OZ/A D	304	2.0	0.0	2.0	100.0	100.0	39.00	39.00
ANTHEM FLEX	3.2 FL OZ/A D	407	2.0	0.0	2.0	100.0	100.0	42.00	42.50
NIS	4.8 FL OZ/A D								
		Mean =	1.7d	0.0	2.0	100.0	100.0	38.63	37.75
6 Gramoxone	61 FL OZ/A B	106	2.0	0.0		100.0	100.0	38.00	40.50
ANTHEM FLEX	2.75 FL OZ/A B	209	4.0	0.0	2.0	100.0	100.0	43.50	34.50
NIS	4.8 FL OZ/A B	303	2.0	0.0	2.0	100.0	100.0	41.50	36.00
		409	2.0	0.0	2.0	100.0	100.0	41.50	40.00
		Mean =	2.4d	0.0	2.0	100.0	100.0	41.13	37.75
7 Gramoxone	61 FL OZ/A B	107	1.0	0.0		100.0	100.0	33.00	33.00
ANTHEM FLEX	3.2 FL OZ/A B	202	2.0	0.0	2.0	100.0	100.0	36.50	42.50
NIS	4.8 FL OZ/A B	306	2.0	0.0	2.0	100.0	100.0	42.50	40.50
		408	2.0	0.0	2.0	100.0	100.0	48.50	46.50
		Mean =	1.7d	0.0	2.0	100.0	100.0	40.13	40.63
8 Gramoxone	61 FL OZ/A C	108	2.0	0.0		100.0	100.0	39.50	37.50
ANTHEM FLEX	2.75 FL OZ/A C	206	2.0	0.0	2.0	100.0	100.0	43.00	33.00
NIS	4.8 FL OZ/A C	301	2.0	0.0	2.0	100.0	100.0	48.00	49.00
		405	2.0	0.0	2.0	100.0	100.0	40.00	39.00
		Mean =	2.0d	0.0	2.0	100.0	100.0	42.63	39.63

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Pest Type	C TRZAW	C TRZAW	C TRZAW	W Weed LOLMG Annual ryegrass	W Weed LAMAM Henbit	C TRZAW	C TRZAW		
Pest Code									
Pest Name									
Crop Type, Code	C TRZAW	C TRZAW	C TRZAW			C TRZAW	C TRZAW		
Crop Scientific Name	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>			Triticum aestiv>	Triticum aestiv>		
Crop Name	Winter wheat	Winter wheat	Winter wheat			Winter wheat	Winter wheat		
Rating Date	11-18-2019	11-18-2019	11-18-2019	11-18-2019	11-18-2019	11-20-2019	12-5-2019		
Part Rated	PLANT C	PLANT C	PLANT C	PLANT P	PLANT P	PLANT C	PLANT C		
Rating Type	PHYTOGEN	CLOROSIS	NECROSIS	CONTROL	CONTROL	COUPLA	COUPLA		
Rating Unit	%	%	%	%	%	/ft2	/ft2		
Number of Subsamples	1	1	1	1	1	1	1		
Data Entry Date	12-25-2019	12-25-2019	12-25-2019	12-25-2019	12-25-2019	8-26-2020	8-26-2020		
Rating Timing									
Days After First/Last Applic.	40 20	40 20	40 20	40 20	40 20	42 22	57 37		
Trt-Eval Interval	24 DA-A	24 DA-A	24 DA-A	24 DA-A	24 DA-A				
Days After Emergence	17 DE-1	17 DE-1	17 DE-1	17 DE-1	17 DE-1	19 DE-1	34 DE-1		
ARM Action Codes	AL		ER1			ET9			
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	8	9	10	11	12	13	14
9 Gramoxone	61 FL OZ/A C	109	2.0	0.0		100.0	100.0	23.50	28.50
ANTHEM FLEX	3.2 FL OZ/A C	201	2.0	0.0	2.0	100.0	100.0	42.50	31.00
NIS	4.8 FL OZ/A C	302	2.0	0.0	2.0	100.0	100.0	32.50	33.00
		403	2.0	0.0	2.0	100.0	100.0	37.50	36.50
		Mean =	2.0d	0.0	2.0	100.0	100.0	34.00	32.25
10 Gramoxone	61 FL OZ/A C	110	2.0	0.0		100.0	100.0	44.00	39.00
ANTHEM FLEX	2.75 FL OZ/A C	205	2.0	0.0	2.0	100.0	100.0	39.00	41.50
NIS	4.8 FL OZ/A C	309	2.0	0.0	2.0	100.0	100.0	36.00	29.50
HARMONY EXTRA WITH TOTALSOL	0.6 OZ/A E	404	2.0	0.0	2.0	100.0	100.0	40.00	44.50
QUELEX	0.75 OZ/A E								
NIS	4.8 FL OZ/A E								
		Mean =	2.0d	0.0	2.0	100.0	100.0	39.75	38.63

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Pest Type				W Weed LOLMG Annual ryegrass	W Weed LAMAM Henbit	W Weed LOLMG Annual ryegrass	W Weed LAMAM Henbit		
Pest Code									
Pest Name									
Crop Type, Code	C TRZAW	C TRZAW	C TRZAW						
Crop Scientific Name	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>						
Crop Name	Winter wheat	Winter wheat	Winter wheat						
Rating Date	1-14-2020	1-14-2020	1-14-2020	1-14-2020	1-14-2020	4-8-2020	4-8-2020		
Part Rated	PLANT C	PLANT C	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	PHYGEN	PHYCHL	PHYNEC	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Data Entry Date	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020		
Rating Timing									
Days After First/Last Applic.	97 25	97 25	97 25	97 25	97 25	182 29	182 29		
Trt-Eval Interval									
Days After Emergence	74 DE-1	74 DE-1	74 DE-1	74 DE-1	74 DE-1	159 DE-1	159 DE-1		
ARM Action Codes					AS				
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	15	16	17	18	19		
20	21								
3 FINESSE Cereal&Fallow-0.5oz/a		103	0.0	0.0	0.0	100.0	100.0	100.0	100.0
ANTHEM FLEX	3 FL OZ/A A	204	0.0	0.0	0.0	100.0	100.0	100.0	100.0
ROUNDUP POWERMAX	32 FL OZ/A A	307	0.0	0.0	0.0	100.0	100.0	97.0	100.0
NIS	4.8 FL OZ/A A	401	0.0	0.0	0.0	100.0	97.0	50.0	100.0
		Mean =	0.0	0.0	0.0	100.0	99.2d	86.8	100.0
4 FINESSE Cereal&Fallow-0.5oz/a		104	0.0	0.0	0.0	95.0	100.0	100.0	100.0
ROUNDUP POWERMAX	32 FL OZ/A A	203	0.0	0.0	0.0	100.0	100.0	100.0	100.0
METRIBUZIN	3 OZ/A D	308	0.0	0.0	0.0	100.0	100.0	100.0	100.0
ANTHEM FLEX	2.75 FL OZ/A D	402	0.0	0.0	0.0	100.0	100.0	100.0	100.0
NIS	4.8 FL OZ/A D								
		Mean =	0.0	0.0	0.0	98.8	100.0d	100.0	100.0
5 FINESSE Cereal&Fallow-0.5oz/a		105	0.0	0.0	0.0	95.0	100.0	90.0	100.0
ROUNDUP POWERMAX	32 FL OZ/A A	210	0.0	0.0	0.0	98.0	100.0	100.0	100.0
METRIBUZIN	3 OZ/A D	304	0.0	0.0	0.0	100.0	100.0	100.0	100.0
ANTHEM FLEX	3.2 FL OZ/A D	407	0.0	0.0	0.0	100.0	100.0	100.0	100.0
NIS	4.8 FL OZ/A D								
		Mean =	0.0	0.0	0.0	98.3	100.0d	97.5	100.0
6 Gramoxone	61 FL OZ/A B	106	0.0	0.0	0.0	100.0	100.0	97.0	100.0
ANTHEM FLEX	2.75 FL OZ/A B	209	0.0	0.0	0.0	100.0	90.0	100.0	100.0
NIS	4.8 FL OZ/A B	303	0.0	0.0	0.0	100.0	90.0	100.0	100.0
		409	0.0	0.0	0.0	100.0	95.0	100.0	100.0
		Mean =	0.0	0.0	0.0	100.0	93.7d	99.3	100.0
7 Gramoxone	61 FL OZ/A B	107	0.0	0.0	0.0	100.0	90.0	95.0	100.0
ANTHEM FLEX	3.2 FL OZ/A B	202	0.0	0.0	0.0	100.0	95.0	80.0	100.0
NIS	4.8 FL OZ/A B	306	0.0	0.0	0.0	100.0	100.0	60.0	100.0
		408	0.0	0.0	0.0	100.0	100.0	100.0	100.0
		Mean =	0.0	0.0	0.0	100.0	96.2d	83.8	100.0
8 Gramoxone	61 FL OZ/A C	108	0.0	0.0	0.0	97.0	100.0	100.0	97.0
ANTHEM FLEX	2.75 FL OZ/A C	206	0.0	0.0	0.0	97.0	100.0	100.0	100.0
NIS	4.8 FL OZ/A C	301	0.0	0.0	0.0	100.0	100.0	70.0	100.0
		405	0.0	0.0	0.0	100.0	100.0	100.0	100.0
		Mean =	0.0	0.0	0.0	98.5	100.0d	92.5	99.3

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Pest Type				W Weed LOLMG Annual ryegrass	W Weed LAMAM Henbit	W Weed LOLMG Annual ryegrass	W Weed LAMAM Henbit		
Pest Code									
Pest Name									
Crop Type, Code	C TRZAW	C TRZAW	C TRZAW						
Crop Scientific Name	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>						
Crop Name	Winter wheat	Winter wheat	Winter wheat						
Rating Date	1-14-2020	1-14-2020	1-14-2020	1-14-2020	1-14-2020	4-8-2020	4-8-2020		
Part Rated	PLANT C	PLANT C	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	PHYGEN	PHYCHL	PHYNEC	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Data Entry Date	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020		
Rating Timing									
Days After First/Last Applic.	97 25	97 25	97 25	97 25	97 25	182 29	182 29		
Trt-Eval Interval									
Days After Emergence	74 DE-1	74 DE-1	74 DE-1	74 DE-1	74 DE-1	159 DE-1	159 DE-1		
ARM Action Codes					AS				
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	15	16	17	18	19	20	21
9 Gramoxone	61 FL OZ/A C	109	0.0	0.0	0.0	100.0	98.0	100.0	97.0
ANTHEM FLEX	3.2 FL OZ/A C	201	0.0	0.0	0.0	100.0	100.0	100.0	100.0
NIS	4.8 FL OZ/A C	302	0.0	0.0	0.0	100.0	100.0	80.0	100.0
		403	0.0	0.0	0.0	100.0	100.0	100.0	100.0
		Mean =	0.0	0.0	0.0	100.0	99.5d	95.0	99.3
10 Gramoxone	61 FL OZ/A C	110	0.0	0.0	0.0	100.0	95.0	100.0	100.0
ANTHEM FLEX	2.75 FL OZ/A C	205	0.0	0.0	0.0	100.0	100.0	80.0	100.0
NIS	4.8 FL OZ/A C	309	0.0	0.0	0.0	100.0	100.0	90.0	100.0
HARMONY EXTRA WITH TOTALSOL	0.6 OZ/A E	404	0.0	0.0	0.0	100.0	100.0	100.0	100.0
QUELEX	0.75 OZ/A E								
NIS	4.8 FL OZ/A E								
		Mean =	0.0	0.0	0.0	100.0	98.7d	92.5	100.0

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Pest Type	W Weed		W Weed		C TRZAW		C TRZAW		C TRZAW		C TRZAW	
Pest Code	LOLMG		LOLMG		Triticum aestiv>		Triticum aestiv>		Triticum aestiv>		Triticum aestiv>	
Pest Name	Annual ryegrass		Annual ryegrass		Winter wheat		Winter wheat		Winter wheat		Winter wheat	
Crop Type, Code					PLOT C		GRAIN C		GRAIN C		GRAIN C	
Crop Scientific Name					LENGTH		WEIGHT		CONMOI		WEITES	
Crop Name					FT		LB		%		LB	
Rating Date	6-23-2020		6-23-2020		6-25-2020		6-25-2020		6-25-2020		6-25-2020	
Part Rated	HEAD P		PLANT P		PLOT C		GRAIN C		GRAIN C		GRAIN C	
Rating Type	COUNT		CONTRO		LENGTH		WEIGHT		CONMOI		WEITES	
Rating Unit	/m2		%		FT		LB		%		LB	
Number of Subsamples	1		1		1		1		1		1	
Data Entry Date	8-26-2020		8-26-2020		8-26-2020		8-26-2020		8-26-2020		8-26-2020	
Rating Timing												
Days After First/Last Applic.	258 105		258 105		260 107		260 107		260 107		260 107	
Trt-Eval Interval												
Days After Emergence	235 DE-1		235 DE-1		237 DE-1		237 DE-1		237 DE-1		237 DE-1	
ARM Action Codes	AL		AA				EC		ET9		EC TY1	
Number of Decimals											1	
Trt Treatment	Rate	Appl										
No. Name	Rate Unit	Code Plot	22	23	24	25	26	27	28			
1 NO HERBICIDE		101	318.0	0.0	25.90	3.850	12.30	53.00	29.2			
		207	4.0	0.0	25.20	7.090	12.00	53.70	55.4			
		310	0.0	0.0	25.60	6.560	12.20	55.00	50.4			
		406	13.0	0.0	25.40	6.840	11.90	54.00	53.1			
		Mean =	11.2d	0.0d	25.53	6.085	12.10	53.93	47.0			
2 ANTHEM FLEX	3 FL OZ/A A	102	93.0	50.0	25.80	8.120	12.10	53.90	61.9			
	Gramoxone	61 FL OZ/A A	208	0.0	100.0	25.20	7.390	12.80	56.30			
	NIS	4.8 FL OZ/A A	305	40.0	50.0	25.30	8.620	12.60	56.40			
		410	9.0	80.0	25.10	7.210	12.30	56.70	56.4			
		Mean =	13.0d	76.3d	25.35	7.835	12.45	55.83	60.5			

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Pest Type	W Weed	W Weed	C TRZAW	C TRZAW	C TRZAW	C TRZAW	C TRZAW		
Pest Code	LOLMG	LOLMG							
Pest Name	Annual ryegrass	Annual ryegrass	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>		
Crop Type, Code			Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat		
Crop Scientific Name									
Crop Name									
Rating Date	6-23-2020	6-23-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020		
Part Rated	HEAD P	PLANT P	PLOT C	GRAIN C	GRAIN C	GRAIN C	GRAIN C		
Rating Type	COUNT	CONTRO	LENGTH	WEIGHT	CONMOI	WEITES	YIELD		
Rating Unit	/m2	%	FT	LB	%	LB	BU		
Number of Subsamples	1	1	1	1	1	1	1		
Data Entry Date	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020		
Rating Timing									
Days After First/Last Applic.	258 105	258 105	260 107	260 107	260 107	260 107	260 107		
Trt-Eval Interval									
Days After Emergence	235 DE-1	235 DE-1	237 DE-1	237 DE-1	237 DE-1	237 DE-1	237 DE-1		
ARM Action Codes	AL	AA		EC	ET9		EC TY1		
Number of Decimals							1		
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	22	23	24	25	26	27	28
3 FINESSE Cereal&Fallow-0.5oz/a		103	0.0	100.0	25.70	10.010	12.30	56.10	76.5
ANTHEM FLEX	3 FL OZ/A A	204	0.0	100.0	25.50	8.470	12.50	56.80	65.0
ROUNDUP POWERMAX	32 FL OZ/A A	307	10.0	90.0	25.30	8.270	12.30	56.40	64.2
NIS	4.8 FL OZ/A A	401	34.0	50.0	25.70	8.660	12.80	56.10	65.8
	Mean =		3.4d	92.5d	25.55	8.853	12.48	56.35	67.9
4 FINESSE Cereal&Fallow-0.5oz/a		104	0.0	100.0	25.50	10.470	12.80	56.10	80.1
ROUNDUP POWERMAX	32 FL OZ/A A	203	0.0	100.0	25.20	9.370	12.70	55.60	72.7
METRIBUZIN	3 OZ/A D	308	0.0	100.0	25.30	7.090	12.80	57.30	54.7
ANTHEM FLEX	2.75 FL OZ/A D	402	2.0	100.0	25.70	8.240	12.80	56.80	62.6
NIS	4.8 FL OZ/A D								
	Mean =		0.3d	100.0d	25.43	8.793	12.78	56.45	67.5
5 FINESSE Cereal&Fallow-0.5oz/a		105	9.0	95.0	25.50	10.310	12.20	55.80	79.5
ROUNDUP POWERMAX	32 FL OZ/A A	210	0.0	100.0	25.30	8.860	12.40	55.30	68.7
METRIBUZIN	3 OZ/A D	304	0.0	100.0	25.20	8.010	12.50	56.70	62.2
ANTHEM FLEX	3.2 FL OZ/A D	407	0.0	100.0	25.40	8.020	12.40	56.90	61.9
NIS	4.8 FL OZ/A D								
	Mean =		0.8d	99.7d	25.35	8.800	12.38	56.18	68.1
6 Gramoxone	61 FL OZ/A B	106	14.0	90.0	25.60	9.220	12.10	55.60	70.9
ANTHEM FLEX	2.75 FL OZ/A B	209	0.0	100.0	25.40	7.990	12.30	55.60	61.7
NIS	4.8 FL OZ/A B	303	0.0	100.0	25.30	8.630	12.50	56.90	66.8
		409	0.0	100.0	25.20	6.140	12.50	56.60	47.7
	Mean =		1.0d	99.4d	25.38	7.995	12.35	56.18	61.8
7 Gramoxone	61 FL OZ/A B	107	1.0	100.0	25.60	9.650	12.20	55.80	74.1
ANTHEM FLEX	3.2 FL OZ/A B	202	0.0	90.0	25.40	9.350	12.40	56.20	72.2
NIS	4.8 FL OZ/A B	306	5.0	97.0	25.70	8.290	12.20	56.60	63.4
		408	0.0	100.0	24.80	7.250	12.90	57.50	57.0
	Mean =		0.9d	98.5d	25.38	8.635	12.43	56.53	66.7
8 Gramoxone	61 FL OZ/A C	108	0.0	90.0	25.60	9.410	12.40	56.30	72.1
ANTHEM FLEX	2.75 FL OZ/A C	206	0.0	90.0	25.00	8.920	12.30	57.00	70.0
NIS	4.8 FL OZ/A C	301	5.0	80.0	25.20	9.330	12.60	56.80	72.4
		405	0.0	100.0	25.30	8.900	12.50	56.40	68.9
	Mean =		0.6d	92.5d	25.28	9.140	12.45	56.63	70.9

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Pest Type	W Weed LOLMG	W Weed LOLMG	C TRZAW	C TRZAW	C TRZAW	C TRZAW	C TRZAW		
Pest Code	Annual ryegrass	Annual ryegrass	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>		
Pest Name	Annual ryegrass	Annual ryegrass	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat		
Crop Type, Code									
Crop Scientific Name									
Crop Name									
Rating Date	6-23-2020	6-23-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020		
Part Rated	HEAD P	PLANT P	PLOT C	GRAIN C	GRAIN C	GRAIN C	GRAIN C		
Rating Type	COUNT	CONTRO	LENGTH	WEIGHT	CONMOI	WEITES	YIELD		
Rating Unit	/m2	%	FT	LB	%	LB	BU		
Number of Subsamples	1	1	1	1	1	1	1		
Data Entry Date	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020		
Rating Timing									
Days After First/Last Applic.	258 105	258 105	260 107	260 107	260 107	260 107	260 107		
Trt-Eval Interval									
Days After Emergence	235 DE-1	235 DE-1	237 DE-1	237 DE-1	237 DE-1	237 DE-1	237 DE-1		
ARM Action Codes	AL	AA		EC	ET9		EC TY1		
Number of Decimals							1		
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	22	23	24	25	26	27	28
9 Gramoxone	61 FL OZ/A C	109	11.0	90.0	25.50	9.500	12.10	55.00	73.3
ANTHEM FLEX	3.2 FL OZ/A C	201	3.0	100.0	25.40	9.680	14.10	55.80	73.3
NIS	4.8 FL OZ/A C	302	0.0	90.0	25.30	8.790	12.50	56.20	68.0
		403	0.0	100.0	25.50	9.320	12.50	57.10	71.6
		Mean =	1.6d	97.4d	25.43	9.323	12.80	56.03	71.5
10 Gramoxone	61 FL OZ/A C	110	3.0	100.0	25.40	10.470	12.30	55.80	80.9
ANTHEM FLEX	2.75 FL OZ/A C	205	10.0	100.0	25.30	9.150	12.50	56.10	70.8
NIS	4.8 FL OZ/A C	309	10.0	90.0	25.10	6.910	12.60	56.30	53.9
HARMONY EXTRA WITH TOTALSOL	0.6 OZ/A E	404	0.0	100.0	25.30	8.790	12.60	56.50	68.0
QUELEX	0.75 OZ/A E								
NIS	4.8 FL OZ/A E								
		Mean =	3.7d	99.4d	25.28	8.830	12.50	56.18	68.4

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Finesse and Anthem Flex Herbicides Use Following Corn in Winter Wheat

Trial ID: 20-5_WHT-REC Location: UKREC Trial Year: 2019
 Protocol ID: USA-19-782 Investigator (Creator): Travis Legleiter
 Project ID: Study Director: WIGGINS, M.
 Sponsor Contact:

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

LOLMG, Lolium multiflorum gaudini, Annual ryegrass = US

LAMAM, Lamium amplexicaule, Henbit = US

Crop Type, Code

C = EPPO species (Bayer) codes

TRZAW, BCER, Triticum aestivum, Winter wheat = US

Part Rated

PLANT = plant

HEAD = head

PLOT = plot

GRAIN = grain

P = Pest is Part Rated

C = Crop is Part Rated

Rating Type

CONTRO = control / burndown or knockdown

COUPLA = count - plant / emergence - objective

PHYGEN = phytotoxicity - general / injury

PHYCHL = phytotoxicity - chlorosis

PHYNEC = phytotoxicity - necrosis /burn

COUNT = count

LENGTH = length

WEIGHT = weight

CONMOI = content - moisture

WEITES = weight - test

YIELD = yield

Rating Unit

% = percent

/ft2 = per square foot

/m2 = per square meter

FT = foot

LB = pound

BU = bushel

ARM Action Codes

ET2 = Excluded treatment 2

AL = Automatic log transformation of X+1

ER1 = Excluded replicate 1

ET9 = Excluded treatment 9

AS = Automatic square root transformation of X+0.5

AA = Automatic arcsine square root % transformation

EC = Do not analyze untreated check, while still reporting treatment mean on AOV Means Table

TY1 = $(726 / ((3.75 * [24]) * [25] * (100 - [26]))) / 86.5$

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Pest Type	W Weed	W Weed				W Weed	W Weed			
Pest Code	LOLMG	LAMAM				LOLMG	LAMAM			
Pest Name	Annual ryegrass		Henbit			Annual ryegrass		Henbit		
Crop Type, Code										
Crop Scientific Name			C TRZAW	C TRZAW	C TRZAW			C TRZAW		
Crop Name			Triticum aestiv>	Triticum aestiv>	Triticum aestiv>			Triticum aestiv>		
Rating Date	10-24-2019	10-24-2019	11-8-2019	11-8-2019	11-8-2019	11-8-2019	11-8-2019	11-8-2019		
Part Rated	PLANT P	PLANT P	PLANT C	PLANT C	PLANT C	PLANT P	PLANT P	PLANT C		
Rating Type	CONTRO	CONTRO	PHYTOGEN	PHYTOGEN	PHYTOGEN	CONTRO	CONTRO	PHYTOGEN		
Rating Unit	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1		
Data Entry Date	11-8-2019	11-8-2019	11-8-2019	11-8-2019	11-8-2019	11-8-2019	11-8-2019	12-25-2019		
Rating Timing										
Days After First/Last Applic.	15 15	15 15	30 10	30 10	30 10	30 10	30 10	40 20		
Trt-Eval Interval	-1 DA-A	-1 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A	24 DA-A		
Days After Emergence	-8 DE-1	-8 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1	17 DE-1		
ARM Action Codes						ET2	ET2	AL		
Number of Decimals										
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8
1 NO HERBICIDE			0.0 b	0.0 b	0.0 a	0.0 a	0.0 a	100.0 a	100.0 a	2.0 a
2 ANTHEM FLEX Gramoxone NIS	3 FL OZ/A A 61 FL OZ/A A 4.8 FL OZ/A A		71.8 ab	73.0 ab	0.0 a	0.0 a	0.0 a	98.8	97.5	2.0 a
3 FINESSE Cereal&Fallow-0.5oz/a ANTHEM FLEX ROUNDUP POWERMAX NIS	3 FL OZ/A A 32 FL OZ/A A 4.8 FL OZ/A A		95.0 a	100.0 a	0.5 a	0.0 a	0.0 a	100.0 a	100.0 a	1.7 a
4 FINESSE Cereal&Fallow-0.5oz/a ROUNDUP POWERMAX METRIBUZIN ANTHEM FLEX NIS	32 FL OZ/A A 3 OZ/A D 2.75 FL OZ/A D 4.8 FL OZ/A D		100.0 a	100.0 a	0.0 a	0.0 a	0.0 a	100.0 a	100.0 a	2.0 a
5 FINESSE Cereal&Fallow-0.5oz/a ROUNDUP POWERMAX METRIBUZIN ANTHEM FLEX NIS	32 FL OZ/A A 3 OZ/A D 3.2 FL OZ/A D 4.8 FL OZ/A D		99.3 a	100.0 a	1.3 a	0.0 a	0.0 a	100.0 a	100.0 a	1.7 a
6 Gramoxone ANTHEM FLEX NIS	61 FL OZ/A B 2.75 FL OZ/A B 4.8 FL OZ/A B		0.0 b	0.0 b	2.3 a	0.0 a	0.0 a	100.0 a	100.0 a	2.4 a
7 Gramoxone ANTHEM FLEX NIS	61 FL OZ/A B 3.2 FL OZ/A B 4.8 FL OZ/A B		0.0 b	0.0 b	1.3 a	0.0 a	0.0 a	100.0 a	100.0 a	1.7 a
8 Gramoxone ANTHEM FLEX NIS	61 FL OZ/A C 2.75 FL OZ/A C 4.8 FL OZ/A C		20.0 b	25.0 ab	3.0 a	0.0 a	0.0 a	100.0 a	100.0 a	2.0 a
9 Gramoxone ANTHEM FLEX NIS	61 FL OZ/A C 3.2 FL OZ/A C 4.8 FL OZ/A C		25.0 b	25.0 ab	1.0 a	0.0 a	0.0 a	100.0 a	100.0 a	2.0 a

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Pest Type	C TRZAW		W Weed	W Weed	C TRZAW		C TRZAW		C TRZAW	
Pest Code	Triticum aestiv>		LOLMG	LAMAM	Triticum aestiv>		Triticum aestiv>		Triticum aestiv>	
Pest Name	Winter wheat		Annual ryegrass	Henbit	Winter wheat		Winter wheat		Winter wheat	
Crop Type, Code	C TRZAW				C TRZAW		C TRZAW		C TRZAW	
Crop Scientific Name	Triticum aestiv>				Triticum aestiv>		Triticum aestiv>		Triticum aestiv>	
Crop Name	Winter wheat				Winter wheat		Winter wheat		Winter wheat	
Rating Date	11-18-2019		11-18-2019	11-18-2019	11-20-2019		12-5-2019		1-14-2020	
Part Rated	PLANT C		PLANT P	PLANT P	PLANT C		PLANT C		PLANT C	
Rating Type	C LOROSIS		CONTROL	CONTROL	COUPLA		COUPLA		PHYGEN	
Rating Unit	%		%	%	/ft2		/ft2		%	
Number of Subsamples	1		1	1	1		1		1	
Data Entry Date	12-25-2019		12-25-2019	12-25-2019	8-26-2020		8-26-2020		8-26-2020	
Rating Timing										
Days After First/Last Applic.	40 20		40 20	40 20	42 22		57 37		97 25	
Trt-Eval Interval	24 DA-A		24 DA-A	24 DA-A	24 DA-A		24 DA-A		24 DA-A	
Days After Emergence	17 DE-1		17 DE-1	17 DE-1	19 DE-1		34 DE-1		74 DE-1	
ARM Action Codes			ER1		ET9					
Number of Decimals										
Trt No.	Treatment Name	Rate	Appl Code	9	10	11	12	13	14	15
1	NO HERBICIDE			0.0 a	2.0 a	0.0 b	0.0 b	35.63 a	41.25 a	0.0 a
2	ANHEM FLEX Gramoxone NIS	3 FL OZ/A A 61 FL OZ/A A 4.8 FL OZ/A A		0.0 a	2.0 a	100.0 a	87.5 a	43.00 a	40.88 a	0.0 a
3	FINESSE Cereal&Fallow-0.5oz/a ANHEM FLEX ROUNDUP POWERMAX NIS	3 FL OZ/A A 32 FL OZ/A A 4.8 FL OZ/A A		0.0 a	2.0 a	100.0 a	100.0 a	37.75 a	41.00 a	0.0 a
4	FINESSE Cereal&Fallow-0.5oz/a ROUNDUP POWERMAX METRIBUZIN ANHEM FLEX NIS	32 FL OZ/A A 3 OZ/A D 2.75 FL OZ/A D 4.8 FL OZ/A D		0.0 a	2.0 a	100.0 a	100.0 a	41.75 a	37.13 a	0.0 a
5	FINESSE Cereal&Fallow-0.5oz/a ROUNDUP POWERMAX METRIBUZIN ANHEM FLEX NIS	32 FL OZ/A A 3 OZ/A D 3.2 FL OZ/A D 4.8 FL OZ/A D		0.0 a	2.0 a	100.0 a	100.0 a	38.63 a	37.75 a	0.0 a
6	Gramoxone ANHEM FLEX NIS	61 FL OZ/A B 2.75 FL OZ/A B 4.8 FL OZ/A B		0.0 a	2.0 a	100.0 a	100.0 a	41.13 a	37.75 a	0.0 a
7	Gramoxone ANHEM FLEX NIS	61 FL OZ/A B 3.2 FL OZ/A B 4.8 FL OZ/A B		0.0 a	2.0 a	100.0 a	100.0 a	40.13 a	40.63 a	0.0 a
8	Gramoxone ANHEM FLEX NIS	61 FL OZ/A C 2.75 FL OZ/A C 4.8 FL OZ/A C		0.0 a	2.0 a	100.0 a	100.0 a	42.63 a	39.63 a	0.0 a
9	Gramoxone ANHEM FLEX NIS	61 FL OZ/A C 3.2 FL OZ/A C 4.8 FL OZ/A C		0.0 a	2.0 a	100.0 a	100.0 a	34.00	32.25 a	0.0 a

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Pest Type	C TRZAW		W Weed	W Weed	C TRZAW		C TRZAW		
Pest Code	C TRZAW		LOLMG	LAMAM	C TRZAW		C TRZAW		
Pest Name	C TRZAW		Annual ryegrass	Henbit	C TRZAW		C TRZAW		
Crop Type, Code	C TRZAW				C TRZAW		C TRZAW		
Crop Scientific Name	Triticum aestiv>				Triticum aestiv>		Triticum aestiv>		
Crop Name	Winter wheat				Winter wheat		Winter wheat		
Rating Date	11-18-2019	11-18-2019	11-18-2019	11-18-2019	11-20-2019	12-5-2019	1-14-2020		
Part Rated	PLANT C	PLANT C	PLANT P	PLANT P	PLANT C	PLANT C	PLANT C		
Rating Type	COLORSIS	NECROSIS	CONTROL	CONTROL	COUPLA	COUPLA	PHYGEN		
Rating Unit	%	%	%	%	/ft2	/ft2	%		
Number of Subsamples	1	1	1	1	1	1	1		
Data Entry Date	12-25-2019	12-25-2019	12-25-2019	12-25-2019	8-26-2020	8-26-2020	8-26-2020		
Rating Timing									
Days After First/Last Applic.	40 20	40 20	40 20	40 20	42 22	57 37	97 25		
Trt-Eval Interval	24 DA-A	24 DA-A	24 DA-A	24 DA-A					
Days After Emergence	17 DE-1	17 DE-1	17 DE-1	17 DE-1	19 DE-1	34 DE-1	74 DE-1		
ARM Action Codes		ER1			ET9				
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	9	10	11	12	13	14	15
10 Gramoxone	61 FL OZ/A C		0.0 a	2.0 a	100.0 a	100.0 a	39.75 a	38.63 a	0.0 a
ANTHEM FLEX	2.75 FL OZ/A C								
NIS	4.8 FL OZ/A C								
HARMONY EXTRA WITH TOTALSOL	0.6 OZ/A E								
QUELEX	0.75 OZ/A E								
NIS	4.8 FL OZ/A E								
LSD P=.05	11.47	5.634	6.909	.	
Standard Deviation	0.00	0.00	0.00	7.91	3.861	4.762	0.00		
CV	0.0	0.0	0.0	8.91	9.64	12.31	0.0		
Levene's F	0.00	0.00	0.00	1.067	0.514	0.00	0.00		
Levene's Prob(F)	0.00*	0.00*	0.00*	0.414	0.853	0.00*	0.00*		
Skewness	.	.	-2.7717*	-2.5451*	-0.5616	-0.1369	.		
Kurtosis	.	.	5.9791*	4.9006*	1.1377	-0.5755	.		
Replicate F	0.000	0.000	0.000	1.000	3.365	1.758	0.000		
Replicate Prob(F)	1.0000	1.0000	1.0000	0.4079	0.0352	0.1789	1.0000		
Treatment F	0.000	0.000	0.000	63.222	1.556	1.313	0.000		
Treatment Prob(F)	1.0000	1.0000	1.0000	0.0001	0.1908	0.2762	1.0000		

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Pest Type			W Weed LOLMG Annual ryegrass	W Weed LAMAM Henbit	W Weed LOLMG Annual ryegrass	W Weed LAMAM Henbit	W Weed LOLMG Annual ryegrass	W Weed LOLMG Annual ryegrass		
Pest Code										
Pest Name										
Crop Type, Code	C TRZAW	C TRZAW								
Crop Scientific Name	Triticum aestiv>	Triticum aestiv>								
Crop Name	Winter wheat	Winter wheat								
Rating Date	1-14-2020	1-14-2020	1-14-2020	1-14-2020	4-8-2020	4-8-2020	6-23-2020	6-23-2020		
Part Rated	PLANT C	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	HEAD P	PLANT P		
Rating Type	PHYCHL	PHYNEC	CONTRO	CONTRO	CONTRO	CONTRO	COUNT	CONTRO		
Rating Unit	%	%	%	%	%	%	/m2	%		
Number of Subsamples	1	1	1	1	1	1	1	1		
Data Entry Date	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020	8-26-2020		
Rating Timing										
Days After First/Last Applic.	97 25	97 25	97 25	97 25	182 29	182 29	258 105	258 105		
Trt-Eval Interval										
Days After Emergence	74 DE-1	74 DE-1	74 DE-1	74 DE-1	159 DE-1	159 DE-1	235 DE-1	235 DE-1		
ARM Action Codes				AS			AL	AA		
Number of Decimals										
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	16	17	18	19	20	21	22	23
10 Gramoxone	61 FL OZ/A	C	0.0 a	0.0 a	100.0 a	98.7 a	92.5 a	100.0 a	3.7 a	99.4 ab
ANTHEM FLEX	2.75 FL OZ/A	C								
NIS	4.8 FL OZ/A	C								
HARMONY EXTRA WITH TOTALSOL	0.6 OZ/A	E								
QUELEX	0.75 OZ/A	E								
NIS	4.8 FL OZ/A	E								
LSD P=.05			.	.	2.55	24.18 - 31.75	19.31	11.23	8.38 - 12.11	8.58 - 19.31
Standard Deviation	0.00	0.00	0.00	0.00	1.76	1.19t	13.31	7.74	0.60t	11.74t
CV	0.0	0.0	0.0	0.0	1.97	13.83t	15.99	8.81	117.21t	16.29t
Levene's F	0.00	0.00	0.00	0.00	1.091	2.03	1.224	15.094	1.056	1.921
Levene's Prob(F)	0.00*	0.00*	0.00*	0.00*	0.398	0.071	0.318	0.001*	0.422	0.087
Skewness	-2.7507*	-2.1922*	-2.0662*	-2.4546*	1.1837*	-1.8167*
Kurtosis	5.9036*	3.1738*	3.1906*	4.5489*	0.9234	2.4047*
Replicate F	0.000	0.000	0.000	0.000	3.849	1.084	0.796	1.082	1.959	1.426
Replicate Prob(F)	1.0000	1.0000	1.0000	1.0000	0.0205	0.3727	0.5067	0.3732	0.1439	0.2568
Treatment F	0.000	0.000	0.000	0.000	1271.430	25.859	20.054	66.159	1.512	20.691
Treatment Prob(F)	1.0000	1.0000	1.0000	1.0000	0.0001	0.0001	0.0001	0.0001	0.1940	0.0001

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Pest Type							
Pest Code							
Pest Name							
Crop Type, Code	C TRZAW	C TRZAW	C TRZAW	C TRZAW	C TRZAW		
Crop Scientific Name	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>		
Crop Name	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat		
Rating Date	6-25-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020		
Part Rated	PLOT C	GRAIN C	GRAIN C	GRAIN C	GRAIN C		
Rating Type	LENGTH	WEIGHT	CONMOI	WEITES	YIELD		
Rating Unit	FT	LB	%	LB	BU		
Number of Subsamples	1	1	1	1	1		
Data Entry Date	8-26-2020	8-26-2020	8-26-2020	8-26-2020			
Rating Timing							
Days After First/Last Applic.	260 107	260 107	260 107	260 107	260 107		
Trt-Eval Interval							
Days After Emergence	237 DE-1	237 DE-1	237 DE-1	237 DE-1	237 DE-1		
ARM Action Codes		EC	ET9		EC TY1		
Number of Decimals					1		
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code	24	25	26		
1 NO HERBICIDE			25.53 a	6.085	12.10 b	53.93 b	47.0
2 ANTHEM FLEX Gramoxone NIS	3 FL OZ/A A 61 FL OZ/A A 4.8 FL OZ/A A		25.35 a	7.835 a	12.45 ab	55.83 a	60.5 a
3 FINESSE Cereal&Fallow-0.5oz/a ANTHEM FLEX ROUNDUP POWERMAX NIS	3 FL OZ/A A 32 FL OZ/A A 4.8 FL OZ/A A		25.55 a	8.853 a	12.48 ab	56.35 a	67.9 a
4 FINESSE Cereal&Fallow-0.5oz/a ROUNDUP POWERMAX METRIBUZIN ANTHEM FLEX NIS	32 FL OZ/A A 3 OZ/A D 2.75 FL OZ/A D 4.8 FL OZ/A D		25.43 a	8.793 a	12.78 a	56.45 a	67.5 a
5 FINESSE Cereal&Fallow-0.5oz/a ROUNDUP POWERMAX METRIBUZIN ANTHEM FLEX NIS	32 FL OZ/A A 3 OZ/A D 3.2 FL OZ/A D 4.8 FL OZ/A D		25.35 a	8.800 a	12.38 ab	56.18 a	68.1 a
6 Gramoxone ANTHEM FLEX NIS	61 FL OZ/A B 2.75 FL OZ/A B 4.8 FL OZ/A B		25.38 a	7.995 a	12.35 ab	56.18 a	61.8 a
7 Gramoxone ANTHEM FLEX NIS	61 FL OZ/A B 3.2 FL OZ/A B 4.8 FL OZ/A B		25.38 a	8.635 a	12.43 ab	56.53 a	66.7 a
8 Gramoxone ANTHEM FLEX NIS	61 FL OZ/A C 2.75 FL OZ/A C 4.8 FL OZ/A C		25.28 a	9.140 a	12.45 ab	56.63 a	70.9 a
9 Gramoxone ANTHEM FLEX NIS	61 FL OZ/A C 3.2 FL OZ/A C 4.8 FL OZ/A C		25.43 a	9.323 a	12.80	56.03 a	71.5 a

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Pest Type					
Pest Code					
Pest Name					
Crop Type, Code	C TRZAW	C TRZAW	C TRZAW	C TRZAW	C TRZAW
Crop Scientific Name	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>	Triticum aestiv>
Crop Name	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat
Rating Date	6-25-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020
Part Rated	PLOT C	GRAIN C	GRAIN C	GRAIN C	GRAIN C
Rating Type	LENGTH	WEIGHT	CONMOI	WEITES	YIELD
Rating Unit	FT	LB	%	LB	BU
Number of Subsamples	1	1	1	1	1
Data Entry Date	8-26-2020	8-26-2020	8-26-2020	8-26-2020	
Rating Timing					
Days After First/Last Applic.	260 107	260 107	260 107	260 107	260 107
Trt-Eval Interval					
Days After Emergence	237 DE-1	237 DE-1	237 DE-1	237 DE-1	237 DE-1
ARM Action Codes		EC	ET9		EC TY1
Number of Decimals					1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	24	25	26
10 Gramoxone	61 FL OZ/A C		25.28 a	8.830 a	12.50 ab
ANTHEM FLEX	2.75 FL OZ/A C				
NIS	4.8 FL OZ/A C				
HARMONY EXTRA WITH TOTALSOL	0.6 OZ/A E				
QUELEX	0.75 OZ/A E				
NIS	4.8 FL OZ/A E				
LSD P=.05			0.287	1.1329	0.284
Standard Deviation			0.198	0.7763	0.195
CV			0.78	8.93	1.57
Levene's F			0.758	1.101	1.363
Levene's Prob(F)			0.654	0.393	0.257
Skewness			-0.0273	-0.3971	0.0253
Kurtosis			0.2334	-0.0236	-0.5444
Replicate F			5.486	8.085	2.185
Replicate Prob(F)			0.0045	0.0007	0.1159
Treatment F			0.866	1.567	3.227
Treatment Prob(F)			0.5659	0.1873	0.0123
					10.123
					0.0001
					8.285
					0.0001
					7.762
					0.0009
					1.566
					0.1874

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Finesse and Anthem Flex Herbicides Use Following Corn in Winter Wheat

Trial ID: 20-5_WHT-REC	Location: UKREC	Trial Year: 2019
Protocol ID: USA-19-782	Investigator (Creator): Travis Legleiter	
Project ID:	Study Director: WIGGINS, M.	
	Sponsor Contact:	

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

LOLMG, Lolium multiflorum gaudini, Annual ryegrass = US

LAMAM, Lamium amplexicaule, Henbit = US

Crop Type, Code

C = EPPO species (Bayer) codes

TRZAW, BCER, Triticum aestivum, Winter wheat = US

Part Rated

PLANT = plant

HEAD = head

PLOT = plot

GRAIN = grain

P = Pest is Part Rated

C = Crop is Part Rated

Rating Type

CONTRO = control / burndown or knockdown

COUPLA = count - plant / emergence - objective

PHYGEN = phytotoxicity - general / injury

PHYCHL = phytotoxicity - chlorosis

PHYNEC = phytotoxicity - necrosis /burn

COUNT = count

LENGTH = length

WEIGHT = weight

CONMOI = content - moisture

WEITES = weight - test

YIELD = yield

Rating Unit

% = percent

/ft2 = per square foot

/m2 = per square meter

FT = foot

LB = pound

BU = bushel

ARM Action Codes

ET2 = Excluded treatment 2

AL = Automatic log transformation of X+1

ER1 = Excluded replicate 1

ET9 = Excluded treatment 9

AS = Automatic square root transformation of X+0.5

AA = Automatic arcsine square root % transformation

EC = Do not analyze untreated check, while still reporting treatment mean on AOV Means Table

TY1 = $(726 / ((3.75 * [24]) * [25] * (100 - [26]))) / 86.5$

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Trial ID: 20C04H061-STnnn (20-6_COR-REC)	Sinate - Academic awareness	Location: UKREC 201-D
Protocol ID: 20C04H061	Investigator (Creator): Travis Legleiter	Trial Year: 2020
Project ID: 61	Study Director: Rich Zollinger	
	Sponsor Contact: AMVAC PD rep for region	

Reps: 4 Plots: 6.67 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.0433 L, overage=461.5 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Rate	Form Unit	Appl Timing	Appl Code	Amt Product to Measure	Rep			
									1	2	3	4
1	Untreated								101	205	307	405
2	Sinate	2.57 LBA/GAL	SL	21 FL OZ/A		POST	A	21.87 mL/mx	102	204	306	403
	MSO	100 %	L	1 % V/V		POST	A	20.0 mL/mx				
	Amsol AMS	3.4 lba/gal	SL	3 LB AI/A		POST	A	117.6 mL/mx				
3	Sinate	2.57 LBA/GAL	SL	21 FL OZ/A		POST	A	21.87 mL/mx	103	202	304	406
	Atrazine	4 LBA/GAL	F	16 FL OZ/A		POST	A	16.67 mL/mx				
	MSO	100 %	L	1 % V/V		POST	A	20.0 mL/mx				
4	Amsol AMS	3.4 lba/gal	SL	3 LB AI/A		POST	A	117.6 mL/mx	104	206	303	401
	Sinate	2.57 LBA/GAL	SL	28 FL OZ/A		POST	A	29.17 mL/mx				
	MSO	100 %	L	1 % V/V		POST	A	20.0 mL/mx				
5	Impact	2.8 LBAE/GAL	SC	1 FL OZ/A		POST	A	1.042 mL/mx	105	201	305	402
	MSO	100 %	L	1 % V/V		POST	A	20.0 mL/mx				
	Amsol AMS	3.4 lba/gal	SL	3 LB AI/A		POST	A	117.6 mL/mx				
6	Liberty	2.34 LBA/GAL	SL	32 FL OZ/A		POST	A	33.33 mL/mx	106	207	302	407
	Amsol AMS	3.4 lba/gal	SL	3 LB AI/A		POST	A	117.6 mL/mx				
7	Laudis	3.5 lba/gal	SC	3 FL OZ/A		POST	A	3.125 mL/mx	107	203	301	404
	MSO	100 %	L	1 % V/V		POST	A	20.0 mL/mx				
	Amsol AMS	3.4 lba/gal	SL	8.5 LB AI/100 GAL		POST	A	49.99 mL/mx				

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
91.146	mL	Sinate	2.57	LBA/GAL	SL	
124.986	mL	MSO	100	%	L	
797.707	mL	Amsol AMS	3.4	lba/gal	SL	
20.833	mL	Atrazine	4	LBA/GAL	F	
1.302	mL	Impact	2.8	LBAE/GAL	SC	
41.667	mL	Liberty	2.34	LBA/GAL	SL	
3.906	mL	Laudis	3.5	lba/gal	SC	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.

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Sinate - Academic awareness

Trial ID: 20C04H061-STnnn (20-6_COR-REC) Location: UKREC 201-D Trial Year: 2020
 Protocol ID: 20C04H061 Investigator (Creator): Travis Legleiter
 Project ID: 61 Study Director: Rich Zollinger
 Sponsor Contact: AMVAC PD rep for region

General Trial Information

Study Director: Rich Zollinger
Investigator: Travis Legleiter **Title:** Assistant Extension Professor

Trial Status: E established
ARM Trial Created On: 4-6-2020

Trial Location

City: Princeton **Country:** USA United States
State/Prov.: Kentucky
Postal Code: 42445

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Role: STYDIR study director
Study Director: Rich Zollinger

Role: INVEST investigator **Title:** Assistant Extension Professor
Investigator: Travis Legleiter
Organization: University of Kentucky
Address 1: 348 University Drive **Phone No.:** 859-562-1323
Country: USA United States **E-mail:** Travis.Legleiter@uky.edu
City: Princeton, KY **Postal Code:** 42445

Role: SPONSR sponsor
Sponsor: AMVAC PD rep for region

Crop Description

Crop 1: C ZEAMX Zea mays Corn **BBCH Scale:** BCOR
Stage Scale: BBCH
Variety: Pioneer P1077AM
Attributes: RR/LL
Planting Date: 5-4-2020 **Planting Rate:** 32000 S/A
Depth: 1.5 IN
Row Spacing: 30 IN **Planting Method:** PLANTD planted
Planting Equipment: VP vacuum planter

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Pest Description		
Pest 1	Type: W Code: AMACH Common Name: Green pigweed	Stage Scale: BBCH
Pest 2	Type: W Code: DIGSS Common Name: Crabgrass	Stage Scale: BBCH
Pest 3	Type: W Code: IPOSS Common Name: Morning glory	Stage Scale: BBCH
Pest 4	Type: W Code: STEME Common Name: Common chickweed	Stage Scale: BBCH
Pest 5	Type: W Code: AMBTR Common Name: Giant ragweed	Stage Scale: BBCH
Pest 6	Type: W Code: LAMAM Common Name: Henbit	Stage Scale: BBCH
Pest 7	Type: W Code: SIDSP Common Name: Prickly sida	Stage Scale: BBCH
Pest 8	Type: W Code: CHEAL Common Name: common lambsquarters	Stage Scale: BBCH
Pest 9	Type: W Code: TAROF Common Name: Blowball	Stage Scale: BBCH
Pest10	Type: W Code: ELEIN Common Name: Goosegrass	Stage Scale: BBCH
Pest11	Type: W Code: SETSS Common Name: Foxtail millet	Stage Scale: BBCH

Site and Design		
Treated Plot Width: 6.67 FT	Site Type: FIELD field	
Treated Plot Length: 30 FT	Experimental Unit: 4 ROW row	
Treated Plot Area: 200.1 FT ²	Tillage Type: CONTIL conventional-till	Treatments: 7
Replications: 4	Study Design: RACOB� Randomized Complete Block (RCB)	

Maintenance									
No.	Date	Type	Maintenance Product Name	Form Conc	Form Unit	Form Type	Description	Rate	Rate Unit
1.	3-26-2020	FERT	Muriate of Potash 0-0-60	60	%	GR	0-0-60	83.3	LB/A
2.	4-6-2020	FERT	DAP	46	% P2O5	GR	18-46-0	200	LB/A
3.	4-28-2020	FERT	Urea	46	% N	SG	46-0-0	370	LB/A

Field Prep./Maintenance:
4/16/20- disked once.
5/4/20- worked with the field cultivator.

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Soil Description
Description Name: 201-D

% Sand: 3.4 **% OM:** 2.4 **Texture:** SIL silt loam
% Silt: 79.9 **pH:** 5.66 **Soil Name:** Crider Silt Loam
% Clay: 16.7 **CEC:** 10.62

Application Description

	A
Application Date	6-1-2020
Appl. Start Time	10:14 AM
Appl. Stop Time	10:38 AM
Application Method	SPRAY
Application Timing	POSPOS
Application Placement	FOLIAR
Applied By	JG
Air Temperature Start, Stop	72 75.6 F
% Relative Humidity Start, Stop	39.8 23.7
Wind Velocity+Dir. Start	3.8 MPH E
Wind Velocity+Dir. Stop	4.6 MPH E
Wind Velocity+Dir. Max	5.4 MPH E
Soil Temperature	60 F
Soil Moisture	Dry
% Cloud Cover	5

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale	ZEAMX BCOR
Stage Majority, Percent	V4
Stage Maximum, Percent	V4
Height Minimum, Maximum	8 14.5

Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale	AMACH W BBCH
Height Average	1.58 IN
Height Minimum, Maximum	0.25 3.25
Density Average	18.63 FT2
Density Minimum, Maximum	3 64
Pest 2 Code, Type, Scale	DIGSS W BBCH
Height Average	2.32 IN
Height Minimum, Maximum	0.50 4
Density Average	13.625 FT2
Density Minimum, Maximum	6 34
Pest 3 Code, Type, Scale	IPOSS W BBCH

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Height Average	1.58	IN
Height Minimum, Maximum	1	2.25
Density Average	0.5	FT2
Density Minimum, Maximum	2	2
Pest 4 Code, Type, Scale	STEME W BBCH	
Height Average	1.50	IN
Height Minimum, Maximum	0.75	2
Density Average	6.875	FT2
Density Minimum, Maximum	1	39
Pest 5 Code, Type, Scale	AMBTR W BBCH	
Height Average	2.72	IN
Height Minimum, Maximum	0.75	4.50
Density Average	2.375	FT2
Density Minimum, Maximum	1	12
Pest 6 Code, Type, Scale	LAMAM W BBCH	
Height Average	0.9375	IN
Height Minimum, Maximum	0.50	1.50
Density Average	0.75	FT2
Density Minimum, Maximum	1	3
Pest 7 Code, Type, Scale	SIDSP W BBCH	
Height Average	1.083	IN
Height Minimum, Maximum	0.25	1.75
Density Average	0.375	FT2
Density Minimum, Maximum	1	2
Pest 8 Code, Type, Scale	CHEAL W BBCH	
Height Average	2.625	IN
Height Minimum, Maximum	1.50	3.75
Density Average	0.25	FT2
Density Minimum, Maximum	0	2
Pest 9 Code, Type, Scale	TAROF W BBCH	
Height Average	1.50	IN
Height Minimum, Maximum	0	1.50
Density Average	0.125	FT2
Density Minimum, Maximum	0	1
Pest10 Code, Type, Scale	ELEIN W BBCH	
Height Average	1	IN
Height Minimum, Maximum	0	1
Density Average	0.25	FT2
Pest11 Code, Type, Scale	SETSS W BBCH	
Height Average	4.90	IN
Height Minimum, Maximum	2.75	7
Density Average	2	FT2

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Density Minimum, Maximum	0	14
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Application Equipment	
	A
Appl. Equipment	CO2 Backpack
Equipment Type	BACCAI
Operation Pressure	31 PSI
Nozzle Type	XR11002V5
Nozzle Spacing	20 IN
Boom ID	Red Tape
Boom Length	6.7 FT
Boom Height	18 IN
Ground Speed	3 MPH
Carrier	WATER
Application Amount	15 GAL/AC
Mix Overage	30 %
Mix Size	2 L
Propellant	COMCO2

		W Weed DIGSA large crabgrass	W Weed AMACH Green pigweed	W Weed AMBTR Giant ragweed		W Weed DIGSA large crabgrass	W Weed AMACH Green pigweed	W Weed AMBTR Giant ragweed
Pest Type								
Pest Code								
Pest Name								
Crop Type, Code	C ZEAMX				C ZEAMX			
Crop Scientific Name	Zea mays				Zea mays			
Crop Name	Corn				Corn			
Rating Date	6-17-2020	6-17-2020	6-17-2020	6-17-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P
Rating Type	PHYGEN	CONTROL	CONTROL	CONTROL	PHYGEN	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%	%	%	%
Calculation								
Number of Subsamples	1	1	1	1	1	1	1	1
Data Entry Date	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020
Equipment								
Rating Timing								
Days After First/Last Applic.	16 16	16 16	16 16	16 16	58 58	58 58	58 58	58 58
Trt-Eval Interval	16 DA-A	16 DA-A	16 DA-A	16 DA-A	58 DA-A	58 DA-A	58 DA-A	58 DA-A
Days After Emergence								
ARM Action Codes		AA	ET2	ET6		EC	EC	AA
Number of Decimals								
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6
1 Untreated		101	0.0	0.0	0.0	0.0	0.0	0.0
		205	0.0	0.0	0.0	0.0	0.0	0.0
		307	0.0	0.0	0.0	0.0	0.0	0.0
		405	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0d	0.0	0.0	0.0	0.0d

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Pest Type	Pest Code	Pest Name	Crop Type, Code	Crop Scientific Name	Crop Name	Rating Date	Part Rated	Rating Type	Rating Unit	Calculation	Number of Subsamples	Data Entry Date	Equipment	Rating Timing	Days After First/Last Applic.	Trt-Eval Interval	Days After Emergence	ARM Action Codes	Number of Decimals		
			C ZEAMX	Zea mays	Corn	6-17-2020	PLANT C	PHYGEN	%		1	9-24-2020			16 16	16 DA-A					
		large crabgrass				6-17-2020	PLANT P	CONTROL	%		1	9-24-2020			16 16	16 DA-A		AA			
		Green pigweed				6-17-2020	PLANT P	CONTROL	%		1	9-24-2020			16 16	16 DA-A		ET2			
		Giant ragweed				6-17-2020	PLANT P	CONTROL	%		1	9-24-2020			16 16	16 DA-A		ET6			
			C ZEAMX	Zea mays	Corn	7-29-2020	PLANT C	PHYGEN	%		1	9-24-2020			58 58	58 DA-A					
		large crabgrass				7-29-2020	PLANT P	CONTROL	%		1	9-24-2020			58 58	58 DA-A		EC			
		Green pigweed				7-29-2020	PLANT P	CONTROL	%		1	9-24-2020			58 58	58 DA-A		EC			
		Giant ragweed				7-29-2020	PLANT P	CONTROL	%		1	9-24-2020			58 58	58 DA-A		AA			
Trt	Treatment	Rate	Appl																		
No.	Name	Rate Unit	Code Plot	1	2	3	4	5	6	7	8										
2	Sinate	21 FL OZ/A	A 102	0.0	90.0	100.0	100.0	0.0	80.0	90.0	100.0										
	MSO	1 % V/V	A 204	0.0	97.0	95.0	95.0	0.0	95.0	95.0	80.0										
	Amsol AMS	3 LB AI/A	A 306	0.0	95.0	97.0	100.0	0.0	80.0	90.0	90.0										
			403	0.0	90.0	80.0	100.0	0.0	70.0	80.0	90.0										
			Mean =	0.0	93.4d	93.0	98.8	0.0	81.3	88.8	92.5d										
3	Sinate	21 FL OZ/A	A 103	0.0	95.0	100.0	100.0	0.0	90.0	100.0	100.0										
	Atrazine	16 FL OZ/A	A 202	0.0	95.0	100.0	100.0	0.0	90.0	100.0	100.0										
	MSO	1 % V/V	A 304	0.0	97.0	90.0	100.0	0.0	90.0	80.0	90.0										
	Amsol AMS	3 LB AI/A	A 406	0.0	95.0	100.0	95.0	0.0	80.0	90.0	90.0										
			Mean =	0.0	95.5d	97.5	98.8	0.0	87.5	92.5	97.4d										
4	Sinate	28 FL OZ/A	A 104	0.0	90.0	100.0	97.0	0.0	90.0	100.0	100.0										
	MSO	1 % V/V	A 206	0.0	100.0	95.0	100.0	0.0	95.0	90.0	90.0										
	Amsol AMS	3 LB AI/A	A 303	0.0	95.0	90.0	100.0	0.0	90.0	80.0	70.0										
			401	0.0	95.0	80.0	100.0	0.0	90.0	80.0	80.0										
			Mean =	0.0	96.3d	91.3	99.3	0.0	91.3	87.5	88.8d										
5	Impact	1 FL OZ/A	A 105	0.0	95.0	100.0	100.0	0.0	90.0	100.0	100.0										
	MSO	1 % V/V	A 201	0.0	97.0	100.0	100.0	0.0	95.0	95.0	95.0										
	Amsol AMS	3 LB AI/A	A 305	0.0	90.0	95.0	95.0	0.0	90.0	80.0	80.0										
			402	0.0	80.0	90.0	100.0	0.0	70.0	95.0	95.0										
			Mean =	0.0	91.5d	96.3	98.8	0.0	86.3	92.5	94.9d										
6	Liberty	32 FL OZ/A	A 106	0.0	90.0	90.0	100.0	0.0	90.0	80.0	100.0										
	Amsol AMS	3 LB AI/A	A 207	0.0	97.0	90.0	100.0	0.0	100.0	90.0	80.0										
			302	0.0	90.0	95.0	95.0	0.0	80.0	80.0	80.0										
			407	0.0	95.0	95.0	95.0	0.0	80.0	95.0	95.0										
			Mean =	0.0	93.4d	92.5	97.5	0.0	87.5	86.3	91.9d										
7	Laudis	3 FL OZ/A	A 107	0.0	97.0	100.0	100.0	0.0	90.0	100.0	100.0										
	MSO	1 % V/V	A 203	0.0	97.0	100.0	100.0	0.0	95.0	100.0	80.0										
	Amsol AMS	8.5 LB AI/100 GAL	A 301	0.0	85.0	96.0	100.0	0.0	80.0	80.0	80.0										
			404	0.0	90.0	100.0	100.0	0.0	95.0	90.0	95.0										
			Mean =	0.0	93.0d	99.0	100.0	0.0	90.0	92.5	91.9d										

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

DIGSA, Digitaria sanguinalis, large crabgrass = US

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Pest Type		W Weed DIGSA	W Weed AMACH	W Weed AMBTR		W Weed DIGSA	W Weed AMACH	W Weed AMBTR		
Pest Code		large crabgrass	Green pigweed	Giant ragweed		large crabgrass	Green pigweed	Giant ragweed		
Pest Name										
Crop Type, Code	C ZEAMX				C ZEAMX					
Crop Scientific Name	Zea mays				Zea mays					
Crop Name	Corn				Corn					
Rating Date	6-17-2020	6-17-2020	6-17-2020	6-17-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020		
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P		
Rating Type	PHYGEN	CONTROL	CONTROL	CONTROL	PHYGEN	CONTROL	CONTROL	CONTROL		
Rating Unit	%	%	%	%	%	%	%	%		
Calculation										
Number of Subsamples	1	1	1	1	1	1	1	1		
Data Entry Date	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020		
Equipment										
Rating Timing										
Days After First/Last Applic.	16 16	16 16	16 16	16 16	58 58	58 58	58 58	58 58		
Trt-Eval Interval	16 DA-A	16 DA-A	16 DA-A	16 DA-A	58 DA-A	58 DA-A	58 DA-A	58 DA-A		
Days After Emergence										
ARM Action Codes		AA	ET2	ET6		EC	EC	AA		
Number of Decimals										
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8
6 Liberty	32 FL OZ/A	A	0.0 a	93.4 a	92.5 a	97.5	0.0 a	87.5 a	86.3 a	91.9 a
Amsol AMS	3 LB AI/A	A								
7 Laudis	3 FL OZ/A	A	0.0 a	93.0 a	99.0 a	100.0 a	0.0 a	90.0 a	92.5 a	91.9 a
MSO	1 % V/V	A								
Amsol AMS	8.5 LB AI/100 GAL	A								
LSD P=.05	.		5.35 - 5.64	6.92	3.08	.	9.22	9.57	8.77 - 8.92	
Standard Deviation	0.00		4.52t	4.59	2.04	0.00	6.12	6.35	7.13t	
CV	0.0		6.96t	5.79	2.47	0.0	7.01	7.05	11.11t	
Levene's F	0.00		2.081	1.977	0.429	0.00	0.622	0.389	1.295	
Levene's Prob(F)	0.00*		0.099	0.131	0.823	0.00*	0.685	0.85	0.302	
Skewness	.		-2.0095*	-1.8342*	-1.9017*	.	-0.7708	-0.1351	-1.574*	
Kurtosis	.		2.4997*	1.6219	1.7734	.	-0.0199	-1.5433	1.5278	
Replicate F	0.000		3.447	1.308	0.040	0.000	5.742	6.069	11.487	
Replicate Prob(F)	1.0000		0.0387	0.3085	0.9889	1.0000	0.0080	0.0065	0.0002	
Treatment F	0.000		161.448	288.458	1571.560	0.000	1.297	0.807	63.845	
Treatment Prob(F)	1.0000		0.0001	0.0001	0.0001	1.0000	0.3168	0.5624	0.0001	

Pest Type
W, Weed = Weed or volunteer crop

Pest Code
DIGSA, Digitaria sanguinalis, large crabgrass = US
AMACH, Amaranthus hybridus, Green pigweed = US
AMBTR, Ambrosia trifida, Giant ragweed = US

Crop Type, Code
C = EPP0 species (Bayer) codes
ZEAMX, BCOR, Zea mays, Corn = US

Part Rated
PLANT = plant
C = Crop is Part Rated
P = Pest is Part Rated

Rating Type
PHYGEN = phytotoxicity - general / injury

Rating Unit
% = percent

ARM Action Codes
AA = Automatic arcsine square root % transformation

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ET2 = Excluded treatment 2
ET6 = Excluded treatment 6
EC = Do not analyze untreated check, while still reporting treatment mean on AOV Means Table

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Sinate + Group 15 mixtures.

Trial ID: 20C04H065-STnnn	Location:	Trial Year: 2020
Protocol ID: 20C04H065	Investigator (Creator): Travis Legleiter	
Project ID: 65	Study Director: Rich Zollinger	
	Sponsor Contact: AMVAC PD rep for region	

Reps: 4 Plots: 6.67 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 1.3563 L (total for 4 plots; minimum=1.0433 L, overage=313 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	Amt Product to Measure	Rep			
										1	2	3	4
1	Untreated									101	204	308	409
2	Harness	7 LBA/GAL	EC		2 PT/A		EPOST A		22.6 mL/mx	102	201	310	403
	Roundup PowerMax	4.5 LBAE/GAL	SL		32 FL OZ/A		EPOST A		22.6 mL/mx				
	MSO	100 %	L		0.5 % V/V		EPOST A		6.781 mL/mx				
	Amsol AMS	3.4 lba/gal	SL		6 % V/V		EPOST A		81.37 mL/mx				
3	Dual II Magnum	7.64 LB/GAL	EC		1.5 PT/A		EPOST A		16.95 mL/mx	103	206	303	401
	Roundup PowerMax	4.5 LBAE/GAL	SL		32 FL OZ/A		EPOST A		22.6 mL/mx				
	MSO	100 %	L		0.5 % V/V		EPOST A		6.781 mL/mx				
	Amsol AMS	3.4 lba/gal	SL		6 % V/V		EPOST A		81.37 mL/mx				
4	Sinate	2.57 LBA/GAL	SL		28 FL OZ/A		EPOST A		19.78 mL/mx	104	207	306	408
	NIS	100 %	L		0.25 % V/V		EPOST A		3.39 mL/mx				
	Amsol AMS	3.4 lba/gal	SL		6 % V/V		EPOST A		81.37 mL/mx				
5	Sinate	2.57 LBA/GAL	SL		28 FL OZ/A		EPOST A		19.78 mL/mx	105	209	302	404
	MSO	100 %	L		0.5 % V/V		EPOST A		6.781 mL/mx				
	Amsol AMS	3.4 lba/gal	SL		6 % V/V		EPOST A		81.37 mL/mx				
6	Sinate	2.57 LBA/GAL	SL		28 FL OZ/A		EPOST A		19.78 mL/mx	106	202	307	406
	Harness	7 LBA/GAL	EC		2 PT/A		EPOST A		22.6 mL/mx				
	NIS	100 %	L		0.25 % V/V		EPOST A		3.39 mL/mx				
	Amsol AMS	3.4 lba/gal	SL		6 % V/V		EPOST A		81.37 mL/mx				
7	Sinate	2.57 LBA/GAL	SL		28 FL OZ/A		EPOST A		19.78 mL/mx	107	210	304	402
	Harness	7 LBA/GAL	EC		2 PT/A		EPOST A		22.6 mL/mx				
	MSO	100 %	L		0.5 % V/V		EPOST A		6.781 mL/mx				
	Amsol AMS	3.4 lba/gal	SL		6 % V/V		EPOST A		81.37 mL/mx				
8	Sinate	2.57 LBA/GAL	SL		28 FL OZ/A		EPOST A		19.78 mL/mx	108	205	309	405
	Dual II Magnum	7.64 LB/GAL	EC		1.5 PT/A		EPOST A		16.95 mL/mx				
	NIS	100 %	L		0.25 % V/V		EPOST A		3.39 mL/mx				
	Amsol AMS	3.4 lba/gal	SL		6 % V/V		EPOST A		81.37 mL/mx				
9	Sinate	2.57 LBA/GAL	SL		28 FL OZ/A		EPOST A		19.78 mL/mx	109	203	305	407
	Dual II Magnum	7.64 LB/GAL	EC		1.5 PT/A		EPOST A		16.95 mL/mx				
	MSO	100 %	L		0.5 % V/V		EPOST A		6.781 mL/mx				
	Amsol AMS	3.4 lba/gal	SL		6 % V/V		EPOST A		81.37 mL/mx				
10	Liberty	2.34 LBA/GAL	SL		32 FL OZ/A		EPOST A		22.6 mL/mx	110	208	301	410
	Amsol AMS	3.4 lba/gal	SL		6 % V/V		EPOST A		81.37 mL/mx				

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

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Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
84.769	mL	Harness	7	LBA/GAL	EC	
56.512	mL	Roundup PowerMax	4.5	LBAE/GAL	SL	
42.380	mL	MSO	100	%	L	
915.403	mL	Amsol AMS	3.4	lba/gal	SL	
63.577	mL	Dual II Magnum	7.64	LB/GAL	EC	
148.345	mL	Sinate	2.57	LBA/GAL	SL	
12.714	mL	NIS	100	%	L	
28.256	mL	Liberty	2.34	LBA/GAL	SL	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 1.3563 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 1.3563 L.

General Trial Information

Study Director: Rich Zollinger

Investigator: Travis Legleiter **Title:** Assistant Extension Professor

Trial Status: E established

ARM Trial Created On: 4-9-2020

Trial Location

City: Princeton **Country:** USA United States

State/Prov.: Kentucky

Postal Code: 42445

Conducted Under GLP: No

Conducted Under GEP: No

Contacts

Role: STYDIR study director

Study Director: Rich Zollinger

Role: INVEST investigator

Investigator: Travis Legleiter

Title: Assistant Extension Professor

Organization: University of Kentucky

Address 1: 348 University Drive

Phone No.: 859-562-1323

Country: USA United States

E-mail: Travis.Legleiter@uky.edu

City: Princeton, KY

Postal Code: 42445

Role: SPONSR sponsor

Sponsor: AMVAC PD rep for region

Crop Description

Crop 1: C ZEAMX Zea mays Corn

BBCH Scale: BCOR

Variety: Pioneer P1077AM

Stage Scale: BBCH

Attributes: RR/LL

Planting Date: 5-4-2020

Planting Rate: 32000 S/A

Depth: 1.5 IN

Planting Method: PLANTD planted

Row Spacing: 30 IN

Planting Equipment: VP vacuum planter

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Pest Description

- Pest 1 Type:** W **Code:** AMBEL *Ambrosia artemisiifolia*
Common Name: Common ragweed **Stage Scale:** BBCH
- Pest 2 Type:** W **Code:** CHEAL *Chenopodium album*
Common Name: common lambsquarters **Stage Scale:** BBCH
- Pest 3 Type:** W **Code:** STEME *Stellaria media*
Common Name: Common chickweed **Stage Scale:** BBCH
- Pest 4 Type:** W **Code:** AMACH *Amaranthus hybridus*
Common Name: Green pigweed **Stage Scale:** BBCH
- Pest 5 Type:** W **Code:** OXAST *Oxalis stricta*
Common Name: European wood sorrel **Stage Scale:** BBCH
- Pest 6 Type:** W **Code:** MOLVE *Mollugo verticillata*
Common Name: Carpetweed **Stage Scale:** BBCH
- Pest 7 Type:** W **Code:** DIGSS *Digitaria sp.*
Common Name: Crabgrass **Stage Scale:** BBCH
- Pest 8 Type:** W **Code:** LAMAM *Lamium amplexicaule*
Common Name: Henbit **Stage Scale:** BBCH
- Pest 9 Type:** W **Code:** IPOSS *Ipomoea sp.*
Common Name: Morning glory **Stage Scale:** BBCH
- Pest10 Type:** W **Code:** ELEIN *Eleusine indica*
Common Name: Goosegrass **Stage Scale:** BBCH
- Pest11 Type:** W **Code:** CAPBP *Capsella bursa-pastoris*
Common Name: Shepherd's purse **Stage Scale:** BBCH

Site and Design

Treated Plot Width: 6.67 FT **Site Type:** FIELD field
Treated Plot Length: 30 FT **Experimental Unit:** 4 ROW row
Treated Plot Area: 200.1 FT² **Treatments:** 10 **Tillage Type:** CONTIL conventional-till
Replications: 4 **Study Design:** RACOB� Randomized Complete Block (RCB)

Maintenance

No.	Date	Type	Maintenance Product Name	Form Conc	Form Unit	Form Type	Description	Rate	Rate Unit
1.	3-26-2020	FERT	Muriate of Potash 0-0-60	60	%	GR	0-0-60	83.3	lb/a
2.	4-6-2020	FERT	DAP	46	% P2O5	GR	18-46-0	200	lb/a
3.	4-28-2020	FERT	Urea	46	% N	SG	46-0-0	370	lb/a

Field Prep./Maintenance:

4/16/20- Disked once.
5/4/20- field cultivated.

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Soil Description

Description Name: 201-E

% Sand: 4.2 % OM: 2.4 Texture: SIL silt loam
 % Silt: 80.1 pH: 5.43 Soil Name: Crider Silt Loam
 % Clay: 15.7 CEC: 11.97

Application Description

	A
Application Date	6-1-2020
Appl. Start Time	11:50 AM
Appl. Stop Time	12:11 PM
Application Method	SPRAY
Application Timing	POSPOS
Application Placement	FOLIAR
Applied By	JG
Air Temperature Start, Stop	78 90 F
% Relative Humidity Start, Stop	33.8 40.6
Wind Velocity+Dir. Start	2.8 MPH E
Wind Velocity+Dir. Stop	1.3 MPH E
Wind Velocity+Dir. Max	8.1 MPH E
Soil Temperature	65 F
Soil Moisture	Dry
% Cloud Cover	5

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale	ZEAMX BCOR
Stage Majority, Percent	V4
Stage Minimum, Percent	V3
Stage Maximum, Percent	V4
Height Average	11.875 IN
Height Minimum, Maximum	9.50 14.25

Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale	AMBEL W BBCH
Height Average	1.75 IN
Height Minimum, Maximum	1.50 2.75
Density Average	0.375 FT2
Density Minimum, Maximum	1 2
Pest 2 Code, Type, Scale	CHEAL W BBCH
Height Average	1.25 IN
Height Minimum, Maximum	0.50 0.75
Density Average	0.25 FT2

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Density Minimum, Maximum	0 2
Pest 3 Code, Type, Scale	STEME W BBCH
Height Average	1.15 IN
Height Minimum, Maximum	0.50 4
Density Average	6.375 FT2
Density Minimum, Maximum	1 20
Pest 4 Code, Type, Scale	AMACH W BBCH
Height Average	1.74 IN
Height Minimum, Maximum	0.25 4
Density Average	12.875 FT2
Density Minimum, Maximum	5 36
Pest 5 Code, Type, Scale	OXAST W BBCH
Height Average	0.375 IN
Height Minimum, Maximum	0.25 0.50
Density Average	6.625 FT2
Density Minimum, Maximum	1 25
Pest 6 Code, Type, Scale	MOLVE W BBCH
Height Average	0.25 IN
Height Minimum, Maximum	0.25 0.25
Density Average	1.25 FT2
Density Minimum, Maximum	1 4
Pest 7 Code, Type, Scale	DIGSS W BBCH
Height Average	2.43 IN
Height Minimum, Maximum	0.50 4.50
Density Average	2.75 FT2
Density Minimum, Maximum	1 5
Pest 8 Code, Type, Scale	LAMAM W BBCH
Height Average	0.625 IN
Height Minimum, Maximum	0.25 1
Density Average	1.25 FT2
Density Minimum, Maximum	1 2
Pest 9 Code, Type, Scale	IPOSS W BBCH
Height Average	1.83 IN
Height Minimum, Maximum	1 2.50
Density Average	0.625 FT2
Density Minimum, Maximum	1 2
Pest10 Code, Type, Scale	ELEIN W BBCH
Height Average	0.83 IN
Height Minimum, Maximum	0.25 1.75
Density Average	1.625 FT2
Density Minimum, Maximum	2 4
Pest11 Code, Type, Scale	CAPBP W BBCH

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Pest Type	Pest Code	Pest Name	Crop Type, Code	Crop Scientific Name	Crop Name	Rating Date	Part Rated	Rating Type	Rating Unit	Calculation	Number of Subsamples	Data Entry Date	Equipment	Rating Timing	Days After First/Last Applic.	Trt-Eval Interval	Days After Emergence	ARM Action Codes	Number of Decimals		
			C ZEAMX	Zea mays	Corn	6-17-2020	PLANT C	PHYGEN	%		1	9-24-2020			16 16	16 DA-A					
		large crabgrass				6-17-2020	PLANT P	CONTRO			1	9-24-2020			16 16	16 DA-A					
		Giant ragweed				6-17-2020	PLANT P	CONTRO			1	9-24-2020			16 16	16 DA-A					
		Green pigweed				6-17-2020	PLANT P	CONTRO			1	9-24-2020			16 16	16 DA-A					
		ivy-leaf mornin>				6-17-2020	PLANT P	CONTRO			1	9-24-2020			16 16	16 DA-A		AA			
			C ZEAMX	Zea mays	Corn	6-29-2020	PLANT C	PHYGEN			1	9-24-2020			28 28	28 DA-A					
		large crabgrass				6-29-2020	PLANT P	CONTRO			1	9-24-2020			28 28	28 DA-A					
		Giant ragweed				6-29-2020	PLANT P	CONTRO			1	9-24-2020			28 28	28 DA-A					
		Green pigweed				6-29-2020	PLANT P	CONTRO			1	9-24-2020			28 28	28 DA-A					
Trt Treatment	Rate	Appl																			
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7	8	9										
	Mean =		0.0	0.0	0.0	0.0	0.0d	0.0	0.0	0.0	0.0										
2 Harness	2 PT/A	A 102	0.0	97.0	100.0	100.0	95.0	0.0	100.0	97.0	100.0										
Roundup PowerMax	32 FL OZ/A	A 201	0.0	100.0	95.0	100.0	97.0	0.0	90.0	100.0	100.0										
MSO	0.5 % V/V	A 310	0.0	100.0	100.0	100.0	95.0	0.0	100.0	100.0	100.0										
Amsol AMS	6 % V/V	A 403	0.0	100.0	100.0	100.0	98.0	0.0	100.0	100.0	100.0										
	Mean =		0.0	99.3	98.8	100.0	96.4d	0.0	97.5	99.3	100.0										
3 Dual II Magnum	1.5 PT/A	A 103	0.0	97.0	100.0	100.0	97.0	0.0	100.0	97.0	100.0										
Roundup PowerMax	32 FL OZ/A	A 206	0.0	100.0	100.0	100.0	97.0	0.0	100.0	100.0	100.0										
MSO	0.5 % V/V	A 303	0.0	100.0	100.0	100.0	95.0	0.0	100.0	100.0	100.0										
Amsol AMS	6 % V/V	A 401	0.0	100.0	100.0	100.0	95.0	0.0	100.0	90.0	100.0										
	Mean =		0.0	99.3	100.0	100.0	96.1d	0.0	100.0	96.8	100.0										
4 Sinate	28 FL OZ/A	A 104	0.0	97.0	97.0	97.0	100.0	0.0	100.0	97.0	100.0										
NIS	0.25 % V/V	A 207	0.0	100.0	100.0	100.0	95.0	0.0	100.0	95.0	100.0										
Amsol AMS	6 % V/V	A 306	0.0	97.0	100.0	98.0	90.0	0.0	95.0	100.0	100.0										
		408	0.0	100.0	100.0	90.0	95.0	0.0	100.0	97.0	97.0										
	Mean =		0.0	98.5	99.3	96.3	96.3d	0.0	98.8	97.3	99.3										
5 Sinate	28 FL OZ/A	A 105	0.0	100.0	100.0	100.0	95.0	0.0	100.0	100.0	100.0										
MSO	0.5 % V/V	A 209	0.0	95.0	100.0	95.0	100.0	0.0	100.0	100.0	85.0										
Amsol AMS	6 % V/V	A 302	0.0	100.0	100.0	100.0	95.0	0.0	100.0	100.0	100.0										
		404	0.0	100.0	100.0	100.0	95.0	0.0	100.0	100.0	100.0										
	Mean =		0.0	98.8	100.0	98.8	97.2d	0.0	100.0	100.0	96.3										
6 Sinate	28 FL OZ/A	A 106	0.0	98.0	98.0	100.0	98.0	0.0	95.0	100.0	100.0										
Harness	2 PT/A	A 202	0.0	100.0	100.0	100.0	97.0	0.0	100.0	100.0	100.0										
NIS	0.25 % V/V	A 307	0.0	100.0	100.0	98.0	95.0	0.0	100.0	100.0	100.0										
Amsol AMS	6 % V/V	A 406	0.0	100.0	100.0	100.0	97.0	0.0	100.0	100.0	100.0										
	Mean =		0.0	99.5	99.5	99.5	96.8d	0.0	98.8	100.0	100.0										
7 Sinate	28 FL OZ/A	A 107	0.0	100.0	100.0	100.0	97.0	0.0	97.0	100.0	100.0										
Harness	2 PT/A	A 210	0.0	100.0	100.0	100.0	97.0	0.0	100.0	100.0	100.0										
MSO	0.5 % V/V	A 304	0.0	100.0	100.0	100.0	95.0	0.0	100.0	100.0	100.0										
Amsol AMS	6 % V/V	A 402	0.0	100.0	97.0	100.0	95.0	0.0	100.0	90.0	100.0										
	Mean =		0.0	100.0	99.3	100.0	96.1d	0.0	99.3	97.5	100.0										

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Pest Type		W Weed DIGSA	W Weed AMBTR	W Weed AMACH	W Weed IPOHE		W Weed DIGSA	W Weed AMBTR	W Weed AMACH		
Pest Code		large crabgrass	Giant ragweed	Green pigweed	ivy-leaf mornin>		large crabgrass	Giant ragweed	Green pigweed		
Pest Name											
Crop Type, Code	C ZEAMX					C ZEAMX					
Crop Scientific Name	Zea mays					Zea mays					
Crop Name	Corn					Corn					
Rating Date	6-17-2020	6-17-2020	6-17-2020	6-17-2020	6-17-2020	6-29-2020	6-29-2020	6-29-2020	6-29-2020		
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P		
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO		
Rating Unit	%										
Calculation											
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Data Entry Date	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020		
Equipment											
Rating Timing											
Days After First/Last Applic.	16 16	16 16	16 16	16 16	16 16	28 28	28 28	28 28	28 28		
Trt-Eval Interval	16 DA-A	16 DA-A	16 DA-A	16 DA-A	16 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A		
Days After Emergence											
ARM Action Codes					AA						
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7	8	9
8 Sinate	28 FL OZ/A	A 108	0.0	100.0	98.0	100.0	90.0	0.0	100.0	100.0	100.0
Dual II Magnum	1.5 PT/A	A 205	0.0	100.0	100.0	100.0	98.0	0.0	98.0	100.0	100.0
NIS	0.25 % V/V	A 309	0.0	100.0	100.0	100.0	90.0	0.0	100.0	100.0	100.0
Amsol AMS	6 % V/V	A 405	0.0	100.0	100.0	95.0	95.0	0.0	100.0	100.0	100.0
		Mean =	0.0	100.0	99.5	98.8	93.7d	0.0	99.5	100.0	100.0
9 Sinate	28 FL OZ/A	A 109	0.0	97.0	100.0	100.0	95.0	0.0	97.0	100.0	100.0
Dual II Magnum	1.5 PT/A	A 203	0.0	100.0	97.0	100.0	97.0	0.0	97.0	100.0	100.0
MSO	0.5 % V/V	A 305	0.0	100.0	100.0	100.0	95.0	0.0	100.0	100.0	100.0
Amsol AMS	6 % V/V	A 407	0.0	100.0	100.0	98.0	98.0	0.0	100.0	100.0	100.0
		Mean =	0.0	99.3	99.3	99.5	96.4d	0.0	98.5	100.0	100.0
10 Liberty	32 FL OZ/A	A 110	0.0	95.0	100.0	100.0	95.0	0.0	90.0	100.0	100.0
Amsol AMS	6 % V/V	A 208	0.0	100.0	100.0	100.0	97.0	0.0	97.0	100.0	100.0
		301	0.0	95.0	100.0	100.0	90.0	0.0	90.0	100.0	100.0
		410	0.0	95.0	100.0	100.0	90.0	0.0	90.0	100.0	100.0
		Mean =	0.0	96.3	100.0	100.0	93.4d	0.0	91.8	100.0	100.0

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	IPOHE	DIGSA	AMBTR	AMACH	IPOHE
Pest Name	ivy-leaf mornin>	large crabgrass	Giant ragweed	Green pigweed	ivy-leaf mornin>
Crop Type, Code					
Crop Scientific Name					
Crop Name					
Rating Date	6-29-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit					
Calculation					
Number of Subsamples	1	1	1	1	1
Data Entry Date	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020
Equipment					
Rating Timing					
Days After First/Last Applic.	28 28	44 44	44 44	44 44	44 44
Trt-Eval Interval	28 DA-A	44 DA-A	44 DA-A	44 DA-A	44 DA-A
Days After Emergence					
ARM Action Codes	EC				
Number of Decimals					
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	10	11	12
1 Untreated			0.0	0.0	0.0
			0.0	0.0	0.0
			0.0	0.0	0.0
			0.0	0.0	0.0

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	
Pest Code	IPOHE	DIGSA	AMBTR	AMACH	IPOHE	
Pest Name	ivy-leaf mornin>	large crabgrass	Giant ragweed	Green pigweed	ivy-leaf mornin>	
Crop Type, Code						
Crop Scientific Name						
Crop Name						
Rating Date	6-29-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020	
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	
Rating Unit						
Calculation						
Number of Subsamples	1	1	1	1	1	
Data Entry Date	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020	
Equipment						
Rating Timing						
Days After First/Last Applic.	28 28	44 44	44 44	44 44	44 44	
Trt-Eval Interval	28 DA-A	44 DA-A	44 DA-A	44 DA-A	44 DA-A	
Days After Emergence						
ARM Action Codes	EC					
Number of Decimals						
Trt Treatment						
No. Name	10	11	12	13	14	
Rate						
Appl						
Rate Unit						
Code Plot						
Mean =	0.0	0.0	0.0	0.0	0.0	
2 Harness	2 PT/A A 102	95.0	97.0	97.0	100.0	95.0
Roundup PowerMax	32 FL OZ/A A 201	90.0	90.0	100.0	100.0	90.0
MSO	0.5 % V/V A 310	90.0	100.0	95.0	100.0	90.0
Amsol AMS	6 % V/V A 403	90.0	100.0	100.0	100.0	90.0
Mean =		91.3	96.8	98.0	100.0	91.3
3 Dual II Magnum	1.5 PT/A A 103	100.0	97.0	97.0	100.0	95.0
Roundup PowerMax	32 FL OZ/A A 206	90.0	100.0	100.0	100.0	90.0
MSO	0.5 % V/V A 303	95.0	100.0	100.0	100.0	95.0
Amsol AMS	6 % V/V A 401	100.0	100.0	90.0	100.0	95.0
Mean =		96.3	99.3	96.8	100.0	93.8
4 Sinate	28 FL OZ/A A 104	100.0	97.0	97.0	100.0	97.0
NIS	0.25 % V/V A 207	90.0	100.0	95.0	100.0	90.0
Amsol AMS	6 % V/V A 306	95.0	95.0	100.0	100.0	95.0
	408	95.0	100.0	97.0	97.0	95.0
Mean =		95.0	98.0	97.3	99.3	94.3
5 Sinate	28 FL OZ/A A 105	95.0	97.0	100.0	100.0	95.0
MSO	0.5 % V/V A 209	80.0	100.0	90.0	90.0	80.0
Amsol AMS	6 % V/V A 302	90.0	100.0	100.0	100.0	90.0
	404	85.0	100.0	100.0	100.0	85.0
Mean =		87.5	99.3	97.5	97.5	87.5
6 Sinate	28 FL OZ/A A 106	95.0	95.0	100.0	100.0	95.0
Harness	2 PT/A A 202	95.0	97.0	100.0	100.0	97.0
NIS	0.25 % V/V A 307	85.0	100.0	100.0	100.0	85.0
Amsol AMS	6 % V/V A 406	97.0	100.0	100.0	100.0	97.0
Mean =		93.0	98.0	100.0	100.0	93.5
7 Sinate	28 FL OZ/A A 107	97.0	95.0	100.0	100.0	97.0
Harness	2 PT/A A 210	95.0	100.0	100.0	100.0	95.0
MSO	0.5 % V/V A 304	95.0	100.0	100.0	100.0	95.0
Amsol AMS	6 % V/V A 402	80.0	100.0	90.0	100.0	80.0
Mean =		91.8	98.8	97.5	100.0	91.8

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	IPOHE	DIGSA	AMBTR	AMACH	IPOHE
Pest Name	ivy-leaf mornin>	large crabgrass	Giant ragweed	Green pigweed	ivy-leaf mornin>
Crop Type, Code					
Crop Scientific Name					
Crop Name					
Rating Date	6-29-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit					
Calculation					
Number of Subsamples	1	1	1	1	1
Data Entry Date	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020
Equipment					
Rating Timing					
Days After First/Last Applic.	28 28	44 44	44 44	44 44	44 44
Trt-Eval Interval	28 DA-A	44 DA-A	44 DA-A	44 DA-A	44 DA-A
Days After Emergence					
ARM Action Codes	EC				
Number of Decimals					
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	10	11	12
8 Sinate	28 FL OZ/A	A 108	95.0	97.0	95.0
Dual II Magnum	1.5 PT/A	A 205	90.0	98.0	100.0
NIS	0.25 % V/V	A 309	80.0	100.0	100.0
Amsol AMS	6 % V/V	A 405	90.0	100.0	100.0
		Mean =	88.8	98.8	98.8
9 Sinate	28 FL OZ/A	A 109	90.0	97.0	97.0
Dual II Magnum	1.5 PT/A	A 203	95.0	97.0	100.0
MSO	0.5 % V/V	A 305	95.0	100.0	100.0
Amsol AMS	6 % V/V	A 407	90.0	100.0	100.0
		Mean =	92.5	98.5	99.3
10 Liberty	32 FL OZ/A	A 110	90.0	97.0	100.0
Amsol AMS	6 % V/V	A 208	90.0	97.0	100.0
		301	90.0	90.0	100.0
		410	80.0	90.0	100.0
		Mean =	87.5	93.5	100.0
					99.3
					87.5

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Pest Type		W Weed DIGSA	W Weed AMBTR	W Weed AMACH	W Weed IPOHE		W Weed DIGSA	W Weed AMBTR	W Weed AMACH		
Pest Code		large crabgrass	Giant ragweed	Green pigweed	ivy-leaf mornin>		large crabgrass	Giant ragweed	Green pigweed		
Pest Name											
Crop Type, Code	C ZEAMX					C ZEAMX					
Crop Scientific Name	Zea mays					Zea mays					
Crop Name	Corn					Corn					
Rating Date	6-17-2020	6-17-2020	6-17-2020	6-17-2020	6-17-2020	6-29-2020	6-29-2020	6-29-2020	6-29-2020		
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P		
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO		
Rating Unit	%										
Calculation											
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Data Entry Date	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020		
Equipment											
Rating Timing											
Days After First/Last Applic.	16 16	16 16	16 16	16 16	16 16	28 28	28 28	28 28	28 28		
Trt-Eval Interval	16 DA-A	16 DA-A	16 DA-A	16 DA-A	16 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A		
Days After Emergence											
ARM Action Codes					AA						
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8	9
10 Liberty Amsol AMS	32 FL OZ/A 6 % V/V	A A	0.0 a	96.3 b	100.0 a	100.0 a	93.4 a	0.0 a	91.8 b	100.0 a	100.0 a
LSD P=.05			.	2.10	1.79	2.61	3.83 - 3.83	.	3.55	3.21	3.53
Standard Deviation			0.00	1.45	1.23	1.80	3.63t	0.00	2.44	2.21	2.44
CV			0.0	1.62	1.37	2.02	5.16t	0.0	2.77	2.48	2.72
Levene's F			0.00	0.605	0.511	1.273	0.904	0.00	0.543	1.377	0.957
Levene's Prob(F)			0.00*	0.783	0.855	0.291	0.534	0.00*	0.831	0.242	0.493
Skewness			.	-2.7557*	-2.7644*	-2.7511*	-2.6312*	.	-2.7184*	-2.7406*	-2.7421*
Kurtosis			.	5.9234*	5.9537*	5.9048*	5.5247*	.	5.7881*	5.8666*	5.8657*
Replicate F			0.000	2.116	0.902	1.326	3.583	0.000	0.368	1.996	0.860
Replicate Prob(F)			1.0000	0.1216	0.4529	0.2864	0.0266	1.0000	0.7766	0.1383	0.4740
Treatment F			0.000	1875.433	2614.687	1217.845	186.571	0.000	649.435	803.005	668.360
Treatment Prob(F)			1.0000	0.0001	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001	0.0001

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	IPOHE	DIGSA	AMBTR	AMACH	IPOHE
Pest Name	ivy-leaf mornin>	large crabgrass	Giant ragweed	Green pigweed	ivy-leaf mornin>
Crop Type, Code					
Crop Scientific Name					
Crop Name					
Rating Date	6-29-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit					
Calculation					
Number of Subsamples	1	1	1	1	1
Data Entry Date	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020
Equipment					
Rating Timing					
Days After First/Last Applic.	28 28	44 44	44 44	44 44	44 44
Trt-Eval Interval	28 DA-A	44 DA-A	44 DA-A	44 DA-A	44 DA-A
Days After Emergence					
ARM Action Codes	EC				
Number of Decimals					
Trt Treatment					
No. Name	10	11	12	13	14
Rate					
Rate Unit					
Appl Code					
1 Untreated	0.0	0.0 b	0.0 b	0.0 b	0.0 b
2 Harness	2 PT/A A				
Roundup PowerMax	32 FL OZ/A A				
MSO	0.5 % V/V A				
Amsol AMS	6 % V/V A				
	91.3 a	96.8 a	98.0 a	100.0 a	91.3 a

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	IPOHE	DIGSA	AMBTR	AMACH	IPOHE		
Pest Name	ivy-leaf mornin>	large crabgrass	Giant ragweed	Green pigweed	ivy-leaf mornin>		
Crop Type, Code							
Crop Scientific Name							
Crop Name							
Rating Date	6-29-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit							
Calculation							
Number of Subsamples	1	1	1	1	1		
Data Entry Date	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020		
Equipment							
Rating Timing							
Days After First/Last Applic.	28 28	44 44	44 44	44 44	44 44		
Trt-Eval Interval	28 DA-A	44 DA-A	44 DA-A	44 DA-A	44 DA-A		
Days After Emergence							
ARM Action Codes	EC						
Number of Decimals							
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code	10	11	12	13	14
3 Dual II Magnum	1.5 PT/A	A	96.3 a	99.3 a	96.8 a	100.0 a	93.8 a
Roundup PowerMax	32 FL OZ/A	A					
MSO	0.5 % V/V	A					
Amsol AMS	6 % V/V	A					
4 Sinate	28 FL OZ/A	A	95.0 a	98.0 a	97.3 a	99.3 a	94.3 a
NIS	0.25 % V/V	A					
Amsol AMS	6 % V/V	A					
5 Sinate	28 FL OZ/A	A	87.5 a	99.3 a	97.5 a	97.5 a	87.5 a
MSO	0.5 % V/V	A					
Amsol AMS	6 % V/V	A					
6 Sinate	28 FL OZ/A	A	93.0 a	98.0 a	100.0 a	100.0 a	93.5 a
Harness	2 PT/A	A					
NIS	0.25 % V/V	A					
Amsol AMS	6 % V/V	A					
7 Sinate	28 FL OZ/A	A	91.8 a	98.8 a	97.5 a	100.0 a	91.8 a
Harness	2 PT/A	A					
MSO	0.5 % V/V	A					
Amsol AMS	6 % V/V	A					
8 Sinate	28 FL OZ/A	A	88.8 a	98.8 a	98.8 a	98.8 a	91.3 a
Dual II Magnum	1.5 PT/A	A					
NIS	0.25 % V/V	A					
Amsol AMS	6 % V/V	A					
9 Sinate	28 FL OZ/A	A	92.5 a	98.5 a	99.3 a	100.0 a	92.5 a
Dual II Magnum	1.5 PT/A	A					
MSO	0.5 % V/V	A					
Amsol AMS	6 % V/V	A					

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	IPOHE	DIGSA	AMBTR	AMACH	IPOHE
Pest Name	ivy-leaf mornin>	large crabgrass	Giant ragweed	Green pigweed	ivy-leaf mornin>
Crop Type, Code					
Crop Scientific Name					
Crop Name					
Rating Date	6-29-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit					
Calculation					
Number of Subsamples	1	1	1	1	1
Data Entry Date	9-24-2020	9-24-2020	9-24-2020	9-24-2020	9-24-2020
Equipment					
Rating Timing					
Days After First/Last Applic.	28 28	44 44	44 44	44 44	44 44
Trt-Eval Interval	28 DA-A	44 DA-A	44 DA-A	44 DA-A	44 DA-A
Days After Emergence					
ARM Action Codes	EC				
Number of Decimals					
Trt Treatment					
No. Name	10	11	12	13	14
Rate					
Rate Unit					
Appl Code					
10 Liberty	32 FL OZ/A A	87.5 a	93.5 a	100.0 a	99.3 a
Amsol AMS	6 % V/V A				87.5 a
LSD P=.05	7.21	3.70	4.47	2.81	6.11
Standard Deviation	4.94	2.55	3.08	1.93	4.21
CV	5.4	2.89	3.48	2.16	5.11
Levene's F	0.303	1.92	0.752	0.768	0.708
Levene's Prob(F)	0.958	0.087	0.659	0.646	0.697
Skewness	-0.7166	-2.7277*	-2.7262*	-2.7536*	-2.6441*
Kurtosis	0.1147	5.8235*	5.8167*	5.9134*	5.5271*
Replicate F	2.338	1.257	0.590	0.559	2.178
Replicate Prob(F)	0.0989	0.3089	0.6268	0.6465	0.1138
Treatment F	1.595	591.888	408.162	1057.828	190.269
Treatment Prob(F)	0.1787	0.0001	0.0001	0.0001	0.0001

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Sinate + Group 15 mixtures.

Trial ID: 20C04H065-STnnn	Location:	Trial Year: 2020
Protocol ID: 20C04H065	Investigator (Creator): Travis Legleiter	
Project ID: 65	Study Director: Rich Zollinger	
	Sponsor Contact: AMVAC PD rep for region	

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

DIGSA, Digitaria sanguinalis, large crabgrass = US

AMBTR, Ambrosia trifida, Giant ragweed = US

AMACH, Amaranthus hybridus, Green pigweed = US

IPOHE, Ipomoea hederacea, ivy-leaf morning glory = US

Crop Type, Code

C = EPPO species (Bayer) codes

ZEAMX, BCOR, Zea mays, Corn = US

Part Rated

PLANT = plant

C = Crop is Part Rated

P = Pest is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

ARM Action Codes

AA = Automatic arcsine square root % transformation

EC = Do not analyze untreated check, while still reporting treatment mean on AOV Means Table

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Acuron GT: Evaluation of weed control and crop tolerance in a one pass system

Trial ID: USNG0H3532020 Location: Cully Scott FS Trial Year: 2020
 Protocol ID: HBI007A4-2020US Investigator (Creator): Scott Cully
 Master Protocol ID: Study Director: Sara Carter
 Official Trial ID: Sponsor Contact: Scott Cully
 Conducted Under GEP: No Trial Origin: P public institution trial

Reps: 3 Plots: 10 by 44 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 3 plots; minimum=1.7206 L)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Unit	Appl Timing	Appl Code	Amt Product to Measure	Rep 1	Rep 2	Rep 3
1	UNTREATED CHECK								101	207	305
2	AMSOL			SL	2.5 % V/V		A	50.0 mL/mx	102	205	308
	NIS			SL	0.25 % V/V		A	5.0 mL/mx			
	ACURON GT	514.35 gA/L		ZC	2260 g AI/ha		A	62.63 mL/mx			
3	AMSOL			SL	2.5 % V/V		A	50.0 mL/mx	103	208	302
	NIS			SL	0.25 % V/V		A	5.0 mL/mx			
	HALEX GT 4.38 CS	525 gA/L		CS	2210 g AI/ha		A	60.0 mL/mx			
4	AMSOL			SL	2.5 % V/V		A	50.0 mL/mx	104	202	306
	RESICORE 3.29 SC	394.4 gA/L		SC	1150 g AI/ha		A	41.56 mL/mx			
	ROUNDUP POWERMAX 4.5 SL	540 gAE/L		SL	1050 g AE/ha		A	27.72 mL/mx			
5	AMSOL			SL	2.5 % V/V		A	50.0 mL/mx	105	206	301
	CAPRENO 3.45 SC	413 gA/L		SC	90.5 g AI/ha		A	3.124 mL/mx			
	ROUNDUP POWERMAX 4.5 SL	540 gAE/L		SL	1050 g AE/ha		A	27.72 mL/mx			
	SUPERB HC			SL	0.5 % V/V		A	10.0 mL/mx			
6	AMSOL			SL	2.5 % V/V		A	50.0 mL/mx	106	209	303
	HARNES MAX 3.85 SC	462 gA/L		SC	1350 g AI/ha		A	41.65 mL/mx			
	ROUNDUP POWERMAX 4.5 SL	540 gAE/L		SL	1050 g AE/ha		A	27.72 mL/mx			
7	AMSOL			SL	2.5 % V/V		A	50.0 mL/mx	107	204	307
	ARMEZON PRO	642.5 gA/L		EC	939 g AI/ha		A	20.83 mL/mx			
	ROUNDUP POWERMAX 4.5 SL	540 gAE/L		SL	1050 g AE/ha		A	27.72 mL/mx			
8	AMSOL			SL	2.5 % V/V		A	50.0 mL/mx	108	203	309
	LAUDIS 3.5 SC	420 gA/L		SC	92.1 g AI/ha		A	3.126 mL/mx			
	ROUNDUP POWERMAX 4.5 SL	540 gAE/L		SL	1050 g AE/ha		A	27.72 mL/mx			
	SUPERB HC			SL	0.5 % V/V		A	10.0 mL/mx			
9	LAUDIS 3.5 SC	420 gA/L		SC	92.1 g AI/ha		A	3.126 mL/mx	109	201	304
	INTACT			SL	0.5 % V/V		A	10.0 mL/mx			
	CLASS ACT RIDION			SL	1 % V/V		A	20.0 mL/mx			
	XTENDIMAX 2.9 SL	350.2 gAE/L		SL	435 g AE/ha		A	17.71 mL/mx			
	ROUNDUP POWERMAX 4.5 SL	540 gAE/L		SL	1050 g AE/ha		A	27.72 mL/mx			

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
437.500	mL	AMSOL			SL	
12.500	mL	NIS			SL	

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Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
78.290	mL	ACURON GT	514.35	gA/L	ZC	
75.005	mL	HALEX GT 4.38 CS	525	gA/L	CS	
51.954	mL	RESICORE 3.29 SC	394.4	gA/L	SC	
207.875	mL	ROUNDUP POWERMAX 4.5 SL	540	gAE/L	SL	
3.904	mL	CAPRENO 3.45 SC	413	gA/L	SC	
25.000	mL	SUPERB HC			SL	
52.065	mL	HARNESS MAX 3.85 SC	462	gA/L	SC	
26.040	mL	ARMEZON PRO	642.5	gA/L	EC	
7.814	mL	LAUDIS 3.5 SC	420	gA/L	SC	
12.500	mL	INTACT			SL	
25.000	mL	CLASS ACT RIDION			SL	
22.132	mL	XTENDIMAX 2.9 SL	350.2	gAE/L	SL	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

* Product amount calculations increased 25 % for coverage adjustment.

* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.

General Trial Information

Study Director: Sara Carter **Title:** Research Specialist

Investigator: Scott Cully

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

Trial Status Date: 11-16-2020 9:28 AM

Last Changed By: Sara Carter

ARM Trial Created On: 4-2-2020

Trial Usage/Type: 0 Research and Development

Initiation Date: 5-11-2020

Planned Completion Date: 10-1-2020

Completion Date: 10-22-2020

Protocol Revision Number: 1.0

Protocol Revision Date: 4-2-2020

Trial Location

Address (Location): Spindletop Research Farm

City: LEXINGTON

Country: USA United States

State/Prov.: KENTUCKY

Postal Code: 40511

Latitude of LL Corner °: 38.118072 N

Longitude of LL Corner °: -84.494072 W USA 71.39038 - 18.91069

-66.949607 - -180

Conducted Under GLP: No

Conducted Under GEP: No

Contacts

Role: STYDIR study director

Study Director: Sara Carter

Title: Research Specialist

Organization: University of Kentucky

Address 1: 2951 Agronomy Road, Unit 12

Mobile No.: 859-559-6710

Country: USA United States

E-mail: skcart0@uky..edu

City: Lexington, KY

Postal Code: 40511

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Role: INVEST investigator
Investigator: Scott Cully
Organization: Syngenta
Address 1: 17256 New Dennison Rd. **Phone No.:** 618-982-9224 **Mobile No.:** 618-751-0715
Country: USA United States **E-mail:** scott.cully@syngenta.com
City: Marion, IL **Postal Code:** 62959

Role: SPONSR sponsor
Sponsor: Scott Cully

Crop Description
Crop 1: C ZEAMX Zea mays Corn **BBCH Scale:** BCOR
Variety: DKC 65-95 **Stage Scale:** BBCH
Planting Date: 5-11-2020 **Planting Rate:** 32000 S/A
Depth: 1.5 IN **Planting Method:** PLANTD planted
Rows per Plot: 6 **Planting Equipment:** FE field equipment
Row Spacing: 30 IN **Seed Bed:** SMOOTH smooth
Soil Moisture: SLIWET slightly wet, moist
Soil Temperature: 58 F **Plant Arrangement:** ROW
Emergence Date: 5-18-2020 **Harvest Equipment:** MASSEY FERGUSON 8XP
Harvest Date: 10-22-2020 **Harvested Width:** 5 FT
% Standard Moisture: 15.5 **Harvested Length:** 40 FT

Pest Description
Pest 1 Type: W **Code:** SETFA *Setaria faberi* **Stage Scale:** BBCH
Common Name: Giant foxtail
Crop: 1 ZEAMX

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida* **Stage Scale:** BBCH
Common Name: Giant ragweed
Crop: 1 ZEAMX

Pest 3 Type: W **Code:** IPOSS *Ipomoea sp.* **Stage Scale:** BBCH
Common Name: Morning glory
Crop: 1 ZEAMX

Site and Design
Treated Plot Width: 10 FT **Total Plot Width:** 15 FT **Site Type:** FIELD field
Treated Plot Length: 44 FT **Total Plot Length:** 44 FT
Treated Plot Area: 440.0 FT2 **Treatments:** 9 **Tillage Type:** CONTIL conventional-till
Replications: 3 **Study Design:** RACOB� Randomized Complete Block (RCB)

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

Weather Conditions
Overall Moisture Conditions: WEWEDR wet-wet-dry
Closest Weather Station: SPINDLETOP **Distance:** 1.25 MI

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Application Description	
	A
Application Date	5-27-2020
Appl. Start Time	1:00 PM
Appl. Stop Time	1:30 PM
Application Method	SPRAY
Application Timing	EAPOCR
Application Placement	BROFOL
Applied By	SARA
Air Temperature Start, Stop	79 F
% Relative Humidity Start, Stop	54
Wind Velocity+Dir. Start	2 MPH N
Wet Leaves (Y/N)	N no
Soil Temperature	75 F
Soil Moisture	WET
% Cloud Cover	20
Next Moisture Occurred On	5-29-2020

Crop Stage At Each Application	
	A
Crop 1 Code, BBCH Scale	ZEAMX BCOR
Stage Scale Used	BBCH
Stage Majority, Percent	12 95
Height Average	6 IN

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Pest Stage At Each Application	
	A
Pest 1 Code, Type, Scale	SETFA W BBCH
Stage Majority, Percent	12 95
Stage Minimum, Percent	10
Stage Maximum, Percent	12
Height Average	3 IN
Height Minimum, Maximum	1 3.5
Crop Part Attacked, Code	ZEAMX
Pest 2 Code, Type, Scale	AMBTR W BBCH
Stage Majority, Percent	13
Stage Minimum, Percent	12
Stage Maximum, Percent	14
Height Average	6 IN
Height Minimum, Maximum	2 6
Crop Part Attacked, Code	ZEAMX
Pest 3 Code, Type, Scale	IPOSS W BBCH
Stage Majority, Percent	11
Stage Minimum, Percent	10
Stage Maximum, Percent	12
Height Average	2 IN
Height Minimum, Maximum	1 2.5
Crop Part Attacked, Code	ZEAMX

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Application Equipment	
	A
Appl. Equipment	BACKPACK
Equipment Type	BELSPR
Operation Pressure	30 PSI
Nozzle Type	TEEJAI
Nozzle Size	TTI 015
Nozzle Spacing	20 IN
Nozzle Filter Mesh	50
Spray Quality	C coarse
Time to Treat 1 Plot	1 MIN
Boom Length	10 FT
Boom Height	30 IN
Ground Speed	4 MPH
Carrier	WATER
Application Amount	15 GAL/AC
Minimum Mix/Treatment	1.7206 L
Mix Overage	0 mL
Mix Size	2 L
Propellant	COMCO2

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		1 W Weed	2 W Weed	3 W Weed		1 W Weed	2 W Weed	3 W Weed
Pest ID Code		SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS
Pest Code		Setaria faberi	Ambrosia trifida	Ipomoea sp.		Setaria faberi	Ambrosia trifida	Ipomoea sp.
Pest Scientific Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory
Pest Name		1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
Crop ID Code		BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
BBCH Scale		Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Scientific Name		Corn	Corn	Corn	Corn	Corn	Corn	Corn
Crop Name		DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95
Crop Variety		6-3-2020	6-3-2020	6-3-2020	6-3-2020	6-24-2020	6-24-2020	6-24-2020
Rating Date		1	2	3	4	5	6	7
Rating Time								
SE Group No.								
SE Name								
SE Description								
Part Rated		PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P
Rating Type		PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO
Rating Unit		0-10	0-100	0-100	0-100	0-10	0-100	0-100
Calculation		NC	NC	NC	NC	NC	NC	NC
Sample Size								
Collection Basis								
Reporting Basis		1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples		1	1	1	1	1	1	1
Crop Stage Scale								
Crop Stage Majority/Min/Max								
Crop Density								
Pest Stage Majority/Min/Max								
Pest Density								
Footnote Number								
Assessed By								
First Export Date								
Equipment								
Rating Timing								
Days After First/Last Applic.		7 7	7 7	7 7	7 7	28 28	28 28	28 28
Trt-Eval Interval		7 DA-A	7 DA-A	7 DA-A	7 DA-A	28 DA-A	28 DA-A	28 DA-A
Plant-Eval Interval		23 DP-1	23 DP-1	23 DP-1	23 DP-1	44 DP-1	44 DP-1	44 DP-1
Days After Emergence		16 DE-1	16 DE-1	16 DE-1	16 DE-1	37 DE-1	37 DE-1	37 DE-1
ARM Action Codes								
Number of Decimals								
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6
1 UNTREATED CHECK		101	0.0	0.0	0.0	0.0	0.0	0.0
		207	0.0	0.0	0.0	0.0	0.0	0.0
		305	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0	0.0	0.0
2 AMSOL	2.5 % V/V	A 102	5.0	98.0	90.0	95.0	0.0	95.0
NIS	0.25 % V/V	A 205	5.0	100.0	98.0	100.0	0.0	98.0
ACURON GT	2260 g Al/ha	A 308	0.0	98.0	95.0	95.0	0.0	98.0
		Mean =	3.3	98.7	94.3	96.7	0.0	97.0
3 AMSOL	2.5 % V/V	A 103	0.0	100.0	95.0	95.0	0.0	98.0
NIS	0.25 % V/V	A 208	0.0	100.0	98.0	100.0	0.0	95.0
HALEX GT 4.38 CS	2210 g Al/ha	A 302	0.0	100.0	90.0	100.0	0.0	98.0
		Mean =	0.0	100.0	94.3	98.3	0.0	97.0

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		1 W Weed	2 W Weed	3 W Weed		1 W Weed	2 W Weed	3 W Weed
Pest ID Code		SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS
Pest Code		Setaria faberi	Ambrosia trifida	Ipomoea sp.		Setaria faberi	Ambrosia trifida	Ipomoea sp.
Pest Scientific Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory
Pest Name		1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
Crop ID Code		BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
BBCH Scale		Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Scientific Name		Corn	Corn	Corn	Corn	Corn	Corn	Corn
Crop Name		DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95
Crop Variety		6-3-2020	6-3-2020	6-3-2020	6-3-2020	6-24-2020	6-24-2020	6-24-2020
Rating Date		1	2	3	4	5	6	7
Rating Time								
SE Group No.								
SE Name								
SE Description								
Part Rated		PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P
Rating Type		PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO
Rating Unit		0-10	0-100	0-100	0-100	0-10	0-100	0-100
Calculation		NC	NC	NC	NC	NC	NC	NC
Sample Size								
Collection Basis								
Reporting Basis		1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples		1	1	1	1	1	1	1
Crop Stage Scale								
Crop Stage Majority/Min/Max								
Crop Density								
Pest Stage Majority/Min/Max								
Pest Density								
Footnote Number								
Assessed By								
First Export Date								
Equipment								
Rating Timing								
Days After First/Last Applic.		7 7	7 7	7 7	7 7	28 28	28 28	28 28
Trt-Eval Interval		7 DA-A	7 DA-A	7 DA-A	7 DA-A	28 DA-A	28 DA-A	28 DA-A
Plant-Eval Interval		23 DP-1	23 DP-1	23 DP-1	23 DP-1	44 DP-1	44 DP-1	44 DP-1
Days After Emergence		16 DE-1	16 DE-1	16 DE-1	16 DE-1	37 DE-1	37 DE-1	37 DE-1
ARM Action Codes								
Number of Decimals								
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6
7 AMSOL	2.5 % V/V	A 107	0.0	100.0	95.0	100.0	0.0	98.0
ARMEZON PRO	939 g AI/ha	A 204	0.0	100.0	98.0	99.0	0.0	98.0
ROUNDUP POWERMAX 4.5 SL	1050 g AE/ha	A 307	0.0	100.0	90.0	95.0	0.0	95.0
	Mean =		0.0	100.0	94.3	98.0	0.0	97.0
8 AMSOL	2.5 % V/V	A 108	0.0	98.0	95.0	98.0	0.0	95.0
LAUDIS 3.5 SC	92.1 g AI/ha	A 203	0.0	95.0	98.0	98.0	0.0	95.0
ROUNDUP POWERMAX 4.5 SL	1050 g AE/ha	A 309	0.0	98.0	90.0	95.0	0.0	95.0
SUPERB HC	0.5 % V/V	A						
	Mean =		0.0	97.0	94.3	97.0	0.0	95.0
9 LAUDIS 3.5 SC	92.1 g AI/ha	A 109	0.0	98.0	95.0	100.0	0.0	95.0
INTACT	0.5 % V/V	A 201	0.0	98.0	95.0	98.0	0.0	98.0
CLASS ACT RIDION	1 % V/V	A 304	0.0	95.0	98.0	98.0	0.0	95.0
XTENDIMAX 2.9 SL	435 g AE/ha	A						
ROUNDUP POWERMAX 4.5 SL	1050 g AE/ha	A						
	Mean =		0.0	97.0	96.0	98.7	0.0	96.0

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Pest ID Code		1 W Weed	2 W Weed	3 W Weed				
Pest Code		SETFA	AMBTR	IPOSS				
Pest Scientific Name		Setaria faberi	Ambrosia trifida	Ipomoea sp.				
Pest Name		Giant foxtail	Giant ragweed	Morning glory				
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95
Rating Date	7-16-2020	7-16-2020	7-16-2020	7-16-2020	10-22-2020	10-22-2020	10-22-2020	10-22-2020
Rating Time								
SE Group No.	9	10	11	12	13	14	16	
SE Name								
SE Description								
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	SEETOT C	SEETOT C	SEETOT C	
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	YIELD	CONMOI	YIELD	
Rating Unit	0-10	0-100	0-100	0-100	lb/plot	%	BU	
Calculation	NC	NC	NC	NC	NC	NC	NC	
Sample Size					1		1	
Collection Basis					PLOT		A	
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1	1
Crop Stage Scale								
Crop Stage Majority/Min/Max								
Crop Density								
Pest Stage Majority/Min/Max								
Pest Density								
Footnote Number								
Assessed By								
First Export Date								
Equipment								
Rating Timing								
Days After First/Last Applic.	50 50	50 50	50 50	50 50	148 148	148 148	148 148	148 148
Trt-Eval Interval	50 DA-A	50 DA-A	50 DA-A	50 DA-A	148 DA-A	148 DA-A	148 DA-A	148 DA-A
Plant-Eval Interval	66 DP-1	66 DP-1	66 DP-1	66 DP-1	164 DP-1	164 DP-1	164 DP-1	164 DP-1
Days After Emergence	59 DE-1	59 DE-1	59 DE-1	59 DE-1	157 DE-1	157 DE-1	157 DE-1	157 DE-1
ARM Action Codes								TY1
Number of Decimals								1
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	9	10	11	12	13	14
1 UNTREATED CHECK		101	0.0	0.0	0.0	0.0	0.620	0.160
		207	0.0	0.0	0.0	0.0	0.040	0.000
		305	0.0	0.0	0.0	0.0	0.350	0.300
		Mean =	0.0	0.0	0.0	0.0	0.337	0.153
2 AMSOL	2.5 % V/V	A 102	0.0	80.0	60.0	80.0	25.440	19.100
NIS	0.25 % V/V	A 205	0.0	98.0	98.0	95.0	32.440	20.300
ACURON GT	2260 g Al/ha	A 308	0.0	95.0	75.0	80.0	35.400	20.200
		Mean =	0.0	91.0	77.7	85.0	31.093	19.867
3 AMSOL	2.5 % V/V	A 103	0.0	60.0	30.0	60.0	23.140	19.100
NIS	0.25 % V/V	A 208	0.0	98.0	90.0	85.0	28.710	10.800
HALEX GT 4.38 CS	2210 g Al/ha	A 302	0.0	95.0	85.0	90.0	31.650	19.700
		Mean =	0.0	84.3	68.3	78.3	27.833	16.533

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Pest ID Code		1 W Weed	2 W Weed	3 W Weed			
Pest Code		SETFA	AMBTR	IPOSS			
Pest Scientific Name		Setaria faberi	Ambrosia trifida	Ipomoea sp.			
Pest Name		Giant foxtail	Giant ragweed	Morning glory			
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95
Rating Date	7-16-2020	7-16-2020	7-16-2020	7-16-2020	10-22-2020	10-22-2020	10-22-2020
Rating Time							
SE Group No.	9	10	11	12	13	14	16
SE Name							
SE Description							
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	SEETOT C	SEETOT C	SEETOT C
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	YIELD	CONMOI	YIELD
Rating Unit	0-10	0-100	0-100	0-100	lb/plot	%	BU
Calculation	NC	NC	NC	NC	NC	NC	NC
Sample Size					1		1
Collection Basis					PLOT		A
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1
Crop Stage Scale							
Crop Stage Majority/Min/Max							
Crop Density							
Pest Stage Majority/Min/Max							
Pest Density							
Footnote Number							
Assessed By							
First Export Date							
Equipment							
Rating Timing							
Days After First/Last Applic.	50 50	50 50	50 50	50 50	148 148	148 148	148 148
Trt-Eval Interval	50 DA-A	50 DA-A	50 DA-A	50 DA-A	148 DA-A	148 DA-A	148 DA-A
Plant-Eval Interval	66 DP-1	66 DP-1	66 DP-1	66 DP-1	164 DP-1	164 DP-1	164 DP-1
Days After Emergence	59 DE-1	59 DE-1	59 DE-1	59 DE-1	157 DE-1	157 DE-1	157 DE-1
ARM Action Codes							TY1
Number of Decimals							1
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code Plot	9	10	11	12	13
4 AMSOL	2.5 % V/V	A 104	0.0	85.0	30.0	50.0	27.700
RESICORE 3.29 SC	1150 g AI/ha	A 202	0.0	95.0	60.0	80.0	29.260
ROUNDUP POWERMAX 4.5 SL	1050 g AE/ha	A 306	0.0	95.0	95.0	90.0	40.470
Mean =			0.0	91.7	61.7	73.3	32.477
5 AMSOL	2.5 % V/V	A 105	0.0	60.0	80.0	65.0	9.830
CAPRENO 3.45 SC	90.5 g AI/ha	A 206	0.0	85.0	60.0	85.0	18.660
ROUNDUP POWERMAX 4.5 SL	1050 g AE/ha	A 301	0.0	75.0	60.0	75.0	27.070
SUPERB HC	0.5 % V/V	A					
Mean =			0.0	73.3	66.7	75.0	18.520
6 AMSOL	2.5 % V/V	A 106	0.0	85.0	95.0	90.0	28.800
HARNESS MAX 3.85 SC	1350 g AI/ha	A 209	0.0	98.0	95.0	98.0	36.150
ROUNDUP POWERMAX 4.5 SL	1050 g AE/ha	A 303	0.0	98.0	90.0	90.0	31.980
Mean =			0.0	93.7	93.3	92.7	32.310
							20.900
							117.5

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Pest ID Code		1 W Weed	2 W Weed	3 W Weed			
Pest Code		SETFA	AMBTR	IPOSS			
Pest Scientific Name		Setaria faberi	Ambrosia trifida	Ipomoea sp.			
Pest Name		Giant foxtail	Giant ragweed	Morning glory			
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95
Rating Date	7-16-2020	7-16-2020	7-16-2020	7-16-2020	10-22-2020	10-22-2020	10-22-2020
Rating Time							
SE Group No.	9	10	11	12	13	14	16
SE Name							
SE Description							
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	SEETOT C	SEETOT C	SEETOT C
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	YIELD	CONMOI	YIELD
Rating Unit	0-10	0-100	0-100	0-100	lb/plot	%	BU
Calculation	NC	NC	NC	NC	NC	NC	NC
Sample Size					1		1
Collection Basis					PLOT		A
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 A
Number of Subsamples	1	1	1	1	1	1	1
Crop Stage Scale							
Crop Stage Majority/Min/Max							
Crop Density							
Pest Stage Majority/Min/Max							
Pest Density							
Footnote Number							
Assessed By							
First Export Date							
Equipment							
Rating Timing							
Days After First/Last Applic.	50 50	50 50	50 50	50 50	148 148	148 148	148 148
Trt-Eval Interval	50 DA-A	50 DA-A	50 DA-A	50 DA-A	148 DA-A	148 DA-A	148 DA-A
Plant-Eval Interval	66 DP-1	66 DP-1	66 DP-1	66 DP-1	164 DP-1	164 DP-1	164 DP-1
Days After Emergence	59 DE-1	59 DE-1	59 DE-1	59 DE-1	157 DE-1	157 DE-1	157 DE-1
ARM Action Codes							TY1
Number of Decimals							1
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code Plot	9	10	11	12	13
7 AMSOL	2.5 % V/V	A 107	0.0	90.0	65.0	90.0	17.970
ARMEZON PRO	939 g AI/ha	A 204	0.0	95.0	90.0	90.0	29.140
ROUNDUP POWERMAX 4.5 SL	1050 g AE/ha	A 307	0.0	95.0	80.0	80.0	33.430
	Mean =		0.0	93.3	78.3	86.7	26.847
8 AMSOL	2.5 % V/V	A 108	0.0	50.0	30.0	60.0	21.140
LAUDIS 3.5 SC	92.1 g AI/ha	A 203	0.0	50.0	60.0	50.0	26.240
ROUNDUP POWERMAX 4.5 SL	1050 g AE/ha	A 309	0.0	85.0	60.0	75.0	27.780
SUPERB HC	0.5 % V/V	A					
	Mean =		0.0	61.7	50.0	61.7	25.053
9 LAUDIS 3.5 SC	92.1 g AI/ha	A 109	0.0	50.0	90.0	65.0	28.290
INTACT	0.5 % V/V	A 201	0.0	75.0	80.0	70.0	30.050
CLASS ACT RIDION	1 % V/V	A 304	0.0	80.0	98.0	95.0	33.370
XTENDIMAX 2.9 SL	435 g AE/ha	A					
ROUNDUP POWERMAX 4.5 SL	1050 g AE/ha	A					
	Mean =		0.0	68.3	89.3	76.7	30.570
							20.540
							111.8

University of Kentucky

Acuron GT: Evaluation of weed control and crop tolerance in a one pass system

Trial ID: USNG0H3532020	Location: Cully Scott FS	Trial Year: 2020
Protocol ID: HBI007A4-2020US	Investigator (Creator): Scott Cully	
Master Protocol ID:	Study Director: Sara Carter	
Official Trial ID:	Sponsor Contact: Scott Cully	
Conducted Under GEP: No	Trial Origin: P public institution trial	

Pest ID Code

1, W, Weed, SETFA, Setaria faberi, Giant foxtail, = 1, W, Weed, SETFA, Setaria faberi, Giant foxtail,
 2, W, Weed, AMBTR, Ambrosia trifida, Giant ragweed, = 2, W, Weed, AMBTR, Ambrosia trifida, Giant ragweed,
 3, W, Weed, IPOSS, Ipomoea sp., Morning glory, = 3, W, Weed, IPOSS, Ipomoea sp., Morning glory,

Part Rated

PLANT = plant
 SEETOT = seed - total
 C = Crop is Part Rated
 P = Pest is Part Rated

Rating Type

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

Rating Unit

0-10 = 0-10 index/scale
 0-100 = 0-100 index/scale-percent
 lb/plot = pounds per plot
 % = percent
 BU = bushel

Calculation

NC = no calculation

PLOT = total plot
 A = acre

PLOT = total plot
 A = acre

Plant-Eval Interval

23 DP-1 = 1 ZEAMX 5-11-2020
 44 DP-1 = 1 ZEAMX 5-11-2020
 66 DP-1 = 1 ZEAMX 5-11-2020
 164 DP-1 = 1 ZEAMX 5-11-2020

ARM Action Codes

TY1 = 3.889286*[13]*(100-[14])/84.5

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Pest ID Code		1 W Weed	2 W Weed	3 W Weed		1 W Weed	2 W Weed	3 W Weed	
Pest Code		SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS	
Pest Scientific Name		Setaria faberi	Ambrosia trifida	Ipomoea sp.		Setaria faberi	Ambrosia trifida	Ipomoea sp.	
Pest Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory	
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95
Rating Date	6-3-2020	6-3-2020	6-3-2020	6-3-2020	6-24-2020	6-24-2020	6-24-2020	6-24-2020	7-16-2020
Rating Time									
SE Group No.	1	2	3	4	5	6	7	8	9
SE Name									
SE Description									
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	0-10	0-100	0-100	0-100	0-10	0-100	0-100	0-100	0-10
Calculation	NC	NC	NC	NC	NC	NC	NC	NC	NC
Sample Size									
Collection Basis									
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1	1	1
Crop Stage Scale									
Crop Stage Majority/Min/Max									
Crop Density									
Pest Stage Majority/Min/Max									
Pest Density									
Footnote Number									
Assessed By									
First Export Date									
Equipment									
Rating Timing									
Days After First/Last Applic.	7 7	7 7	7 7	7 7	28 28	28 28	28 28	28 28	50 50
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	50 DA-A
Plant-Eval Interval	23 DP-1	23 DP-1	23 DP-1	23 DP-1	44 DP-1	44 DP-1	44 DP-1	44 DP-1	66 DP-1
Days After Emergence	16 DE-1	16 DE-1	16 DE-1	16 DE-1	37 DE-1	37 DE-1	37 DE-1	37 DE-1	59 DE-1
ARM Action Codes									
Number of Decimals									
Trt Treatment	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
No. Name	Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit
	Code	Code	Code	Code	Code	Code	Code	Code	Code
	1	2	3	4	5	6	7	8	9
9 LAUDIS 3.5 SC	92.1 g AI/ha A								
INTACT	0.5 % V/V A								
CLASS ACT RIDION	1 % V/V A								
XTENDIMAX 2.9 SL	435 g AE/ha A								
ROUNDUP POWERMAX 4.5 SL	1050 g AE/ha A								
LSD P=.05	1.67	2.30	4.90	3.43	.	2.29	3.91	.	.
Standard Deviation	0.96	1.33	2.83	1.98	0.00	1.32	2.26	0.00	0.00
CV	259.81	1.51	3.36	2.27	0.0	1.54	2.73	0.0	0.0
Levene's F		0.907	1.432	0.292	0.00	0.00	0.667	0.00	0.00
Levene's Prob(F)		0.532	0.25	0.959	0.00*	0.00*	0.714	0.00*	0.00*
Skewness	3.4472*	-2.6101*	-2.5577*	-2.605*	.	-2.6119*	-2.5812*	-2.6229*	.
Kurtosis	10.6704*	5.2225*	5.0464*	5.2065*	.	5.2295*	5.1263*	5.265*	.
Replicate F	1.000	0.147	3.633	1.849	0.000	0.571	5.091	0.000	0.000
Replicate Prob(F)	0.3897	0.8641	0.0500	0.1895	1.0000	0.5758	0.0195	1.0000	1.0000
Treatment F	4.000	1853.532	376.436	817.283	0.000	1775.476	566.636	0.000	0.000

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Pest ID Code		1 W Weed	2 W Weed	3 W Weed		1 W Weed	2 W Weed	3 W Weed	
Pest Code		SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS	
Pest Scientific Name		Setaria faberi	Ambrosia trifida	Ipomoea sp.		Setaria faberi	Ambrosia trifida	Ipomoea sp.	
Pest Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory	
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95
Rating Date	6-3-2020	6-3-2020	6-3-2020	6-3-2020	6-24-2020	6-24-2020	6-24-2020	6-24-2020	7-16-2020
Rating Time									
SE Group No.	1	2	3	4	5	6	7	8	9
SE Name									
SE Description									
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	0-10	0-100	0-100	0-100	0-10	0-100	0-100	0-100	0-10
Calculation	NC	NC	NC	NC	NC	NC	NC	NC	NC
Sample Size									
Collection Basis									
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1	1	1
Crop Stage Scale									
Crop Stage Majority/Min/Max									
Crop Density									
Pest Stage Majority/Min/Max									
Pest Density									
Footnote Number									
Assessed By									
First Export Date									
Equipment									
Rating Timing									
Days After First/Last Applic.	7 7	7 7	7 7	7 7	28 28	28 28	28 28	28 28	50 50
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	50 DA-A
Plant-Eval Interval	23 DP-1	23 DP-1	23 DP-1	23 DP-1	44 DP-1	44 DP-1	44 DP-1	44 DP-1	66 DP-1
Days After Emergence	16 DE-1	16 DE-1	16 DE-1	16 DE-1	37 DE-1	37 DE-1	37 DE-1	37 DE-1	59 DE-1
ARM Action Codes									
Number of Decimals									
Trt Treatment									
No. Name	1	2	3	4	5	6	7	8	9
Rate									
Rate Unit									
Appl Code									
Treatment Prob(F)	0.0088	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001	1.0000	1.0000

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Pest ID Code	1 W Weed	2 W Weed	3 W Weed					
Pest Code	SETFA	AMBTR	IPOSS					
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Ipomoea sp.					
Pest Name	Giant foxtail	Giant ragweed	Morning glory					
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX		
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR		
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays		
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn		
Crop Variety	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95		
Rating Date	7-16-2020	7-16-2020	7-16-2020	10-22-2020	10-22-2020	10-22-2020		
Rating Time								
SE Group No.	10	11	12	13	14	16		
SE Name								
SE Description								
Part Rated	PLANT P	PLANT P	PLANT P	SEETOT C	SEETOT C	SEETOT C		
Rating Type	CONTRO	CONTRO	CONTRO	YIELD	CONMOI	YIELD		
Rating Unit	0-100	0-100	0-100	lb/plot	%	BU		
Calculation	NC	NC	NC	NC	NC	NC		
Sample Size				1		1		
Collection Basis				PLOT		A		
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 A		
Number of Subsamples	1	1	1	1	1	1		
Crop Stage Scale								
Crop Stage Majority/Min/Max								
Crop Density								
Pest Stage Majority/Min/Max								
Pest Density								
Footnote Number								
Assessed By								
First Export Date								
Equipment								
Rating Timing								
Days After First/Last Applic.	50 50	50 50	50 50	148 148	148 148	148 148		
Trt-Eval Interval	50 DA-A	50 DA-A	50 DA-A	148 DA-A	148 DA-A	148 DA-A		
Plant-Eval Interval	66 DP-1	66 DP-1	66 DP-1	164 DP-1	164 DP-1	164 DP-1		
Days After Emergence	59 DE-1	59 DE-1	59 DE-1	157 DE-1	157 DE-1	157 DE-1		
ARM Action Codes						TY1		
Number of Decimals						1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	10	11	12	13	14	15
1 UNTREATED CHECK	0.0 d		0.0 b	0.0 c	0.337 c	0.153 b	1.5 c	
2 AMSOL	2.5 % V/V	A	91.0 a	77.7 a	85.0 ab	31.093 a	19.867 a	114.6 a
NIS	0.25 % V/V	A						
ACURON GT	2260 g AI/ha	A						
3 AMSOL	2.5 % V/V	A	84.3 ab	68.3 a	78.3 ab	27.833 a	16.533 a	107.0 a
NIS	0.25 % V/V	A						
HALEX GT 4.38 CS	2210 g AI/ha	A						
4 AMSOL	2.5 % V/V	A	91.7 a	61.7 a	73.3 ab	32.477 a	18.600 a	121.2 a
RESICORE 3.29 SC	1150 g AI/ha	A						
ROUNDUP POWERMAX 4.5 SL	1050 g AE/ha	A						
5 AMSOL	2.5 % V/V	A	73.3 abc	66.7 a	75.0 ab	18.520 b	14.100 a	72.5 b
CAPRENO 3.45 SC	90.5 g AI/ha	A						
ROUNDUP POWERMAX 4.5 SL	1050 g AE/ha	A						
SUPERB HC	0.5 % V/V	A						

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Pest ID Code	1 W Weed	2 W Weed	3 W Weed			
Pest Code	SETFA	AMBTR	IPOSS			
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Ipomoea sp.			
Pest Name	Giant foxtail	Giant ragweed	Morning glory			
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95
Rating Date	7-16-2020	7-16-2020	7-16-2020	10-22-2020	10-22-2020	10-22-2020
Rating Time						
SE Group No.	10	11	12	13	14	16
SE Name						
SE Description						
Part Rated	PLANT P	PLANT P	PLANT P	SEETOT C	SEETOT C	SEETOT C
Rating Type	CONTRO	CONTRO	CONTRO	YIELD	CONMOI	YIELD
Rating Unit	0-100	0-100	0-100	lb/plot	%	BU
Calculation	NC	NC	NC	NC	NC	NC
Sample Size				1		1
Collection Basis				PLOT		A
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 A
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	50 50	50 50	50 50	148 148	148 148	148 148
Trt-Eval Interval	50 DA-A	50 DA-A	50 DA-A	148 DA-A	148 DA-A	148 DA-A
Plant-Eval Interval	66 DP-1	66 DP-1	66 DP-1	164 DP-1	164 DP-1	164 DP-1
Days After Emergence	59 DE-1	59 DE-1	59 DE-1	157 DE-1	157 DE-1	157 DE-1
ARM Action Codes						TY1
Number of Decimals						1
Trt Treatment	Rate	Rate	Rate	Rate	Rate	Rate
No. Name	Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit
6 AMSOL	2.5 % V/V A					
HARNESS MAX 3.85 SC	1350 g AI/ha A					
ROUNDUP POWERMAX 4.5 SL	1050 g AE/ha A					
		93.7 a	93.3 a	92.7 a	32.310 a	20.900 a
7 AMSOL	2.5 % V/V A					
ARMEZON PRO	939 g AI/ha A					
ROUNDUP POWERMAX 4.5 SL	1050 g AE/ha A					
		93.3 a	78.3 a	86.7 ab	26.847 a	18.000 a
8 AMSOL	2.5 % V/V A					
LAUDIS 3.5 SC	92.1 g AI/ha A					
ROUNDUP POWERMAX 4.5 SL	1050 g AE/ha A					
SUPERB HC	0.5 % V/V A					
		61.7 c	50.0 a	61.7 b	25.053 a	16.833 a
						95.4 a

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Pest ID Code	1 W Weed	2 W Weed	3 W Weed			
Pest Code	SETFA	AMBTR	IPOSS			
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Ipomoea sp.			
Pest Name	Giant foxtail	Giant ragweed	Morning glory			
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95
Rating Date	7-16-2020	7-16-2020	7-16-2020	10-22-2020	10-22-2020	10-22-2020
Rating Time						
SE Group No.	10	11	12	13	14	16
SE Name						
SE Description						
Part Rated	PLANT P	PLANT P	PLANT P	SEETOT C	SEETOT C	SEETOT C
Rating Type	CONTRO	CONTRO	CONTRO	YIELD	CONMOI	YIELD
Rating Unit	0-100	0-100	0-100	lb/plot	%	BU
Calculation	NC	NC	NC	NC	NC	NC
Sample Size				1		1
Collection Basis				PLOT		A
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 A
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	50 50	50 50	50 50	148 148	148 148	148 148
Trt-Eval Interval	50 DA-A	50 DA-A	50 DA-A	148 DA-A	148 DA-A	148 DA-A
Plant-Eval Interval	66 DP-1	66 DP-1	66 DP-1	164 DP-1	164 DP-1	164 DP-1
Days After Emergence	59 DE-1	59 DE-1	59 DE-1	157 DE-1	157 DE-1	157 DE-1
ARM Action Codes						TY1
Number of Decimals						1
Trt Treatment	Rate	Rate	Rate	Rate	Rate	Rate
No. Name	Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit
9 LAUDIS 3.5 SC	92.1 g AI/ha A					
INTACT	0.5 % V/V A					
CLASS ACT RIDION	1 % V/V A					
XTENDIMAX 2.9 SL	435 g AE/ha A					
ROUNDUP POWERMAX 4.5 SL	1050 g AE/ha A					
LSD P=.05	15.68	29.27	18.60	5.7944	4.4980	21.01
Standard Deviation	9.06	16.91	10.75	3.3476	2.5987	12.14
CV	12.41	26.0	15.37	13.39	16.07	12.97
Levene's F	0.461	0.765	0.603	0.641	0.616	0.64
Levene's Prob(F)	0.868	0.637	0.764	0.734	0.753	0.735
Skewness	-1.5593*	-1.002*	-1.6735*	-1.3207*	-1.6903*	-1.4613*
Kurtosis	1.5846	0.0048	2.1172*	1.1147	1.9409*	1.4569
Replicate F	9.810	3.244	3.585	15.539	2.732	13.829
Replicate Prob(F)	0.0017	0.0657	0.0517	0.0002	0.0954	0.0003
Treatment F	32.522	8.144	19.923	28.082	18.091	28.657

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Pest ID Code	1 W Weed	2 W Weed	3 W Weed			
Pest Code	SETFA	AMBTR	IPOSS			
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Ipomoea sp.			
Pest Name	Giant foxtail	Giant ragweed	Morning glory			
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95	DKC 65-95
Rating Date	7-16-2020	7-16-2020	7-16-2020	10-22-2020	10-22-2020	10-22-2020
Rating Time						
SE Group No.	10	11	12	13	14	16
SE Name						
SE Description						
Part Rated	PLANT P	PLANT P	PLANT P	SEETOT C	SEETOT C	SEETOT C
Rating Type	CONTRO	CONTRO	CONTRO	YIELD	CONMOI	YIELD
Rating Unit	0-100	0-100	0-100	lb/plot	%	BU
Calculation	NC	NC	NC	NC	NC	NC
Sample Size				1		1
Collection Basis				PLOT		A
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 A
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	50 50	50 50	50 50	148 148	148 148	148 148
Trt-Eval Interval	50 DA-A	50 DA-A	50 DA-A	148 DA-A	148 DA-A	148 DA-A
Plant-Eval Interval	66 DP-1	66 DP-1	66 DP-1	164 DP-1	164 DP-1	164 DP-1
Days After Emergence	59 DE-1	59 DE-1	59 DE-1	157 DE-1	157 DE-1	157 DE-1
ARM Action Codes						TY1
Number of Decimals						1
Trt Treatment	Rate	Rate	Rate	Rate	Rate	Rate
No. Name	Unit	Unit	Unit	Unit	Unit	Unit
	Code	Code	Code	Code	Code	Code
	10	11	12	13	14	15
Treatment Prob(F)	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001

University of Kentucky

Acuron GT: Evaluation of weed control and crop tolerance in a one pass system

Trial ID: USNG0H3532020	Location: Cully Scott FS	Trial Year: 2020
Protocol ID: HBI007A4-2020US	Investigator (Creator): Scott Cully	
Master Protocol ID:	Study Director: Sara Carter	
Official Trial ID:	Sponsor Contact: Scott Cully	
Conducted Under GEP: No	Trial Origin: P public institution trial	

Pest ID Code

1, W, Weed, SETFA, Setaria faberi, Giant foxtail, = 1, W, Weed, SETFA, Setaria faberi, Giant foxtail,
 2, W, Weed, AMBTR, Ambrosia trifida, Giant ragweed, = 2, W, Weed, AMBTR, Ambrosia trifida, Giant ragweed,
 3, W, Weed, IPOSS, Ipomoea sp., Morning glory, = 3, W, Weed, IPOSS, Ipomoea sp., Morning glory,

Part Rated

PLANT = plant
 SEETOT = seed - total
 C = Crop is Part Rated
 P = Pest is Part Rated

Rating Type

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

Rating Unit

0-10 = 0-10 index/scale
 0-100 = 0-100 index/scale-percent
 lb/plot = pounds per plot
 % = percent
 BU = bushel

Calculation

NC = no calculation

PLOT = total plot
 A = acre

PLOT = total plot
 A = acre

Plant-Eval Interval

23 DP-1 = 1 ZEAMX 5-11-2020
 44 DP-1 = 1 ZEAMX 5-11-2020
 66 DP-1 = 1 ZEAMX 5-11-2020
 164 DP-1 = 1 ZEAMX 5-11-2020

ARM Action Codes

TY1 = 3.889286*[13]*(100-[14])/84.5

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Acuron GT: Evaluation of weed control, crop tolerance and yield in a two pass system - Mid and South University (20-9_COR-REC)

Trial ID: USNG0H3542020 Location: Cully Scott FS Trial Year: 2020
 Protocol ID: HBI008A4-2020US Investigator (Creator): Scott Cully
 Master Protocol ID: Study Director: Travis Legleiter
 Official Trial ID: Sponsor Contact:
 Conducted Under GEP: No Trial Origin: P public institution trial

Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Timing Code	Appl	Amt Product to Measure	Rep 1	2	3	4
1	UNTREATED CHECK									101	207	304	402
2	BICEP II MAGNUM	5.5 LBA/GAL	SC		35.3 OZ	AI/A		A	53.48 mL/mx	102	206	301	404
	AMSOL		SL		2.5 %	V/V		B	49.99 mL/mx				
	NIS		SL		0.25 %	V/V		B	4.999 mL/mx				
	ACURON GT	4.28624964 LBA/GAL	ZC		32.3 OZ	AI/A		B	62.79 mL/mx				
3	LEXAR EZ 3.7 ZC	3.69833326 LBA/GAL	ZC		26.7 OZ	AI/A		A	60.16 mL/mx	103	204	309	411
	AMSOL		SL		2.5 %	V/V		B	49.99 mL/mx				
	NIS		SL		0.25 %	V/V		B	4.999 mL/mx				
	ACURON GT	4.28624964 LBA/GAL	ZC		32.3 OZ	AI/A		B	62.79 mL/mx				
4	SURESTART II 4.25 SC	4.24383354 LBA/GAL	SC		14.8 OZ	AI/A		A	29.06 mL/mx	104	202	311	406
	AMSOL		SL		2.5 %	V/V		B	49.99 mL/mx				
	NIS		SL		0.25 %	V/V		B	4.999 mL/mx				
	ACURON GT	4.28624964 LBA/GAL	ZC		32.3 OZ	AI/A		B	62.79 mL/mx				
5	HARNESS XTRA 5.6L	5.6 LBA/GAL	SC		40.4 OZ	AI/A		A	60.11 mL/mx	105	203	306	410
	AMSOL		SL		2.5 %	V/V		B	49.99 mL/mx				
	NIS		SL		0.25 %	V/V		B	4.999 mL/mx				
	ACURON GT	4.28624964 LBA/GAL	ZC		32.3 OZ	AI/A		B	62.79 mL/mx				
6	VERDICT 5.57 EC	5.5583334 LBA/GAL	EC		9.7 OZ	AI/A		A	14.54 mL/mx	106	208	307	412
	AMSOL		SL		2.5 %	V/V		B	49.99 mL/mx				
	NIS		SL		0.25 %	V/V		B	4.999 mL/mx				
	ACURON GT	4.28624964 LBA/GAL	ZC		32.3 OZ	AI/A		B	62.79 mL/mx				
7	SURESTART II 4.25 SC	4.24383354 LBA/GAL	SC		14.8 OZ	AI/A		A	29.06 mL/mx	107	210	303	401
	AMSOL		SL		2.5 %	V/V		B	49.99 mL/mx				
	RESICORE 3.29 SC	3.28666663 LBA/GAL	SC		16.4 OZ	AI/A		B	41.58 mL/mx				
	ROUNDUP POWERMAX 5.5 SL	5.5 LBA/GAL	SL		18.3 OZ	AI/A		B	27.72 mL/mx				
8	HARNESS XTRA 5.6L	5.6 LBA/GAL	SC		40.4 OZ	AI/A		A	60.11 mL/mx	108	211	310	405
	AMSOL		SL		2.5 %	V/V		B	49.99 mL/mx				
	LAUDIS 3.5 SC	3.5 LBA/GAL	SC		1.31 OZ	AI/A		B	3.119 mL/mx				
	ROUNDUP POWERMAX 5.5 SL	5.5 LBA/GAL	SL		18.3 OZ	AI/A		B	27.72 mL/mx				
	SUPERB HC		SL		0.5 %	V/V		B	9.999 mL/mx				
9	VERDICT 5.57 EC	5.5583334 LBA/GAL	EC		9.7 OZ	AI/A		A	14.54 mL/mx	109	212	305	403
	AMSOL		SL		2.5 %	V/V		B	49.99 mL/mx				
	ARMEZON PRO	5.35416651 LBA/GAL	EC		13.4 OZ	AI/A		B	20.85 mL/mx				
	ROUNDUP POWERMAX 5.5 SL	5.5 LBA/GAL	SL		18.3 OZ	AI/A		B	27.72 mL/mx				

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Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Unit	Appl Timing	Appl Code	Amt Product to Measure	Rep 1	2	3	4
10	HARNESS MAX 3.85 SC	462 g/L	g/L	SC	30.8 OZ	A/A	A	66.66 mL/mx	110	209	308	409
	AMSOL			SL	2.5 %	V/V	B	49.99 mL/mx				
	CAPRENO 3.45 SC	413 g/L	g/L	SC	1.29 OZ	A/A	B	3.123 mL/mx				
	ROUNDUP POWERMAX 5.5 SL	5.5 LBA/GAL	LBA/GAL	SL	18.3 OZ	A/A	B	27.72 mL/mx				
	COC			SL	1 %	V/V	B	20.0 mL/mx				
11	BICEP II MAGNUM	5.5 LBA/GAL	LBA/GAL	SC	35.3 OZ	A/A	A	53.48 mL/mx	111	205	312	407
	AMSOL			SL	2.5 %	V/V	B	49.99 mL/mx				
	IMPACTZ	509.04 g/L	g/L	SC	4.26 OZ	A/A	B	8.368 mL/mx				
	ROUNDUP POWERMAX 5.5 SL	5.5 LBA/GAL	LBA/GAL	SL	18.3 OZ	A/A	B	27.72 mL/mx				
	MSO			SL	1 %	V/V	B	20.0 mL/mx				
12	ANTHEM ATZ 4.5 SE	539 g/L	g/L	SE	18 OZ	A/A	A	33.39 mL/mx	112	201	302	408
	AMSOL			SL	2.5 %	V/V	B	49.99 mL/mx				
	NIS			SL	0.25 %	V/V	B	4.999 mL/mx				
	ACURON GT	4.28624964 LBA/GAL	LBA/GAL	ZC	32.3 OZ	A/A	B	62.79 mL/mx				

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
133.698	mL	BICEP II MAGNUM	5.5	LBA/GAL	SC	
687.425	mL	AMSOL			SL	
37.496	mL	NIS			SL	
470.932	mL	ACURON GT	4.28624964	LBA/GAL	ZC	
75.195	mL	LEXAR EZ 3.7 ZC	3.69833326	LBA/GAL	ZC	
72.647	mL	SURESTART II 4.25 SC	4.24383354	LBA/GAL	SC	
150.281	mL	HARNESS XTRA 5.6L	5.6	LBA/GAL	SC	
36.353	mL	VERDICT 5.57 EC	5.55833334	LBA/GAL	EC	
51.972	mL	RESICORE 3.29 SC	3.28666663	LBA/GAL	SC	
173.277	mL	ROUNDUP POWERMAX 5.5 SL	5.5	LBA/GAL	SL	
3.898	mL	LAUDIS 3.5 SC	3.5	LBA/GAL	SC	
12.499	mL	SUPERB HC			SL	
26.067	mL	ARMEZON PRO	5.35416651	LBA/GAL	EC	
83.324	mL	HARNESS MAX 3.85 SC	462	g/L	SC	
3.904	mL	CAPRENO 3.45 SC	413	g/L	SC	
24.997	mL	COC			SL	
10.460	mL	IMPACTZ	509.04	g/L	SC	
24.997	mL	MSO			SL	
41.739	mL	ANTHEM ATZ 4.5 SE	539	g/L	SE	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.

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Acron GT: Evaluation of weed control, crop tolerance and yield in a two pass system - Mid and South University (20-9_COR-REC)

Trial ID: USNG0H3542020 Location: Cully Scott FS Trial Year: 2020
 Protocol ID: HBI008A4-2020US Investigator (Creator): Scott Cully
 Master Protocol ID: Study Director: Travis Legleiter
 Official Trial ID: Sponsor Contact:
 Conducted Under GEP: No Trial Origin: P public institution trial

General Trial Information

Study Director: Travis Legleiter **Title:** Assistant Professor
Investigator: Scott Cully

Discipline: H herbicide
Trial Status: E established
Trial Status Date: 7-23-2020 10:53 AM
ARM Trial Created On: 4-2-2020
Last Changed By: Travis Legleiter
Trial Usage/Type: 0 Research and Development
Protocol Revision Number: 2.0 **Protocol Revision Date:** 4-2-2020

Trial Location

Address (Location): 348 University Drive
City: Princeton **Country:** USA United States
State/Prov.: Kentucky KY
Postal Code: 42445

Latitude of LL Corner °: 37.096036 N
Longitude of LL Corner °: -87.855457 W USAKY 39.147732 -36.497058
 -81.964788 -89.571203

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Role: STYDIR study director
Study Director: Travis Legleiter **Title:** Assistant Professor
Organization: University of Kentucky
Address 1: 348 University Drive
City: Princeton, KY **E-mail:** Travis.Legleiter@uky.edu
Postal Code: 42445

Role: INVEST investigator
Investigator: Scott Cully
Organization: Syngenta
Address 1: 17256 New Dennison Rd. **Phone No.:** 618-982-9224 **Mobile No.:** 618-751-0715
Country: USA United States **E-mail:** scott.cully@syngenta.com
City: Marion, IL **Postal Code:** 62959

Crop Description

Crop 1: C ZEAMD Zea mays indentata Dent corn **BBCH Scale:** BCOR
Stage Scale: BBCH
Variety: Pioneer P1077AM
Attributes: RR/LL
Planting Rate: 32000 S/A
Planting Date: 5-4-2020
Depth: 1.5 IN **Planting Method:** PLANTD planted
Rows per Plot: 4 **Planting Equipment:** VP vacuum planter
Row Spacing: 30 IN
Harvested Width: 5 FT
% Standard Moisture: 15.5

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Pest Description

Pest 1 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed **Stage Scale:** BBCH
Artificial Population: N

Pest 2 Type: W **Code:** DIGSA *Digitaria sanguinalis*
Common Name: large crabgrass **Stage Scale:** BBCH
Artificial Population: N

Pest 3 Type: W **Code:** IPOSS *Ipomoea sp.*
Common Name: Morning glory **Stage Scale:** BBCH
Artificial Population: N

Pest 4 Type: W **Code:** SOLAM *Solanum americanum*
Common Name: American black nightshade **Stage Scale:** BBCH
Artificial Population: N

Pest 5 Type: W **Code:** SIDSP *Sida spinosa*
Common Name: Prickly sida **Stage Scale:** BBCH
Artificial Population: N

Pest 6 Type: W **Code:** AMACH *Amaranthus hybridus*
Common Name: Green pigweed **Stage Scale:** BBCH
Artificial Population: N

Pest 7 Type: W **Code:** SORHA *Sorghum halepense*
Common Name: Johnson grass **Stage Scale:** BBCH
Artificial Population: N

Site and Design

Treated Plot Width: 10 FT **Total Plot Width:** 10 FT **Site Type:** FIELD field
Treated Plot Length: 30 FT **Experimental Unit:** 1 PLOT plot
Treated Plot Area: 300.0 FT2 **Treatments:** 12 **Tillage Type:** CONTIL conventional-till
Replications: 4 **Study Design:** RACOBL Randomized Complete Block (RCB)

Maintenance

No.	Date	Type	Maintenance Product Name	Form Conc	Form Unit	Form Type	Description	Rate	Rate Unit
1.	3-26-2020	FERT	POTASH	60	%	GR	0-0-60	83.3	LB/A
2.	4-6-2020	FERT	DAP 18-46-00			XX		200	LB/A
3.	4-28-2020	FERT	UREA 46%	46	%AW/W	XX		370	LB/A

Field Prep./Maintenance:

4/16/20- Disked once
5/4/20- One pass field cultivator

Soil Description

Description Name: 201-D
% Sand: 3.4 **% OM:** 2.4 **Texture:** SIL silt loam
% Silt: 79.9 **pH:** 5.66 **Soil Name:** Crider Silt Loam
% Clay: 16.7 **CEC:** 10.62

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Application Description		
	A	B
Application Date	5-6-2020	6-1-2020
Appl. Start Time	8:05 AM	4:00 PM
Appl. Stop Time	8:45 AM	4:37 PM
Interval to Prev. Appl.		26 DAYS
Application Method	SPRAY	SPRAY
Application Timing	PRE	POST
Application Placement	SOIL	FOLIAR
Applied By	JG	JG
Air Temperature Start, Stop	48.2 41.3 F	79.9 81 F
% Relative Humidity Start, Stop	80.8 71.3	33.6 34.3
Wind Velocity+Dir. Start	4.1 MPH NW	5.7 MPH E
Wind Velocity+Dir. Stop	3.6 MPH NW	1.3 MPH E
Wind Velocity+Dir. Max	8.9 MPH NW	7.6 MPH E
Wet Leaves (Y/N)	N no	N no
Soil Temperature	50 F	79 F
Soil Moisture	Damp	DRY
% Cloud Cover	100	2

Crop Stage At Each Application		
	A	B
Crop 1 Code, BBCH Scale	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used	BBCH	BBCH
Stage Majority, Percent		V4
Stage Minimum, Percent		V3
Stage Maximum, Percent		V4
Height Average		12 IN
Height Minimum, Maximum		6.50 17.5

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Pest Stage At Each Application		
	A	B
Pest 1 Code, Type, Scale	AMBTR W BBCH	AMBTR W BBCH
Height Average		1.98 IN
Height Minimum, Maximum		0.50 4
Density Average		5.75 FT2
Density Minimum, Maximum		1 12
Pest 2 Code, Type, Scale	DIGSA W BBCH	DIGSA W BBCH
Height Average		0.875 IN
Height Minimum, Maximum		0.75 1
Density Average		0.25 FT2
Density Minimum, Maximum		1 1
Pest 3 Code, Type, Scale	IPOSS W BBCH	IPOSS W BBCH
Height Average		1.50 IN
Height Minimum, Maximum		1 2
Density Average		0.25 FT2
Density Minimum, Maximum		1 1
Pest 4 Code, Type, Scale	SOLAM W BBCH	SOLAM W BBCH
Height Average		0.75 IN
Height Minimum, Maximum		0.50 1
Density Average		0.375 FT2
Density Minimum, Maximum		0 3
Pest 5 Code, Type, Scale	SIDSP W BBCH	SIDSP W BBCH
Height Average		0.25 IN
Height Minimum, Maximum		0 0.25
Density Average		0.125 FT2
Density Minimum, Maximum		0 1
Pest 6 Code, Type, Scale	AMACH W BBCH	AMACH W BBCH
Pest 7 Code, Type, Scale	SORHA W BBCH	SORHA W BBCH

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Application Equipment		
	A	B
Equipment Type	SPRBAC	SPRBAC
Operation Pressure	50 PSI	32 PSI
Nozzle Type	TT1110015	XR1002
Nozzle Size	015	02
Nozzle Spacing	20 IN	20 IN
Boom ID	Blue Tape	White Tape
Boom Length	10 FT	10 FT
Boom Height	18 IN	18 IN
Ground Speed	3 MPH	3 MPH
Carrier	WATER	WATER
Application Amount	15 GAL/AC	15 GAL/AC
Minimum Mix/Treatment	1.564 L	1.564 L
Mix Overage	436 mL	436 mL
Mix Size	2 L	2 L
Propellant	COMCO2	COMCO2

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Pest ID Code		2 W Weed	1 W Weed	6 W Weed		
Pest Code		DIGSA	AMBTR	AMACH		
Pest Scientific Name		Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>		
Pest Name		large crabgrass	Giant ragweed	Green pigweed		
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020
Rating Time						
SE Group No.	1	2	3	4	5	6
SE Name						
SE Description						
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT C
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size						
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	6-10-2020	10-2-2020	10-2-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	26 26	26 26	26 26	26 26	35 9	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A		
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1
Days After Emergence						
ARM Action Codes						
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	1	2	3	4
1 UNTREATED CHECK		101	0.0	0.0	0.0	0.0
		207	0.0	0.0	0.0	0.0
		304	0.0	0.0	0.0	0.0
		402	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0
2 BICEP II MAGNUM	35.3 OZ AI/A A	102	0.0	95.0	80.0	100.0
AMSOL	2.5 % V/V B	206	0.0	100.0	97.0	100.0
NIS	0.25 % V/V B	301	0.0	100.0	70.0	100.0
ACURON GT	32.3 OZ AI/A B	404	0.0	100.0	60.0	100.0
		Mean =	0.0	98.8	76.8	100.0

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Pest ID Code		2 W Weed	1 W Weed	6 W Weed		
Pest Code		DIGSA	AMBTR	AMACH		
Pest Scientific Name		Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>		
Pest Name		large crabgrass	Giant ragweed	Green pigweed		
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020
Rating Time						
SE Group No.	1	2	3	4	5	6
SE Name						
SE Description						
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT C
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size						
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	6-10-2020	10-2-2020	10-2-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	26 26	26 26	26 26	26 26	35 9	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A		
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1
Days After Emergence						
ARM Action Codes						
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	1	2	3	4
3 LEXAR EZ 3.7 ZC	26.7 OZ A/I/A A	103	0.0	100.0	90.0	100.0
AMSOL	2.5 % V/V B	204	0.0	100.0	50.0	100.0
NIS	0.25 % V/V B	309	0.0	100.0	97.0	100.0
ACURON GT	32.3 OZ A/I/A B	411	0.0	100.0	95.0	100.0
	Mean =		0.0	100.0	83.0	100.0
4 SURESTART II 4.25 SC	14.8 OZ A/I/A A	104	0.0	100.0	80.0	100.0
AMSOL	2.5 % V/V B	202	0.0	100.0	50.0	90.0
NIS	0.25 % V/V B	311	0.0	100.0	95.0	100.0
ACURON GT	32.3 OZ A/I/A B	406	0.0	100.0	100.0	100.0
	Mean =		0.0	100.0	81.3	97.5

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		2 W Weed	1 W Weed	6 W Weed		
Pest ID Code		DIGSA	AMBTR	AMACH		
Pest Code		Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>		
Pest Scientific Name		large crabgrass	Giant ragweed	Green pigweed		
Pest Name						
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020
Rating Time						
SE Group No.	1	2	3	4	5	6
SE Name						
SE Description						
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT C
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size						
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	6-10-2020	10-2-2020	10-2-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	26 26	26 26	26 26	26 26	35 9	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A		
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1
Days After Emergence						
ARM Action Codes						
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	1	2	3	4
5 HARNESS XTRA 5.6L	40.4 OZ A/I/A A	105	0.0	100.0	80.0	90.0
AMSOL	2.5 % V/V B	203	0.0	100.0	50.0	90.0
NIS	0.25 % V/V B	306	0.0	100.0	80.0	100.0
ACURON GT	32.3 OZ A/I/A B	410	0.0	100.0	90.0	100.0
	Mean =		0.0	100.0	75.0	95.0
6 VERDICT 5.57 EC	9.7 OZ A/I/A A	106	0.0	100.0	95.0	100.0
AMSOL	2.5 % V/V B	208	0.0	100.0	100.0	100.0
NIS	0.25 % V/V B	307	0.0	100.0	95.0	100.0
ACURON GT	32.3 OZ A/I/A B	412	0.0	100.0	100.0	100.0
	Mean =		0.0	100.0	97.5	100.0

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Pest ID Code		2 W Weed	1 W Weed	6 W Weed		
Pest Code		DIGSA	AMBTR	AMACH		
Pest Scientific Name		Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>		
Pest Name		large crabgrass	Giant ragweed	Green pigweed		
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020
Rating Time						
SE Group No.	1	2	3	4	5	6
SE Name						
SE Description						
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT C
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size						
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	6-10-2020	10-2-2020	10-2-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	26 26	26 26	26 26	26 26	35 9	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A		
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1
Days After Emergence						
ARM Action Codes						
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	1	2	3	4
7 SURESTART II 4.25 SC	14.8 OZ AI/A A	107	0.0	100.0	100.0	100.0
AMSOL	2.5 % V/V B	210	0.0	100.0	90.0	100.0
RESICORE 3.29 SC	16.4 OZ AI/A B	303	0.0	100.0	70.0	100.0
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A B	401	0.0	100.0	90.0	100.0
	Mean =		0.0	100.0	87.5	100.0
8 HARNESS XTRA 5.6L	40.4 OZ AI/A A	108	0.0	95.0	100.0	100.0
AMSOL	2.5 % V/V B	211	0.0	100.0	90.0	100.0
LAUDIS 3.5 SC	1.31 OZ AI/A B	310	0.0	100.0	100.0	100.0
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A B	405	0.0	100.0	90.0	100.0
SUPERB HC	0.5 % V/V B					
	Mean =		0.0	98.8	95.0	100.0

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		2 W Weed	1 W Weed	6 W Weed		
Pest ID Code		DIGSA	AMBTR	AMACH		
Pest Code		DIGSA	AMBTR	AMACH		
Pest Scientific Name		Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>		
Pest Name		large crabgrass	Giant ragweed	Green pigweed		
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020
Rating Time						
SE Group No.	1	2	3	4	5	6
SE Name						
SE Description						
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT C
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size						
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	6-10-2020	10-2-2020	10-2-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	26 26	26 26	26 26	26 26	35 9	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A		
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1
Days After Emergence						
ARM Action Codes						
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	1	2	3	4
9 VERDICT 5.57 EC	9.7 OZ AI/A A	109	0.0	100.0	90.0	100.0
AMSOL	2.5 % V/V B	212	0.0	100.0	97.0	100.0
ARMEZON PRO	13.4 OZ AI/A B	305	0.0	100.0	90.0	100.0
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A B	403	0.0	100.0	80.0	100.0
		Mean =	0.0	100.0	89.3	100.0
10 HARNESS MAX 3.85 SC	30.8 OZ AI/A A	110	0.0	100.0	100.0	100.0
AMSOL	2.5 % V/V B	209	0.0	100.0	100.0	100.0
CAPRENO 3.45 SC	1.29 OZ AI/A B	308	0.0	100.0	100.0	100.0
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A B	409	0.0	100.0	90.0	100.0
COC	1 % V/V B					
		Mean =	0.0	100.0	97.5	100.0

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Pest ID Code		2 W Weed	1 W Weed	6 W Weed		
Pest Code		DIGSA	AMBTR	AMACH		
Pest Scientific Name		Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>		
Pest Name		large crabgrass	Giant ragweed	Green pigweed		
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020
Rating Time						
SE Group No.	1	2	3	4	5	6
SE Name						
SE Description						
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT C
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size						
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	6-10-2020	10-2-2020	10-2-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	26 26	26 26	26 26	26 26	35 9	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A		
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1
Days After Emergence						
ARM Action Codes						
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	1	2	3	4
11 BICEP II MAGNUM	35.3 OZ A/A A	111	0.0	97.0	95.0	100.0
AMSOL	2.5 % V/V B	205	0.0	100.0	80.0	90.0
IMPACTZ	4.26 OZ A/A B	312	0.0	100.0	97.0	100.0
ROUNDUP POWERMAX 5.5 SL	18.3 OZ A/A B	407	0.0	100.0	70.0	100.0
MSO	1 % V/V B					
	Mean =		0.0	99.3	85.5	97.5
12 ANTHEM ATZ 4.5 SE	18 OZ A/A A	112	0.0	100.0	97.0	100.0
AMSOL	2.5 % V/V B	201	0.0	100.0	50.0	90.0
NIS	0.25 % V/V B	302	0.0	100.0	75.0	100.0
ACURON GT	32.3 OZ A/A B	408	0.0	100.0	85.0	100.0
	Mean =		0.0	100.0	76.8	97.5

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	2 W Weed	1 W Weed	6 W Weed	2 W Weed	1 W Weed	6 W Weed
Pest ID Code	DIGSA	AMBTR	AMACH	DIGSA	AMBTR	AMACH
Pest Code	DIGSA	AMBTR	AMACH	DIGSA	AMBTR	AMACH
Pest Scientific Name	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>
Pest Name	large crabgrass	Giant ragweed	Green pigweed	large crabgrass	Giant ragweed	Green pigweed
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	6-29-2020	7-29-2020	7-29-2020	7-29-2020
Rating Time						
SE Group No.	7	8	9	10	11	12
SE Name						
SE Description						
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size						
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	54 28	54 28	54 28	84 58	84 58	84 58
Trt-Eval Interval						
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	86 DP-1	86 DP-1	86 DP-1
Days After Emergence						
ARM Action Codes						
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	7	8	9	10
1 UNTREATED CHECK		101	0.0	0.0	0.0	0.0
		207	0.0	0.0	0.0	0.0
		304	0.0	0.0	0.0	0.0
		402	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0
2 BICEP II MAGNUM	35.3 OZ AI/A A	102	100.0	100.0	100.0	100.0
AMSOL	2.5 % V/V B	206	100.0	100.0	100.0	100.0
NIS	0.25 % V/V B	301	100.0	97.0	100.0	97.0
ACURON GT	32.3 OZ AI/A B	404	100.0	98.0	100.0	100.0
		Mean =	100.0	98.8	100.0	99.3

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	2 W Weed	1 W Weed	6 W Weed	2 W Weed	1 W Weed	6 W Weed
Pest ID Code	DIGSA	AMBTR	AMACH	DIGSA	AMBTR	AMACH
Pest Code	DIGSA	AMBTR	AMACH	DIGSA	AMBTR	AMACH
Pest Scientific Name	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>
Pest Name	large crabgrass	Giant ragweed	Green pigweed	large crabgrass	Giant ragweed	Green pigweed
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	6-29-2020	7-29-2020	7-29-2020	7-29-2020
Rating Time						
SE Group No.	7	8	9	10	11	12
SE Name						
SE Description						
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size						
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	54 28	54 28	54 28	84 58	84 58	84 58
Trt-Eval Interval						
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	86 DP-1	86 DP-1	86 DP-1
Days After Emergence						
ARM Action Codes						
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	7	8	9	10
3 LEXAR EZ 3.7 ZC	26.7 OZ A/A A	103	95.0	100.0	100.0	100.0
AMSOL	2.5 % V/V B	204	100.0	100.0	100.0	97.0
NIS	0.25 % V/V B	309	100.0	100.0	100.0	100.0
ACURON GT	32.3 OZ A/A B	411	100.0	100.0	100.0	100.0
	Mean =		98.8	100.0	100.0	99.3
4 SURESTART II 4.25 SC	14.8 OZ A/A A	104	97.0	100.0	100.0	100.0
AMSOL	2.5 % V/V B	202	100.0	80.0	100.0	80.0
NIS	0.25 % V/V B	311	97.0	100.0	100.0	100.0
ACURON GT	32.3 OZ A/A B	406	100.0	100.0	100.0	100.0
	Mean =		98.5	95.0	100.0	95.0

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	2 W Weed	1 W Weed	6 W Weed	2 W Weed	1 W Weed	6 W Weed
Pest ID Code	DIGSA	AMBTR	AMACH	DIGSA	AMBTR	AMACH
Pest Code	DIGSA	AMBTR	AMACH	DIGSA	AMBTR	AMACH
Pest Scientific Name	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>
Pest Name	large crabgrass	Giant ragweed	Green pigweed	large crabgrass	Giant ragweed	Green pigweed
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	6-29-2020	7-29-2020	7-29-2020	7-29-2020
Rating Time						
SE Group No.	7	8	9	10	11	12
SE Name						
SE Description						
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size						
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	54 28	54 28	54 28	84 58	84 58	84 58
Trt-Eval Interval						
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	86 DP-1	86 DP-1	86 DP-1
Days After Emergence						
ARM Action Codes						
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	7	8	9	10
5 HARNESS XTRA 5.6L	40.4 OZ AI/A A	105	100.0	100.0	100.0	100.0
AMSOL	2.5 % V/V B	203	97.0	100.0	100.0	97.0
NIS	0.25 % V/V B	306	100.0	99.0	100.0	100.0
ACURON GT	32.3 OZ AI/A B	410	97.0	100.0	100.0	100.0
	Mean =		98.5	99.8	100.0	99.3
6 VERDICT 5.57 EC	9.7 OZ AI/A A	106	100.0	100.0	100.0	97.0
AMSOL	2.5 % V/V B	208	100.0	100.0	100.0	100.0
NIS	0.25 % V/V B	307	100.0	100.0	100.0	100.0
ACURON GT	32.3 OZ AI/A B	412	100.0	100.0	100.0	100.0
	Mean =		100.0	100.0	100.0	99.3

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	2 W Weed	1 W Weed	6 W Weed	2 W Weed	1 W Weed	6 W Weed
Pest ID Code	DIGSA	AMBTR	AMACH	DIGSA	AMBTR	AMACH
Pest Code	DIGSA	AMBTR	AMACH	DIGSA	AMBTR	AMACH
Pest Scientific Name	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>
Pest Name	large crabgrass	Giant ragweed	Green pigweed	large crabgrass	Giant ragweed	Green pigweed
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	6-29-2020	7-29-2020	7-29-2020	7-29-2020
Rating Time						
SE Group No.	7	8	9	10	11	12
SE Name						
SE Description						
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size						
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	54 28	54 28	54 28	84 58	84 58	84 58
Trt-Eval Interval						
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	86 DP-1	86 DP-1	86 DP-1
Days After Emergence						
ARM Action Codes						
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	7	8	9	10
7 SURESTART II 4.25 SC	14.8 OZ A/A A	107	100.0	100.0	100.0	100.0
AMSOL	2.5 % V/V B	210	100.0	100.0	100.0	100.0
RESICORE 3.29 SC	16.4 OZ A/A B	303	100.0	95.0	100.0	95.0
ROUNDUP POWERMAX 5.5 SL	18.3 OZ A/A B	401	100.0	90.0	100.0	90.0
	Mean =		100.0	96.3	100.0	96.3
8 HARNESS XTRA 5.6L	40.4 OZ A/A A	108	97.0	100.0	100.0	97.0
AMSOL	2.5 % V/V B	211	100.0	100.0	100.0	95.0
LAUDIS 3.5 SC	1.31 OZ A/A B	310	100.0	100.0	100.0	100.0
ROUNDUP POWERMAX 5.5 SL	18.3 OZ A/A B	405	100.0	100.0	100.0	100.0
SUPERB HC	0.5 % V/V B					
	Mean =		99.3	100.0	100.0	98.0

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	2 W Weed	1 W Weed	6 W Weed	2 W Weed	1 W Weed	6 W Weed
Pest ID Code	DIGSA	AMBTR	AMACH	DIGSA	AMBTR	AMACH
Pest Code	DIGSA	AMBTR	AMACH	DIGSA	AMBTR	AMACH
Pest Scientific Name	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>
Pest Name	large crabgrass	Giant ragweed	Green pigweed	large crabgrass	Giant ragweed	Green pigweed
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	6-29-2020	7-29-2020	7-29-2020	7-29-2020
Rating Time						
SE Group No.	7	8	9	10	11	12
SE Name						
SE Description						
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size						
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	54 28	54 28	54 28	84 58	84 58	84 58
Trt-Eval Interval						
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	86 DP-1	86 DP-1	86 DP-1
Days After Emergence						
ARM Action Codes						
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	7	8	9	10
9 VERDICT 5.57 EC	9.7 OZ AI/A A	109	97.0	95.0	100.0	97.0
AMSOL	2.5 % V/V B	212	100.0	100.0	100.0	100.0
ARMEZON PRO	13.4 OZ AI/A B	305	98.0	100.0	100.0	98.0
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A B	403	100.0	80.0	100.0	100.0
	Mean =		98.8	93.8	100.0	98.8
10 HARNESS MAX 3.85 SC	30.8 OZ AI/A A	110	90.0	100.0	100.0	90.0
AMSOL	2.5 % V/V B	209	100.0	100.0	100.0	100.0
CAPRENO 3.45 SC	1.29 OZ AI/A B	308	100.0	100.0	100.0	100.0
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A B	409	100.0	100.0	100.0	100.0
COC	1 % V/V B					
	Mean =		97.5	100.0	100.0	97.5

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	2 W Weed	1 W Weed	6 W Weed	2 W Weed	1 W Weed	6 W Weed
Pest ID Code	DIGSA	AMBTR	AMACH	DIGSA	AMBTR	AMACH
Pest Code	DIGSA	AMBTR	AMACH	DIGSA	AMBTR	AMACH
Pest Scientific Name	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>
Pest Name	large crabgrass	Giant ragweed	Green pigweed	large crabgrass	Giant ragweed	Green pigweed
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	6-29-2020	7-29-2020	7-29-2020	7-29-2020
Rating Time						
SE Group No.	7	8	9	10	11	12
SE Name						
SE Description						
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size						
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	54 28	54 28	54 28	84 58	84 58	84 58
Trt-Eval Interval						
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	86 DP-1	86 DP-1	86 DP-1
Days After Emergence						
ARM Action Codes						
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	7	8	9	10
11 BICEP II MAGNUM	35.3 OZ A/A A	111	98.0	100.0	100.0	90.0
AMSOL	2.5 % V/V B	205	97.0	100.0	100.0	97.0
IMPACTZ	4.26 OZ A/A B	312	100.0	95.0	100.0	100.0
ROUNDUP POWERMAX 5.5 SL	18.3 OZ A/A B	407	97.0	95.0	100.0	97.0
MSO	1 % V/V B					
	Mean =		98.0	97.5	100.0	96.0
12 ANTHEM ATZ 4.5 SE	18 OZ A/A A	112	100.0	100.0	100.0	100.0
AMSOL	2.5 % V/V B	201	100.0	90.0	100.0	100.0
NIS	0.25 % V/V B	302	100.0	96.0	100.0	100.0
ACURON GT	32.3 OZ A/A B	408	100.0	96.0	100.0	100.0
	Mean =		100.0	95.5	100.0	100.0

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Pest ID Code	3 W Weed	7 W Weed				
Pest Code	IPOSS	SORHA				
Pest Scientific Name	Ipomoea sp.	Sorghum halepen>				
Pest Name	Morning glory	Johnson grass				
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	7-29-2020	7-29-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time						
SE Group No.	13	14	15	16	17	18
SE Name						
SE Description						
Part Rated	PLANT P	PLANT P	GRAIN C	GRAIN C	GRAIN C	GRAIN C
Rating Type	CONTRO	CONTRO	WEIGHT	CONMOI	WEITES	LENGTH
Rating Unit	%	%	LB	%	LB	FT
Calculation	NC	NC	NC	NC	NC	NC
Sample Size			1 PLOT			
Collection Basis	1 PLOT	1 PLOT	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Reporting Basis	1 PLOT	1 PLOT	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-2-2020	10-2-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	84 58	84 58	154 128	154 128	154 128	154 128
Trt-Eval Interval						
Plant-Eval Interval	86 DP-1	86 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence						
ARM Action Codes		ER4	EC			
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	13	14	15	16
1 UNTREATED CHECK		101	0.0	0.0	11.050	17.50
		207	0.0	0.0	20.980	15.30
		304	0.0	0.0	20.020	15.60
		402	0.0		28.810	16.60
		Mean =	0.0	0.0	20.215	16.25
2 BICEP II MAGNUM	35.3 OZ AI/A A	102	90.0	97.0	28.552*	16.29*
AMSOL	2.5 % V/V B	206	90.0	100.0	29.750	16.10
NIS	0.25 % V/V B	301	100.0	100.0	33.010	16.30
ACURON GT	32.3 OZ AI/A B	404	90.0		33.910	15.80
		Mean =	92.5	99.0	31.305	16.12
						58.17*
						57.60
						56.60
						57.50
						57.47
						24.430
						23.040
						23.760
						24.140
						23.843
						24.016*
						23.630
						24.280
						24.040
						23.991

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Pest ID Code	3 W Weed	7 W Weed				
Pest Code	IPOSS	SORHA				
Pest Scientific Name	Ipomoea sp.	Sorghum halepense				
Pest Name	Morning glory	Johnson grass				
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	7-29-2020	7-29-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time						
SE Group No.	13	14	15	16	17	18
SE Name						
SE Description						
Part Rated	PLANT P	PLANT P	GRAIN C	GRAIN C	GRAIN C	GRAIN C
Rating Type	CONTRO	CONTRO	WEIGHT	CONMOI	WEITES	LENGTH
Rating Unit	%	%	LB	%	LB	FT
Calculation	NC	NC	NC	NC	NC	NC
Sample Size			1			
Collection Basis	1 PLOT	1 PLOT	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Reporting Basis	1 PLOT	1 PLOT	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-2-2020	10-2-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	84 58	84 58	154 128	154 128	154 128	154 128
Trt-Eval Interval						
Plant-Eval Interval	86 DP-1	86 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence						
ARM Action Codes		ER4	EC			
Number of Decimals						
Trt Treatment	Rate Appl					
No. Name	Rate Unit Code Plot	13	14	15	16	17
3 LEXAR EZ 3.7 ZC	26.7 OZ A/A A 103	80.0	90.0	26.680	17.00	58.50
AMSOL	2.5 % V/V B 204	95.0	100.0	33.910	18.80	48.80
NIS	0.25 % V/V B 309	100.0	100.0	33.850	16.40	58.40
ACURON GT	32.3 OZ A/A B 411	100.0		32.110	16.40	57.40
	Mean =	93.8	96.7	31.638	17.15	55.78
4 SURESTART II 4.25 SC	14.8 OZ A/A A 104	90.0	90.0	25.670	17.60	55.70
AMSOL	2.5 % V/V B 202	90.0	100.0	33.320	15.30	55.50
NIS	0.25 % V/V B 311	98.0	97.0	30.420	17.50	55.20
ACURON GT	32.3 OZ A/A B 406	100.0		34.480	15.70	57.00
	Mean =	94.5	95.7	30.973	16.53	55.85

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Pest ID Code	3 W Weed	7 W Weed				
Pest Code	IPOSS	SORHA				
Pest Scientific Name	Ipomoea sp.	Sorghum halepense				
Pest Name	Morning glory	Johnson grass				
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	7-29-2020	7-29-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time						
SE Group No.	13	14	15	16	17	18
SE Name						
SE Description						
Part Rated	PLANT P	PLANT P	GRAIN C	GRAIN C	GRAIN C	GRAIN C
Rating Type	CONTRO	CONTRO	WEIGHT	CONMOI	WEITES	LENGTH
Rating Unit	%	%	LB	%	LB	FT
Calculation	NC	NC	NC	NC	NC	NC
Sample Size			1 PLOT			
Collection Basis	1 PLOT	1 PLOT	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Reporting Basis	1 PLOT	1 PLOT	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-2-2020	10-2-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	84 58	84 58	154 128	154 128	154 128	154 128
Trt-Eval Interval						
Plant-Eval Interval	86 DP-1	86 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence						
ARM Action Codes		ER4	EC			
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	13	14	15	16
5 HARNESS XTRA 5.6L	40.4 OZ A/A A	105	95.0	97.0	26.690	16.00
AMSOL	2.5 % V/V B	203	95.0	95.0	32.200	16.00
NIS	0.25 % V/V B	306	90.0	100.0	33.310	16.00
ACURON GT	32.3 OZ A/A B	410	95.0		33.890	17.90
	Mean =		93.8	97.3	31.523	16.48
6 VERDICT 5.57 EC	9.7 OZ A/A A	106	95.0	100.0	29.500	17.10
AMSOL	2.5 % V/V B	208	100.0	100.0	31.210	16.80
NIS	0.25 % V/V B	307	90.0	100.0	33.500	16.70
ACURON GT	32.3 OZ A/A B	412	98.0		31.900	16.50
	Mean =		95.8	100.0	31.528	16.78

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Pest ID Code	3 W Weed	7 W Weed				
Pest Code	IPOSS	SORHA				
Pest Scientific Name	Ipomoea sp.	Sorghum halepense				
Pest Name	Morning glory	Johnson grass				
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	7-29-2020	7-29-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time						
SE Group No.	13	14	15	16	17	18
SE Name						
SE Description						
Part Rated	PLANT P	PLANT P	GRAIN C	GRAIN C	GRAIN C	GRAIN C
Rating Type	CONTRO	CONTRO	WEIGHT	CONMOI	WEITES	LENGTH
Rating Unit	%	%	LB	%	LB	FT
Calculation	NC	NC	NC	NC	NC	NC
Sample Size			1 PLOT			
Collection Basis	1 PLOT	1 PLOT	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Reporting Basis	1 PLOT	1 PLOT	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-2-2020	10-2-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	84 58	84 58	154 128	154 128	154 128	154 128
Trt-Eval Interval						
Plant-Eval Interval	86 DP-1	86 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence						
ARM Action Codes		ER4	EC			
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	13	14	15	16
7 SURESTART II 4.25 SC	14.8 OZ A/A A	107	90.0	100.0	33.200	17.10
AMSOL	2.5 % V/V B	210	90.0	100.0	33.140	14.60
RESICORE 3.29 SC	16.4 OZ A/A B	303	80.0	100.0	32.850	17.20
ROUNDUP POWERMAX 5.5 SL	18.3 OZ A/A B	401	100.0		33.400	16.00
	Mean =		90.0	100.0	33.148	16.23
8 HARNESS XTRA 5.6L	40.4 OZ A/A A	108	90.0	97.0	28.549*	17.09*
AMSOL	2.5 % V/V B	211	70.0	95.0	30.810	17.00
LAUDIS 3.5 SC	1.31 OZ A/A B	310	90.0	90.0	30.000	16.40
ROUNDUP POWERMAX 5.5 SL	18.3 OZ A/A B	405	100.0		35.850	17.20
SUPERB HC	0.5 % V/V B					
	Mean =		87.5	94.0	31.302	16.92
						55.10
						24.051

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Pest ID Code	3 W Weed	7 W Weed				
Pest Code	IPOSS	SORHA				
Pest Scientific Name	Ipomoea sp.	Sorghum halepense				
Pest Name	Morning glory	Johnson grass				
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent	Zea mays indent	Zea mays indent	Zea mays indent	Zea mays indent	Zea mays indent
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	7-29-2020	7-29-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time						
SE Group No.	13	14	15	16	17	18
SE Name						
SE Description						
Part Rated	PLANT P	PLANT P	GRAIN C	GRAIN C	GRAIN C	GRAIN C
Rating Type	CONTRO	CONTRO	WEIGHT	CONMOI	WEITES	LENGTH
Rating Unit	%	%	LB	%	LB	FT
Calculation	NC	NC	NC	NC	NC	NC
Sample Size			1 PLOT			
Collection Basis	1 PLOT	1 PLOT	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Reporting Basis	1 PLOT	1 PLOT	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-2-2020	10-2-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	84 58	84 58	154 128	154 128	154 128	154 128
Trt-Eval Interval						
Plant-Eval Interval	86 DP-1	86 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence						
ARM Action Codes		ER4	EC			
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	13	14	15	16
9 VERDICT 5.57 EC	9.7 OZ AI/A A	109	90.0	90.0	29.550	16.20
AMSOL	2.5 % V/V B	212	97.0	97.0	27.650	16.20
ARMEZON PRO	13.4 OZ AI/A B	305	70.0	80.0	31.910	16.70
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A B	403	90.0		34.660	16.80
	Mean =		86.8	89.0	30.943	16.48
10 HARNESS MAX 3.85 SC	30.8 OZ AI/A A	110	70.0	80.0	30.520	16.50
AMSOL	2.5 % V/V B	209	80.0	100.0	27.550	16.20
CAPRENO 3.45 SC	1.29 OZ AI/A B	308	100.0	95.0	31.600	16.40
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A B	409	90.0		31.430	16.50
COC	1 % V/V B					
	Mean =		85.0	91.7	30.275	16.40
						55.90
						24.055

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Pest ID Code	3 W Weed	7 W Weed				
Pest Code	IPOSS	SORHA				
Pest Scientific Name	Ipomoea sp.	Sorghum halepense				
Pest Name	Morning glory	Johnson grass				
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	7-29-2020	7-29-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time						
SE Group No.	13	14	15	16	17	18
SE Name						
SE Description						
Part Rated	PLANT P	PLANT P	GRAIN C	GRAIN C	GRAIN C	GRAIN C
Rating Type	CONTRO	CONTRO	WEIGHT	CONMOI	WEITES	LENGTH
Rating Unit	%	%	LB	%	LB	FT
Calculation	NC	NC	NC	NC	NC	NC
Sample Size			1 PLOT			
Collection Basis	1 PLOT	1 PLOT	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Reporting Basis	1 PLOT	1 PLOT	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-2-2020	10-2-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020
First Export Date						
Equipment						
Rating Timing						
Days After First/Last Applic.	84 58	84 58	154 128	154 128	154 128	154 128
Trt-Eval Interval						
Plant-Eval Interval	86 DP-1	86 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence						
ARM Action Codes		ER4	EC			
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	13	14	15	16
11 BICEP II MAGNUM	35.3 OZ A/A A	111	90.0	90.0	27.760	16.00
AMSOL	2.5 % V/V B	205	70.0	100.0	32.650	18.00
IMPACTZ	4.26 OZ A/A B	312	90.0	95.0	28.860	16.60
ROUNDUP POWERMAX 5.5 SL	18.3 OZ A/A B	407	95.0		36.350	13.90
MSO	1 % V/V B					
	Mean =		86.3	95.0	31.405	16.13
12 ANTHEM ATZ 4.5 SE	18 OZ A/A A	112	97.0	100.0	28.410	15.40
AMSOL	2.5 % V/V B	201	95.0	100.0	31.147*	16.19*
NIS	0.25 % V/V B	302	90.0	100.0	32.070	17.60
ACURON GT	32.3 OZ A/A B	408	97.0		33.700	16.00
	Mean =		94.8	100.0	31.332	16.30
						56.00
						55.43*
						56.60
						52.90
						23.810
						23.990
						24.070
						23.980
						23.923*
						24.030
						24.350
						24.071

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Pest ID Code			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop ID Code	1	ZEAMD	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays indent>	
Crop Name		Dent corn	
Crop Variety		Pioneer P1077AM	
Rating Date		10-7-2020	
Rating Time			
SE Group No.		19	
SE Name			
SE Description			
Part Rated		GRAIN C	
Rating Type		YIELD	
Rating Unit		BU	
Calculation		NC	
Sample Size		1	A
Collection Basis	2	ROWNU	
Reporting Basis		1	A
Number of Subsamples			1
Crop Stage Scale			
Crop Stage Majority/Min/Max			
Crop Density			
Pest Stage Majority/Min/Max			
Pest Density			
Footnote Number			
Assessed By			
Data Entry Date			
First Export Date			
Equipment			
Rating Timing			
Days After First/Last Applic.		154	128
Trt-Eval Interval			
Plant-Eval Interval		156	DP-1
Days After Emergence			
ARM Action Codes		EC	TY1
Number of Decimals			1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code Plot	19
1 UNTREATED CHECK		101	68.7
		207	142.0
		304	130.9
		402	183.3
		Mean =	131.2
2 BICEP II MAGNUM	35.3 OZ AI/A	A 102	184.3*
AMSOL	2.5 % V/V	B 206	194.5
NIS	0.25 % V/V	B 301	209.5
ACURON GT	32.3 OZ AI/A	B 404	218.7
		Mean =	201.7

University of Kentucky

Pest ID Code			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop ID Code	1	ZEAMD	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays indent>	
Crop Name		Dent corn	
Crop Variety		Pioneer P1077AM	
Rating Date		10-7-2020	
Rating Time			
SE Group No.		19	
SE Name			
SE Description			
Part Rated		GRAIN C	
Rating Type		YIELD	
Rating Unit		BU	
Calculation		NC	
Sample Size		1	A
Collection Basis	2	ROWNU	
Reporting Basis		1	A
Number of Subsamples			1
Crop Stage Scale			
Crop Stage Majority/Min/Max			
Crop Density			
Pest Stage Majority/Min/Max			
Pest Density			
Footnote Number			
Assessed By			
Data Entry Date			
First Export Date			
Equipment			
Rating Timing			
Days After First/Last Applic.		154	128
Trt-Eval Interval			
Plant-Eval Interval		156	DP-1
Days After Emergence			
ARM Action Codes		EC	TY1
Number of Decimals			1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code Plot	19
3 LEXAR EZ 3.7 ZC	26.7 OZ AI/A	A 103	172.2
AMSOL	2.5 % V/V	B 204	210.9
NIS	0.25 % V/V	B 309	212.6
ACURON GT	32.3 OZ AI/A	B 411	206.5
		Mean =	200.6
4 SURESTART II 4.25 SC	14.8 OZ AI/A	A 104	164.4
AMSOL	2.5 % V/V	B 202	211.7
NIS	0.25 % V/V	B 311	199.7
ACURON GT	32.3 OZ AI/A	B 406	223.3
		Mean =	199.8

University of Kentucky

Pest ID Code			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop ID Code	1	ZEAMD	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays indent>	
Crop Name		Dent corn	
Crop Variety		Pioneer P1077AM	
Rating Date		10-7-2020	
Rating Time			
SE Group No.		19	
SE Name			
SE Description			
Part Rated		GRAIN C	
Rating Type		YIELD	
Rating Unit		BU	
Calculation		NC	
Sample Size		1	A
Collection Basis	2	ROWNU	
Reporting Basis		1	A
Number of Subsamples			1
Crop Stage Scale			
Crop Stage Majority/Min/Max			
Crop Density			
Pest Stage Majority/Min/Max			
Pest Density			
Footnote Number			
Assessed By			
Data Entry Date			
First Export Date			
Equipment			
Rating Timing			
Days After First/Last Applic.		154	128
Trt-Eval Interval			
Plant-Eval Interval		156	DP-1
Days After Emergence			
ARM Action Codes		EC TY1	
Number of Decimals			1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code Plot	19
5 HARNESS XTRA 5.6L	40.4 OZ AI/A	A 105	174.8
AMSOL	2.5 % V/V	B 203	206.5
NIS	0.25 % V/V	B 306	209.8
ACURON GT	32.3 OZ AI/A	B 410	209.7
		Mean =	200.2
6 VERDICT 5.57 EC	9.7 OZ AI/A	A 106	190.9
AMSOL	2.5 % V/V	B 208	201.5
NIS	0.25 % V/V	B 307	210.0
ACURON GT	32.3 OZ AI/A	B 412	197.5
		Mean =	200.0

University of Kentucky

Pest ID Code			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop ID Code	1	ZEAMD	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays indent>	
Crop Name		Dent corn	
Crop Variety		Pioneer P1077AM	
Rating Date		10-7-2020	
Rating Time			
SE Group No.		19	
SE Name			
SE Description			
Part Rated		GRAIN C	
Rating Type		YIELD	
Rating Unit		BU	
Calculation		NC	
Sample Size		1	A
Collection Basis	2	ROWNU	
Reporting Basis		1	A
Number of Subsamples			1
Crop Stage Scale			
Crop Stage Majority/Min/Max			
Crop Density			
Pest Stage Majority/Min/Max			
Pest Density			
Footnote Number			
Assessed By			
Data Entry Date			
First Export Date			
Equipment			
Rating Timing			
Days After First/Last Applic.		154	128
Trt-Eval Interval			
Plant-Eval Interval		156	DP-1
Days After Emergence			
ARM Action Codes		EC TY1	
Number of Decimals			1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code Plot	19
7 SURESTART II 4.25 SC	14.8 OZ AI/A	A 107	206.4
AMSOL	2.5 % V/V	B 210	219.0
RESICORE 3.29 SC	16.4 OZ AI/A	B 303	208.7
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A	B 401	214.7
		Mean =	212.2
8 HARNESS XTRA 5.6L	40.4 OZ AI/A	A 108	181.8*
AMSOL	2.5 % V/V	B 211	195.4
LAUDIS 3.5 SC	1.31 OZ AI/A	B 310	193.1
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A	B 405	226.6
SUPERB HC	0.5 % V/V	B	
		Mean =	199.2

University of Kentucky

Pest ID Code			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop ID Code	1	ZEAMD	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays indent>	
Crop Name		Dent corn	
Crop Variety		Pioneer P1077AM	
Rating Date		10-7-2020	
Rating Time			
SE Group No.		19	
SE Name			
SE Description			
Part Rated		GRAIN C	
Rating Type		YIELD	
Rating Unit		BU	
Calculation		NC	
Sample Size		1	A
Collection Basis	2	ROWNU	
Reporting Basis		1	A
Number of Subsamples			1
Crop Stage Scale			
Crop Stage Majority/Min/Max			
Crop Density			
Pest Stage Majority/Min/Max			
Pest Density			
Footnote Number			
Assessed By			
Data Entry Date			
First Export Date			
Equipment			
Rating Timing			
Days After First/Last Applic.		154	128
Trt-Eval Interval			
Plant-Eval Interval		156	DP-1
Days After Emergence			
ARM Action Codes		EC TY1	
Number of Decimals			1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code Plot	19
9 VERDICT 5.57 EC	9.7 OZ AI/A	A 109	189.0
AMSOL	2.5 % V/V	B 212	175.7
ARMEZON PRO	13.4 OZ AI/A	B 305	205.0
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A	B 403	217.3
		Mean =	196.8
10 HARNESS MAX 3.85 SC	30.8 OZ AI/A	A 110	192.1
AMSOL	2.5 % V/V	B 209	178.6
CAPRENO 3.45 SC	1.29 OZ AI/A	B 308	200.7
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A	B 409	203.4
COC	1 % V/V	B	
		Mean =	193.7

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Pest ID Code			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop ID Code	1	ZEAMD	
BBCH Scale		BCOR	
Crop Scientific Name		Zea mays indent>	
Crop Name		Dent corn	
Crop Variety		Pioneer P1077AM	
Rating Date		10-7-2020	
Rating Time			
SE Group No.		19	
SE Name			
SE Description			
Part Rated		GRAIN C	
Rating Type		YIELD	
Rating Unit		BU	
Calculation		NC	
Sample Size		1	A
Collection Basis	2	ROWNU	
Reporting Basis		1	A
Number of Subsamples			1
Crop Stage Scale			
Crop Stage Majority/Min/Max			
Crop Density			
Pest Stage Majority/Min/Max			
Pest Density			
Footnote Number			
Assessed By			
Data Entry Date			
First Export Date			
Equipment			
Rating Timing			
Days After First/Last Applic.		154	128
Trt-Eval Interval			
Plant-Eval Interval		156	DP-1
Days After Emergence			
ARM Action Codes		EC	TY1
Number of Decimals			1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code Plot	19
11 BICEP II MAGNUM	35.3 OZ AI/A	A 111	173.9
AMSOL	2.5 % V/V	B 205	207.2
IMPACTZ	4.26 OZ AI/A	B 312	186.1
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A	B 407	240.2
MSO	1 % V/V	B	
	Mean =		201.8
12 ANTHEM ATZ 4.5 SE	18 OZ AI/A	A 112	184.5
AMSOL	2.5 % V/V	B 201	199.7*
NIS	0.25 % V/V	B 302	202.5
ACURON GT	32.3 OZ AI/A	B 408	214.0
	Mean =		200.2

University of Kentucky

Acuron GT: Evaluation of weed control, crop tolerance and yield in a two pass system - Mid and South University (20-9_COR-REC)

Trial ID: USNG0H3542020 Location: Cully Scott FS Trial Year: 2020
 Protocol ID: HBI008A4-2020US Investigator (Creator): Scott Cully
 Master Protocol ID: Study Director: Travis Legleiter
 Official Trial ID: Sponsor Contact:
 Conducted Under GEP: No Trial Origin: P public institution trial

Pest ID Code

2, W, Weed, DIGSA, Digitaria sanguinalis, large crabgrass, = N
 1, W, Weed, AMBTR, Ambrosia trifida, Giant ragweed, = N
 6, W, Weed, AMACH, Amaranthus hybridus, Green pigweed, = N
 3, W, Weed, IPOSS, Ipomoea sp., Morning glory, = N
 7, W, Weed, SORHA, Sorghum halepense, Johnson grass, = N

Crop ID Code

1, ZEAMD, BCOR, Zea mays indentata, Dent corn, Pioneer P1077AM = RR/LL

Part Rated

PLANT = plant
 GRAIN = grain
 C = Crop is Part Rated
 P = Pest is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury
 CONTRO = control / burndown or knockdown
 WEIGHT = weight
 CONMOI = content - moisture
 WEITES = weight - test
 LENGTH = length
 YIELD = yield

Rating Unit

% = percent
 LB = pound
 FT = foot
 BU = bushel

Calculation

NC = no calculation

PLOT = total plot
 A = acre

PLOT = total plot
 ROWNU = number of rows

PLOT = total plot
 ROWNU = number of rows
 A = acre

Plant-Eval Interval

28 DP-1 = 1 ZEAMD 5-4-2020
 37 DP-1 = 1 ZEAMD 5-4-2020
 56 DP-1 = 1 ZEAMD 5-4-2020
 86 DP-1 = 1 ZEAMD 5-4-2020
 156 DP-1 = 1 ZEAMD 5-4-2020

ARM Action Codes

ER4 = Excluded replicate 4
 EC = Do not analyze untreated check, while still reporting treatment mean on AOV Means Table
 $TY1 = (777.8571 / (5 * [18])) * [15] * (100 - [16]) / 84.5$

University of Kentucky

Acuron GT: Evaluation of weed control, crop tolerance and yield in a two pass system - Mid and South University (20-9_COR-REC)

Trial ID: USNG0H3542020	Location: Cully Scott FS	Trial Year: 2020
Protocol ID: HBI008A4-2020US	Investigator (Creator): Scott Cully	
Master Protocol ID:	Study Director: Travis Legleiter	
Official Trial ID:	Sponsor Contact:	
Conducted Under GEP: No	Trial Origin: P public institution trial	

		2 W Weed	1 W Weed	6 W Weed			2 W Weed
Pest ID Code		DIGSA	AMBTR	AMACH			DIGSA
Pest Code		DIGSA	AMBTR	AMACH			DIGSA
Pest Scientific Name		Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>			Digitaria sangu>
Pest Name		large crabgrass	Giant ragweed	Green pigweed			large crabgrass
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020	6-29-2020
Rating Time							
SE Group No.	1	2	3	4	5	6	7
SE Name							
SE Description							
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT C	PLANT P
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN	CONTRO
Rating Unit	%	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC	NC
Sample Size							
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1
Crop Stage Scale							
Crop Stage Majority/Min/Max							
Crop Density							
Pest Stage Majority/Min/Max							
Pest Density							
Footnote Number							
Assessed By							
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	6-10-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date							
Equipment							
Rating Timing							
Days After First/Last Applic.	26 26	26 26	26 26	26 26	35 9	54 28	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A			
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1	56 DP-1
Days After Emergence							
ARM Action Codes							
Number of Decimals							
Trt Treatment							
No. Name	1	2	3	4	5	6	7
Rate							
Appl Code							
Rate Unit							
1 UNTREATED CHECK	0.0 a	0.0 b	0.0 b	0.0 b	0.0 a	0.0 a	0.0 b

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=15,16,17,18,19
 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

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		2 W Weed	1 W Weed	6 W Weed			2 W Weed
Pest ID Code		DIGSA	AMBTR	AMACH			DIGSA
Pest Code		DIGSA	AMBTR	AMACH			DIGSA
Pest Scientific Name		Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>			Digitaria sangu>
Pest Name		large crabgrass	Giant ragweed	Green pigweed			large crabgrass
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020	6-29-2020
Rating Time							
SE Group No.	1	2	3	4	5	6	7
SE Name							
SE Description							
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT C	PLANT P
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN	CONTRO
Rating Unit	%	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC	NC
Sample Size							
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1
Crop Stage Scale							
Crop Stage Majority/Min/Max							
Crop Density							
Pest Stage Majority/Min/Max							
Pest Density							
Footnote Number							
Assessed By							
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	6-10-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date							
Equipment							
Rating Timing							
Days After First/Last Applic.	26 26	26 26	26 26	26 26	35 9	54 28	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A			
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1	56 DP-1
Days After Emergence							
ARM Action Codes							
Number of Decimals							
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code	1	2	3	4	5
2 BICEP II MAGNUM	35.3 OZ A/A	A	0.0 a	98.8 a	76.8 a	100.0 a	0.0 a
AMSOL	2.5 % V/V	B					0.0 a
NIS	0.25 % V/V	B					
ACURON GT	32.3 OZ A/A	B					100.0 a
3 LEXAR EZ 3.7 ZC	26.7 OZ A/A	A	0.0 a	100.0 a	83.0 a	100.0 a	0.0 a
AMSOL	2.5 % V/V	B					0.0 a
NIS	0.25 % V/V	B					
ACURON GT	32.3 OZ A/A	B					98.8 a

Means followed by same letter or symbol do not significantly differ (P=0.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=15,16,17,18,19
 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

Pest ID Code		2 W Weed	1 W Weed	6 W Weed				2 W Weed	
Pest Code		DIGSA	AMBTR	AMACH				DIGSA	
Pest Scientific Name		Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>				Digitaria sangu>	
Pest Name		large crabgrass	Giant ragweed	Green pigweed				large crabgrass	
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020	6-29-2020	
Rating Time									
SE Group No.	1	2	3	4	5		6	7	
SE Name									
SE Description									
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT C	PLANT C	PLANT P	
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN	PHYGEN	CONTRO	
Rating Unit	%	%	%	%	%	%	%	%	
Calculation	NC	NC	NC	NC	NC	NC	NC	NC	
Sample Size									
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	
Number of Subsamples	1	1	1	1	1	1	1	1	
Crop Stage Scale									
Crop Stage Majority/Min/Max									
Crop Density									
Pest Stage Majority/Min/Max									
Pest Density									
Footnote Number									
Assessed By									
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	6-10-2020	6-10-2020	10-2-2020	10-2-2020	10-2-2020	
First Export Date									
Equipment									
Rating Timing									
Days After First/Last Applic.	26 26	26 26	26 26	26 26	26 26	35 9	54 28	54 28	
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A	26 DA-A				
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1	56 DP-1	
Days After Emergence									
ARM Action Codes									
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	1	2	3	4	5	6	7
4 SURESTART II 4.25 SC	14.8 OZ A/A	A	0.0 a	100.0 a	81.3 a	97.5 a	0.0 a	0.0 a	98.5 a
AMSOL	2.5 % V/V	B							
NIS	0.25 % V/V	B							
ACURON GT	32.3 OZ A/A	B							
5 HARNESS XTRA 5.6L	40.4 OZ A/A	A	0.0 a	100.0 a	75.0 a	95.0 a	0.0 a	0.0 a	98.5 a
AMSOL	2.5 % V/V	B							
NIS	0.25 % V/V	B							
ACURON GT	32.3 OZ A/A	B							

Means followed by same letter or symbol do not significantly differ (P=0.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=15,16,17,18,19
 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

		2 W Weed	1 W Weed	6 W Weed			2 W Weed
Pest ID Code		DIGSA	AMBTR	AMACH			DIGSA
Pest Code		DIGSA	AMBTR	AMACH			DIGSA
Pest Scientific Name		Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>			Digitaria sangu>
Pest Name		large crabgrass	Giant ragweed	Green pigweed			large crabgrass
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020	6-29-2020
Rating Time							
SE Group No.	1	2	3	4	5	6	7
SE Name							
SE Description							
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT C	PLANT P
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN	CONTRO
Rating Unit	%	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC	NC
Sample Size							
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1
Crop Stage Scale							
Crop Stage Majority/Min/Max							
Crop Density							
Pest Stage Majority/Min/Max							
Pest Density							
Footnote Number							
Assessed By							
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	6-10-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date							
Equipment							
Rating Timing							
Days After First/Last Applic.	26 26	26 26	26 26	26 26	35 9	54 28	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A			
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1	56 DP-1
Days After Emergence							
ARM Action Codes							
Number of Decimals							
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code	1	2	3	4	5
6 VERDICT 5.57 EC	9.7 OZ A/I/A	A	0.0 a	100.0 a	97.5 a	100.0 a	0.0 a
AMSOL	2.5 % V/V	B					0.0 a
NIS	0.25 % V/V	B					
ACURON GT	32.3 OZ A/I/A	B					100.0 a
7 SURESTART II 4.25 SC	14.8 OZ A/I/A	A	0.0 a	100.0 a	87.5 a	100.0 a	0.0 a
AMSOL	2.5 % V/V	B					0.0 a
RESICORE 3.29 SC	16.4 OZ A/I/A	B					
ROUNDUP POWERMAX 5.5 SL	18.3 OZ A/I/A	B					100.0 a

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 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

Pest ID Code	2 W Weed		1 W Weed		6 W Weed		1 ZEAMD		1 ZEAMD		2 W Weed	
Pest Code	DIGSA		AMBTR		AMACH		BCOR		BCOR		DIGSA	
Pest Scientific Name	Digitaria sangu>		Ambrosia trifida		Amaranthus hybr>		Zea mays indent>		Zea mays indent>		Digitaria sangu>	
Pest Name	large crabgrass		Giant ragweed		Green pigweed		Zea mays indent>		Zea mays indent>		large crabgrass	
Crop ID Code	1 ZEAMD		1 ZEAMD		1 ZEAMD		1 ZEAMD		1 ZEAMD		1 ZEAMD	
BBCH Scale	BCOR		BCOR		BCOR		BCOR		BCOR		BCOR	
Crop Scientific Name	Zea mays indent>		Zea mays indent>		Zea mays indent>		Zea mays indent>		Zea mays indent>		Zea mays indent>	
Crop Name	Dent corn		Dent corn		Dent corn		Dent corn		Dent corn		Dent corn	
Crop Variety	Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM	
Rating Date	6-1-2020		6-1-2020		6-1-2020		6-1-2020		6-10-2020		6-29-2020	
Rating Time												
SE Group No.	1		2		3		4		5		6	
SE Name												
SE Description												
Part Rated	PLANT C		PLANT P		PLANT P		PLANT P		PLANT C		PLANT C	
Rating Type	PHYGEN		CONTRO		CONTRO		CONTRO		PHYGEN		PHYGEN	
Rating Unit	%		%		%		%		%		%	
Calculation	NC		NC		NC		NC		NC		NC	
Sample Size												
Collection Basis	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT
Reporting Basis	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT
Number of Subsamples	1		1		1		1		1		1	
Crop Stage Scale												
Crop Stage Majority/Min/Max												
Crop Density												
Pest Stage Majority/Min/Max												
Pest Density												
Footnote Number												
Assessed By												
Data Entry Date	6-10-2020		6-10-2020		6-10-2020		6-10-2020		10-2-2020		10-2-2020	
First Export Date												
Equipment												
Rating Timing												
Days After First/Last Applic.	26 26		26 26		26 26		26 26		35 9		54 28	
Trt-Eval Interval	26 DA-A		26 DA-A		26 DA-A		26 DA-A				54 28	
Plant-Eval Interval	28 DP-1		28 DP-1		28 DP-1		28 DP-1		37 DP-1		56 DP-1	
Days After Emergence												
ARM Action Codes												
Number of Decimals												
Trt Treatment	Rate	Appl										
No. Name	Rate Unit	Code	1	2	3	4	5	6	7			
8 HARNESS XTRA 5.6L	40.4 OZ A/I/A	A	0.0 a	98.8 a	95.0 a	100.0 a	0.0 a	0.0 a	99.3 a			
AMSOL	2.5 % V/V	B										
LAUDIS 3.5 SC	1.31 OZ A/I/A	B										
ROUNDUP POWERMAX 5.5 SL	18.3 OZ A/I/A	B										
SUPERB HC	0.5 % V/V	B										
9 VERDICT 5.57 EC	9.7 OZ A/I/A	A	0.0 a	100.0 a	89.3 a	100.0 a	0.0 a	0.0 a	98.8 a			
AMSOL	2.5 % V/V	B										
ARMEZON PRO	13.4 OZ A/I/A	B										
ROUNDUP POWERMAX 5.5 SL	18.3 OZ A/I/A	B										

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 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=15,16,17,18,19
 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

	2 W Weed		1 W Weed		6 W Weed				2 W Weed	
	DIGSA		AMBTR		AMACH				DIGSA	
	Digitaria sangu>		Ambrosia trifida		Amaranthus hybr>				Digitaria sangu>	
	large crabgrass		Giant ragweed		Green pigweed				large crabgrass	
Crop ID Code	1 ZEAMD		1 ZEAMD		1 ZEAMD		1 ZEAMD		1 ZEAMD	
BBCH Scale	BCOR		BCOR		BCOR		BCOR		BCOR	
Crop Scientific Name	Zea mays indent>		Zea mays indent>		Zea mays indent>		Zea mays indent>		Zea mays indent>	
Crop Name	Dent corn		Dent corn		Dent corn		Dent corn		Dent corn	
Crop Variety	Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM	
Rating Date	6-1-2020		6-1-2020		6-1-2020		6-1-2020		6-10-2020	
Rating Time									6-29-2020	
SE Group No.	1		2		3		4		5	
SE Name									6	
SE Description									7	
Part Rated	PLANT C		PLANT P		PLANT P		PLANT P		PLANT C	
Rating Type	PHYGEN		CONTRO		CONTRO		CONTRO		PHYGEN	
Rating Unit	%		%		%		%		%	
Calculation	NC		NC		NC		NC		NC	
Sample Size										
Collection Basis	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT
Reporting Basis	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT
Number of Subsamples	1		1		1		1		1	
Crop Stage Scale										
Crop Stage Majority/Min/Max										
Crop Density										
Pest Stage Majority/Min/Max										
Pest Density										
Footnote Number										
Assessed By										
Data Entry Date	6-10-2020		6-10-2020		6-10-2020		6-10-2020		10-2-2020	
First Export Date									10-2-2020	
Equipment										
Rating Timing										
Days After First/Last Applic.	26 26		26 26		26 26		26 26		35 9	
Trt-Eval Interval	26 DA-A		26 DA-A		26 DA-A		26 DA-A		54 28	
Plant-Eval Interval	28 DP-1		28 DP-1		28 DP-1		28 DP-1		37 DP-1	
Days After Emergence									56 DP-1	
ARM Action Codes									56 DP-1	
Number of Decimals									56 DP-1	
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	
10 HARNESS MAX 3.85 SC	30.8 OZ AI/A	A	0.0 a	100.0 a	97.5 a	100.0 a	0.0 a	0.0 a	97.5 a	
AMSOL	2.5 % V/V	B								
CAPRENO 3.45 SC	1.29 OZ AI/A	B								
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A	B								
COC	1 % V/V	B								

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 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=15,16,17,18,19
 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

	2 W Weed		1 W Weed		6 W Weed				2 W Weed	
	DIGSA		AMBTR		AMACH				DIGSA	
Pest ID Code	Digitaria sangu>		Ambrosia trifida		Amaranthus hybr>				Digitaria sangu>	
Pest Code	large crabgrass		Giant ragweed		Green pigweed				large crabgrass	
Pest Scientific Name	1 ZEAMD		1 ZEAMD		1 ZEAMD		1 ZEAMD		1 ZEAMD	
Pest Name	BCOR		BCOR		BCOR		BCOR		BCOR	
Crop ID Code	Zea mays indent>		Zea mays indent>		Zea mays indent>		Zea mays indent>		Zea mays indent>	
BBCH Scale	Dent corn		Dent corn		Dent corn		Dent corn		Dent corn	
Crop Scientific Name	Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM	
Crop Name	6-1-2020		6-1-2020		6-1-2020		6-10-2020		6-29-2020	
Crop Variety	6-1-2020		6-1-2020		6-1-2020		6-10-2020		6-29-2020	
Rating Date	1		2		3		4		5	
Rating Time	1		2		3		4		5	
SE Group No.	1		2		3		4		5	
SE Name	1		2		3		4		5	
SE Description	1		2		3		4		5	
Part Rated	PLANT C		PLANT P		PLANT P		PLANT P		PLANT C	
Rating Type	PHYGEN		CONTRO		CONTRO		CONTRO		PHYGEN	
Rating Unit	%		%		%		%		%	
Calculation	NC		NC		NC		NC		NC	
Sample Size	NC		NC		NC		NC		NC	
Collection Basis	1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT	
Reporting Basis	1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT	
Number of Subsamples	1		1		1		1		1	
Crop Stage Scale	1		1		1		1		1	
Crop Stage Majority/Min/Max	1		1		1		1		1	
Crop Density	1		1		1		1		1	
Pest Stage Majority/Min/Max	1		1		1		1		1	
Pest Density	1		1		1		1		1	
Footnote Number	1		1		1		1		1	
Assessed By	1		1		1		1		1	
Data Entry Date	6-10-2020		6-10-2020		6-10-2020		6-10-2020		10-2-2020	
First Export Date	6-10-2020		6-10-2020		6-10-2020		6-10-2020		10-2-2020	
Equipment	6-10-2020		6-10-2020		6-10-2020		6-10-2020		10-2-2020	
Rating Timing	6-10-2020		6-10-2020		6-10-2020		6-10-2020		10-2-2020	
Days After First/Last Applic.	26 26		26 26		26 26		26 26		35 9	
Trt-Eval Interval	26 DA-A		26 DA-A		26 DA-A		26 DA-A		54 28	
Plant-Eval Interval	28 DP-1		28 DP-1		28 DP-1		28 DP-1		56 DP-1	
Days After Emergence	28 DP-1		28 DP-1		28 DP-1		28 DP-1		56 DP-1	
ARM Action Codes	28 DP-1		28 DP-1		28 DP-1		28 DP-1		56 DP-1	
Number of Decimals	28 DP-1		28 DP-1		28 DP-1		28 DP-1		56 DP-1	
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	
11 BICEP II MAGNUM	35.3 OZ AI/A	A	0.0 a	99.3 a	85.5 a	97.5 a	0.0 a	0.0 a	98.0 a	
AMSOL	2.5 % V/V	B								
IMPACTZ	4.26 OZ AI/A	B								
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A	B								
MSO	1 % V/V	B								

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Missing data estimates are included in columns: Yates=15,16,17,18,19
Excluded replicate 4 in column 14
Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

Pest ID Code	2 W Weed		1 W Weed		6 W Weed		1 ZEAMD		1 ZEAMD		2 W Weed	
Pest Code	DIGSA		AMBTR		AMACH		1 ZEAMD		1 ZEAMD		DIGSA	
Pest Scientific Name	Digitaria sangu>		Ambrosia trifida		Amaranthus hybr>		1 ZEAMD		1 ZEAMD		Digitaria sangu>	
Pest Name	large crabgrass		Giant ragweed		Green pigweed		1 ZEAMD		1 ZEAMD		large crabgrass	
Crop ID Code	1 ZEAMD		1 ZEAMD		1 ZEAMD		1 ZEAMD		1 ZEAMD		1 ZEAMD	
BBCH Scale	BCOR		BCOR		BCOR		BCOR		BCOR		BCOR	
Crop Scientific Name	Zea mays indent>		Zea mays indent>		Zea mays indent>		Zea mays indent>		Zea mays indent>		Zea mays indent>	
Crop Name	Dent corn		Dent corn		Dent corn		Dent corn		Dent corn		Dent corn	
Crop Variety	Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM	
Rating Date	6-1-2020		6-1-2020		6-1-2020		6-1-2020		6-10-2020		6-29-2020	
Rating Time												
SE Group No.	1		2		3		4		5		6	
SE Name												
SE Description												
Part Rated	PLANT C		PLANT P		PLANT P		PLANT P		PLANT C		PLANT C	
Rating Type	PHYGEN		CONTRO		CONTRO		CONTRO		PHYGEN		PHYGEN	
Rating Unit	%		%		%		%		%		%	
Calculation	NC		NC		NC		NC		NC		NC	
Sample Size												
Collection Basis	1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT	
Reporting Basis	1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT	
Number of Subsamples	1		1		1		1		1		1	
Crop Stage Scale												
Crop Stage Majority/Min/Max												
Crop Density												
Pest Stage Majority/Min/Max												
Pest Density												
Footnote Number												
Assessed By												
Data Entry Date	6-10-2020		6-10-2020		6-10-2020		6-10-2020		10-2-2020		10-2-2020	
First Export Date												
Equipment												
Rating Timing												
Days After First/Last Applic.	26 26		26 26		26 26		26 26		35 9		54 28	
Trt-Eval Interval	26 DA-A		26 DA-A		26 DA-A		26 DA-A				54 DP-1	
Plant-Eval Interval	28 DP-1		28 DP-1		28 DP-1		28 DP-1		37 DP-1		56 DP-1	
Days After Emergence												
ARM Action Codes												
Number of Decimals												
Trt Treatment	Rate	Appl										
No. Name	Rate Unit	Code	1	2	3	4	5	6	7			
12 ANTHEM ATZ 4.5 SE	18 OZ A/A	A	0.0 a	100.0 a	76.8 a	97.5 a	0.0 a	0.0 a	100.0 a			
AMSOL	2.5 % V/V	B										
NIS	0.25 % V/V	B										
ACURON GT	32.3 OZ A/A	B										
LSD P=.05				1.45	19.55	3.84			2.57			
Standard Deviation	0.00			1.01	13.59	2.67	0.00	0.00	1.79			
CV	0.0			1.11	17.26	2.95	0.0	0.0	1.97			
Levene's F	0.00			0.831	1.134	1.788	0.00	0.00	0.944			
Levene's Prob(F)	0.00*			0.611	0.365	0.093	0.00*	0.00*	0.512			
Skewness				-3.105*	-1.92*	-3.0486*			-3.0889*			
Kurtosis				7.9921*	3.0427*	7.7567*			7.9261*			

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 Missing data estimates are included in columns: Yates=15,16,17,18,19
 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

	2 W Weed		1 W Weed		6 W Weed				2 W Weed	
Pest ID Code		DIGSA		AMBTR		AMACH				DIGSA
Pest Code		DIGSA		AMBTR		AMACH				DIGSA
Pest Scientific Name		Digitaria sangu>		Ambrosia trifida		Amaranthus hybr>				Digitaria sangu>
Pest Name		large crabgrass		Giant ragweed		Green pigweed				large crabgrass
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020	6-29-2020	6-29-2020
Rating Time										
SE Group No.	1	2	3	4	5	6	7			
SE Name										
SE Description										
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT C	PLANT C	PLANT P	PLANT P	PLANT P
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN	PHYGEN	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Sample Size										
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1	1	1	1
Crop Stage Scale										
Crop Stage Majority/Min/Max										
Crop Density										
Pest Stage Majority/Min/Max										
Pest Density										
Footnote Number										
Assessed By										
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	6-10-2020	6-10-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date										
Equipment										
Rating Timing										
Days After First/Last Applic.	26 26	26 26	26 26	26 26	26 26	35 9	54 28	54 28	54 28	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A	26 DA-A					
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1
Days After Emergence										
ARM Action Codes										
Number of Decimals										
Trt Treatment										
No. Name	1	2	3	4	5	6	7			
Rate										
Rate Unit										
Appl Code										
Replicate F	0.000	3.449	1.914	4.186	0.000	0.000	2.704			
Replicate Prob(F)	1.0000	0.0276	0.1465	0.0129	1.0000	1.0000	0.0613			
Treatment F	0.000	3247.011	14.664	458.204	0.000	0.000	1024.693			
Treatment Prob(F)	1.0000	0.0001	0.0001	0.0001	1.0000	1.0000	0.0001			

Means followed by same letter or symbol do not significantly differ (P=,05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=15,16,17,18,19
 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

	1 W Weed		6 W Weed		2 W Weed		1 W Weed		6 W Weed		3 W Weed		7 W Weed	
	AMBTR		AMACH		DIGSA		AMBTR		AMACH		IPOSS		SORHA	
Pest Scientific Name	Ambrosia trifida		Amaranthus hybr>		Digitaria sangu>		Ambrosia trifida		Amaranthus hybr>		Ipomoea sp.		Sorghum halepen>	
Pest Name	Giant ragweed		Green pigweed		large crabgrass		Giant ragweed		Green pigweed		Morning glory		Johnson grass	
Crop ID Code	1 ZEAMD		1 ZEAMD		1 ZEAMD		1 ZEAMD		1 ZEAMD		1 ZEAMD		1 ZEAMD	
BBCH Scale	BCOR		BCOR		BCOR		BCOR		BCOR		BCOR		BCOR	
Crop Scientific Name	Zea mays indent>		Zea mays indent>		Zea mays indent>		Zea mays indent>		Zea mays indent>		Zea mays indent>		Zea mays indent>	
Crop Name	Dent corn		Dent corn		Dent corn		Dent corn		Dent corn		Dent corn		Dent corn	
Crop Variety	Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM	
Rating Date	6-29-2020		6-29-2020		7-29-2020		7-29-2020		7-29-2020		7-29-2020		7-29-2020	
Rating Time														
SE Group No.	8		9		10		11		12		13		14	
SE Name														
SE Description														
Part Rated	PLANT P		PLANT P		PLANT P		PLANT P		PLANT P		PLANT P		PLANT P	
Rating Type	CONTRO		CONTRO		CONTRO		CONTRO		CONTRO		CONTRO		CONTRO	
Rating Unit	%		%		%		%		%		%		%	
Calculation	NC		NC		NC		NC		NC		NC		NC	
Sample Size														
Collection Basis	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT
Reporting Basis	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT
Number of Subsamples	1		1		1		1		1		1		1	
Crop Stage Scale														
Crop Stage Majority/Min/Max														
Crop Density														
Pest Stage Majority/Min/Max														
Pest Density														
Footnote Number														
Assessed By														
Data Entry Date	10-2-2020		10-2-2020		10-2-2020		10-2-2020		10-2-2020		10-2-2020		10-2-2020	
First Export Date														
Equipment														
Rating Timing														
Days After First/Last Applic.	54	28	54	28	84	58	84	58	84	58	84	58	84	58
Trt-Eval Interval														
Plant-Eval Interval	56 DP-1		56 DP-1		86 DP-1		86 DP-1		86 DP-1		86 DP-1		86 DP-1	
Days After Emergence														
ARM Action Codes													ER4	
Number of Decimals														
Trt Treatment														
No. Name	8		9		10		11		12		13		14	
Rate Unit	0.0 b		0.0 b		0.0 b		0.0 b		0.0 b		0.0 b		0.0 b	
Appl Code														
1 UNTREATED CHECK														

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=15,16,17,18,19
 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

	1 W Weed	6 W Weed	2 W Weed	1 W Weed	6 W Weed	3 W Weed	7 W Weed
Pest ID Code	1 W Weed	6 W Weed	2 W Weed	1 W Weed	6 W Weed	3 W Weed	7 W Weed
Pest Code	AMBTR	AMACH	DIGSA	AMBTR	AMACH	IPOSS	SORHA
Pest Scientific Name	Ambrosia trifida	Amaranthus hybr>	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>	Ipomoea sp.	Sorghum halepen>
Pest Name	Giant ragweed	Green pigweed	large crabgrass	Giant ragweed	Green pigweed	Morning glory	Johnson grass
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020
Rating Time							
SE Group No.	8	9	10	11	12	13	14
SE Name							
SE Description							
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC	NC
Sample Size							
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1
Crop Stage Scale							
Crop Stage Majority/Min/Max							
Crop Density							
Pest Stage Majority/Min/Max							
Pest Density							
Footnote Number							
Assessed By							
Data Entry Date	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date							
Equipment							
Rating Timing							
Days After First/Last Applic.	54 28	54 28	84 58	84 58	84 58	84 58	84 58
Trt-Eval Interval							
Plant-Eval Interval	56 DP-1	56 DP-1	86 DP-1	86 DP-1	86 DP-1	86 DP-1	86 DP-1
Days After Emergence							
ARM Action Codes							ER4
Number of Decimals							
Trt Treatment							
No. Name	8	9	10	11	12	13	14
Rate							
Rate Unit							
Appl Code							
2 BICEP II MAGNUM	35.3 OZ A/A A	100.0 a	100.0 a	99.3 a	100.0 a	92.5 a	99.0 a
AMSOL	2.5 % V/V B						
NIS	0.25 % V/V B						
ACURON GT	32.3 OZ A/A B						
3 LEXAR EZ 3.7 ZC	26.7 OZ A/A A	100.0 a	100.0 a	99.3 a	100.0 a	93.8 a	96.7 a
AMSOL	2.5 % V/V B						
NIS	0.25 % V/V B						
ACURON GT	32.3 OZ A/A B						

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=15,16,17,18,19
 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

	1 W Weed	6 W Weed	2 W Weed	1 W Weed	6 W Weed	3 W Weed	7 W Weed
Pest ID Code	AMBTR	AMACH	DIGSA	AMBTR	AMACH	IPOSS	SORHA
Pest Code	AMBTR	AMACH	DIGSA	AMBTR	AMACH	IPOSS	SORHA
Pest Scientific Name	Ambrosia trifida	Amaranthus hybr>	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>	Ipomoea sp.	Sorghum halepen>
Pest Name	Giant ragweed	Green pigweed	large crabgrass	Giant ragweed	Green pigweed	Morning glory	Johnson grass
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020
Rating Time							
SE Group No.	8	9	10	11	12	13	14
SE Name							
SE Description							
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC	NC
Sample Size							
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1
Crop Stage Scale							
Crop Stage Majority/Min/Max							
Crop Density							
Pest Stage Majority/Min/Max							
Pest Density							
Footnote Number							
Assessed By							
Data Entry Date	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date							
Equipment							
Rating Timing							
Days After First/Last Applic.	54 28	54 28	84 58	84 58	84 58	84 58	84 58
Trt-Eval Interval							
Plant-Eval Interval	56 DP-1	56 DP-1	86 DP-1	86 DP-1	86 DP-1	86 DP-1	86 DP-1
Days After Emergence							
ARM Action Codes							ER4
Number of Decimals							
Trt Treatment							
No. Name	8	9	10	11	12	13	14
Rate							
Rate Unit							
Appl Code							
4 SURESTART II 4.25 SC	14.8 OZ A/A A	100.0 a	100.0 a	95.0 a	100.0 a	94.5 a	95.7 a
AMSOL	2.5 % V/V B						
NIS	0.25 % V/V B						
ACURON GT	32.3 OZ A/A B						
5 HARNESS XTRA 5.6L	40.4 OZ A/A A	100.0 a	99.3 a	100.0 a	100.0 a	93.8 a	97.3 a
AMSOL	2.5 % V/V B						
NIS	0.25 % V/V B						
ACURON GT	32.3 OZ A/A B						

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=15,16,17,18,19
 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

	1 W Weed	6 W Weed	2 W Weed	1 W Weed	6 W Weed	3 W Weed	7 W Weed
Pest ID Code	AMBTR	AMACH	DIGSA	AMBTR	AMACH	IPOSS	SORHA
Pest Code	AMBTR	AMACH	DIGSA	AMBTR	AMACH	IPOSS	SORHA
Pest Scientific Name	Ambrosia trifida	Amaranthus hybr>	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>	Ipomoea sp.	Sorghum halepen>
Pest Name	Giant ragweed	Green pigweed	large crabgrass	Giant ragweed	Green pigweed	Morning glory	Johnson grass
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020
Rating Time							
SE Group No.	8	9	10	11	12	13	14
SE Name							
SE Description							
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC	NC
Sample Size							
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1
Crop Stage Scale							
Crop Stage Majority/Min/Max							
Crop Density							
Pest Stage Majority/Min/Max							
Pest Density							
Footnote Number							
Assessed By							
Data Entry Date	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date							
Equipment							
Rating Timing							
Days After First/Last Applic.	54 28	54 28	84 58	84 58	84 58	84 58	84 58
Trt-Eval Interval							
Plant-Eval Interval	56 DP-1	56 DP-1	86 DP-1	86 DP-1	86 DP-1	86 DP-1	86 DP-1
Days After Emergence							
ARM Action Codes							ER4
Number of Decimals							
Trt Treatment							
No. Name	8	9	10	11	12	13	14
Rate							
Rate Unit							
Appl Code							
6 VERDICT 5.57 EC	100.0 a	100.0 a	99.3 a	100.0 a	100.0 a	95.8 a	100.0 a
AMSOL							
NIS							
ACURON GT							
7 SURESTART II 4.25 SC	96.3 a	100.0 a	100.0 a	96.3 a	100.0 a	90.0 a	100.0 a
AMSOL							
RESICORE 3.29 SC							
ROUNDUP POWERMAX 5.5 SL							

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=15,16,17,18,19
 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

	1 W Weed	6 W Weed	2 W Weed	1 W Weed	6 W Weed	3 W Weed	7 W Weed
Pest ID Code	1 W Weed	6 W Weed	2 W Weed	1 W Weed	6 W Weed	3 W Weed	7 W Weed
Pest Code	AMBTR	AMACH	DIGSA	AMBTR	AMACH	IPOSS	SORHA
Pest Scientific Name	Ambrosia trifida	Amaranthus hybr>	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>	Ipomoea sp.	Sorghum halepen>
Pest Name	Giant ragweed	Green pigweed	large crabgrass	Giant ragweed	Green pigweed	Morning glory	Johnson grass
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020
Rating Time							
SE Group No.	8	9	10	11	12	13	14
SE Name							
SE Description							
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC	NC
Sample Size							
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1
Crop Stage Scale							
Crop Stage Majority/Min/Max							
Crop Density							
Pest Stage Majority/Min/Max							
Pest Density							
Footnote Number							
Assessed By							
Data Entry Date	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date							
Equipment							
Rating Timing							
Days After First/Last Applic.	54 28	54 28	84 58	84 58	84 58	84 58	84 58
Trt-Eval Interval							
Plant-Eval Interval	56 DP-1	56 DP-1	86 DP-1	86 DP-1	86 DP-1	86 DP-1	86 DP-1
Days After Emergence							
ARM Action Codes							ER4
Number of Decimals							
Trt Treatment							
No. Name	8	9	10	11	12	13	14
Rate							
Rate Unit							
Appl Code							
8 HARNESS XTRA 5.6L	40.4 OZ AI/A A						
AMSOL	2.5 % V/V B						
LAUDIS 3.5 SC	1.31 OZ AI/A B						
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A B						
SUPERB HC	0.5 % V/V B						
9 VERDICT 5.57 EC	9.7 OZ AI/A A						
AMSOL	2.5 % V/V B						
ARMEZON PRO	13.4 OZ AI/A B						
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A B						

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=15,16,17,18,19
 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

	1 W Weed	6 W Weed	2 W Weed	1 W Weed	6 W Weed	3 W Weed	7 W Weed
Pest ID Code	AMBTR	AMACH	DIGSA	AMBTR	AMACH	IPOSS	SORHA
Pest Code	AMBTR	AMACH	DIGSA	AMBTR	AMACH	IPOSS	SORHA
Pest Scientific Name	Ambrosia trifida	Amaranthus hybr>	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>	Ipomoea sp.	Sorghum halepen>
Pest Name	Giant ragweed	Green pigweed	large crabgrass	Giant ragweed	Green pigweed	Morning glory	Johnson grass
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020
Rating Time							
SE Group No.	8	9	10	11	12	13	14
SE Name							
SE Description							
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC	NC
Sample Size							
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1
Crop Stage Scale							
Crop Stage Majority/Min/Max							
Crop Density							
Pest Stage Majority/Min/Max							
Pest Density							
Footnote Number							
Assessed By							
Data Entry Date	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date							
Equipment							
Rating Timing							
Days After First/Last Applic.	54 28	54 28	84 58	84 58	84 58	84 58	84 58
Trt-Eval Interval							
Plant-Eval Interval	56 DP-1	56 DP-1	86 DP-1	86 DP-1	86 DP-1	86 DP-1	86 DP-1
Days After Emergence							
ARM Action Codes							ER4
Number of Decimals							
Trt Treatment							
No. Name	8	9	10	11	12	13	14
Rate							
Rate Unit							
Appl Code							
10 HARNESS MAX 3.85 SC	30.8 OZ AI/A A	100.0 a	100.0 a	97.5 a	100.0 a	100.0 a	85.0 a
AMSOL	2.5 % V/V B						
CAPRENO 3.45 SC	1.29 OZ AI/A B						
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A B						
COC	1 % V/V B						
							91.7 a

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=15,16,17,18,19
 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

	1 W Weed	6 W Weed	2 W Weed	1 W Weed	6 W Weed	3 W Weed	7 W Weed
Pest ID Code	AMBTR	AMACH	DIGSA	AMBTR	AMACH	IPOSS	SORHA
Pest Code	AMBTR	AMACH	DIGSA	AMBTR	AMACH	IPOSS	SORHA
Pest Scientific Name	Ambrosia trifida	Amaranthus hybr>	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>	Ipomoea sp.	Sorghum halepen>
Pest Name	Giant ragweed	Green pigweed	large crabgrass	Giant ragweed	Green pigweed	Morning glory	Johnson grass
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020
Rating Time							
SE Group No.	8	9	10	11	12	13	14
SE Name							
SE Description							
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC	NC
Sample Size							
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1
Crop Stage Scale							
Crop Stage Majority/Min/Max							
Crop Density							
Pest Stage Majority/Min/Max							
Pest Density							
Footnote Number							
Assessed By							
Data Entry Date	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date							
Equipment							
Rating Timing							
Days After First/Last Applic.	54 28	54 28	84 58	84 58	84 58	84 58	84 58
Trt-Eval Interval							
Plant-Eval Interval	56 DP-1	56 DP-1	86 DP-1	86 DP-1	86 DP-1	86 DP-1	86 DP-1
Days After Emergence							
ARM Action Codes							ER4
Number of Decimals							
Trt Treatment							
No. Name	8	9	10	11	12	13	14
Rate							
Rate Unit							
Appl Code							
11 BICEP II MAGNUM	35.3 OZ AI/A A	97.5 a	100.0 a	96.0 a	95.0 a	100.0 a	86.3 a
AMSOL	2.5 % V/V B						95.0 a
IMPACTZ	4.26 OZ AI/A B						
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A B						
MSO	1 % V/V B						

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 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=15,16,17,18,19
 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

	1 W Weed	6 W Weed	2 W Weed	1 W Weed	6 W Weed	3 W Weed	7 W Weed
Pest ID Code	1 W Weed	6 W Weed	2 W Weed	1 W Weed	6 W Weed	3 W Weed	7 W Weed
Pest Code	AMBTR	AMACH	DIGSA	AMBTR	AMACH	IPOSS	SORHA
Pest Scientific Name	Ambrosia trifida	Amaranthus hybr>	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>	Ipomoea sp.	Sorghum halepen>
Pest Name	Giant ragweed	Green pigweed	large crabgrass	Giant ragweed	Green pigweed	Morning glory	Johnson grass
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020
Rating Time							
SE Group No.	8	9	10	11	12	13	14
SE Name							
SE Description							
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC	NC
Sample Size							
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1
Crop Stage Scale							
Crop Stage Majority/Min/Max							
Crop Density							
Pest Stage Majority/Min/Max							
Pest Density							
Footnote Number							
Assessed By							
Data Entry Date	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date							
Equipment							
Rating Timing							
Days After First/Last Applic.	54 28	54 28	84 58	84 58	84 58	84 58	84 58
Trt-Eval Interval							
Plant-Eval Interval	56 DP-1	56 DP-1	86 DP-1	86 DP-1	86 DP-1	86 DP-1	86 DP-1
Days After Emergence							
ARM Action Codes							ER4
Number of Decimals							
Trt Treatment	Rate	Rate	Rate	Rate	Rate	Rate	Rate
No. Name	Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit
	Appl Code	Appl Code	Appl Code	Appl Code	Appl Code	Appl Code	Appl Code
	8	9	10	11	12	13	14
12 ANTHEM ATZ 4.5 SE	18 OZ AI/A A	95.5 a	100.0 a	100.0 a	94.5 a	100.0 a	94.8 a
AMSOL	2.5 % V/V B						
NIS	0.25 % V/V B						
ACURON GT	32.3 OZ AI/A B						
LSD P=.05	6.44	.	2.84	6.99	.	11.54	7.62
Standard Deviation	4.48	0.00	1.97	4.86	0.00	8.02	4.50
CV	4.99	0.0	2.17	5.46	0.0	9.62	5.1
Levene's F	1.363	0.00	1.177	1.727	0.00	0.918	1.559
Levene's Prob(F)	0.232	0.00*	0.336	0.107	0.00*	0.534	0.175
Skewness	-2.9802*	-3.1133*	-3.0782*	-2.9469*	-3.1133*	-2.6452*	-2.9546*
Kurtosis	7.4524*	8.0253*	7.8811*	7.3247*	8.0253*	6.0798*	7.5452*

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 Missing data estimates are included in columns: Yates=15,16,17,18,19
 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

Pest ID Code	1 W Weed	6 W Weed	2 W Weed	1 W Weed	6 W Weed	3 W Weed	7 W Weed
Pest Code	AMBTR	AMACH	DIGSA	AMBTR	AMACH	IPOSS	SORHA
Pest Scientific Name	Ambrosia trifida	Amaranthus hybr>	Digitaria sangu>	Ambrosia trifida	Amaranthus hybr>	Ipomoea sp.	Sorghum halepen>
Pest Name	Giant ragweed	Green pigweed	large crabgrass	Giant ragweed	Green pigweed	Morning glory	Johnson grass
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020	7-29-2020
Rating Time							
SE Group No.	8	9	10	11	12	13	14
SE Name							
SE Description							
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC	NC
Sample Size							
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1	1
Crop Stage Scale							
Crop Stage Majority/Min/Max							
Crop Density							
Pest Stage Majority/Min/Max							
Pest Density							
Footnote Number							
Assessed By							
Data Entry Date	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020	10-2-2020
First Export Date							
Equipment							
Rating Timing							
Days After First/Last Applic.	54 28	54 28	84 58	84 58	84 58	84 58	84 58
Trt-Eval Interval							
Plant-Eval Interval	56 DP-1	56 DP-1	86 DP-1	86 DP-1	86 DP-1	86 DP-1	86 DP-1
Days After Emergence							
ARM Action Codes							ER4
Number of Decimals							
Trt Treatment							
No. Name	8	9	10	11	12	13	14
Rate							
Rate Unit							
Appl Code							
Replicate F	1.000	0.000	3.352	1.205	0.000	1.874	3.230
Replicate Prob(F)	0.4051	1.0000	0.0306	0.3234	1.0000	0.1532	0.0589
Treatment F	160.418	0.000	842.287	134.384	0.000	43.731	115.981
Treatment Prob(F)	0.0001	1.0000	0.0001	0.0001	1.0000	0.0001	0.0001

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Missing data estimates are included in columns: Yates=15,16,17,18,19
Excluded replicate 4 in column 14
Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

Pest ID Code					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time					
SE Group No.	15	16	17	18	19
SE Name					
SE Description					
Part Rated	GRAIN C	GRAIN C	GRAIN C	GRAIN C	GRAIN C
Rating Type	WEIGHT	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	LB	%	LB	FT	BU
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT				1 A
Collection Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Reporting Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	1 A
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number					
Assessed By					
Data Entry Date	11-5-2020	11-5-2020	11-5-2020	11-5-2020	
First Export Date					
Equipment					
Rating Timing					
Days After First/Last Applic.	154 128	154 128	154 128	154 128	154 128
Trt-Eval Interval					
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence					
ARM Action Codes	EC				EC TY1
Number of Decimals					1
Trt Treatment					
No. Name	Rate	Appl			
	Rate Unit	Code			
1 UNTREATED CHECK	15	16	17	18	19
	20.215	16.25 a	53.93 a	23.843 a	131.2

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 Missing data estimates are included in columns: Yates=15,16,17,18,19
 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

Pest ID Code					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time					
SE Group No.	15	16	17	18	19
SE Name					
SE Description					
Part Rated	GRAIN C	GRAIN C	GRAIN C	GRAIN C	GRAIN C
Rating Type	WEIGHT	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	LB	%	LB	FT	BU
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT				1 A
Collection Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Reporting Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	1 A
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number					
Assessed By					
Data Entry Date	11-5-2020	11-5-2020	11-5-2020	11-5-2020	
First Export Date					
Equipment					
Rating Timing					
Days After First/Last Applic.	154 128	154 128	154 128	154 128	154 128
Trt-Eval Interval					
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence					
ARM Action Codes	EC				EC TY1
Number of Decimals					1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	15	16	17
2 BICEP II MAGNUM	35.3 OZ A/A	A	31.305 a	16.12 a	57.47 a
AMSOL	2.5 % V/V	B			23.991 a
NIS	0.25 % V/V	B			
ACURON GT	32.3 OZ A/A	B			201.7 a
3 LEXAR EZ 3.7 ZC	26.7 OZ A/A	A	31.638 a	17.15 a	55.78 a
AMSOL	2.5 % V/V	B			24.038 a
NIS	0.25 % V/V	B			
ACURON GT	32.3 OZ A/A	B			200.6 a

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Excluded replicate 4 in column 14
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University of Kentucky

Pest ID Code					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time					
SE Group No.	15	16	17	18	19
SE Name					
SE Description					
Part Rated	GRAIN C	GRAIN C	GRAIN C	GRAIN C	GRAIN C
Rating Type	WEIGHT	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	LB	%	LB	FT	BU
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT				1 A
Collection Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Reporting Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	1 A
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number					
Assessed By					
Data Entry Date	11-5-2020	11-5-2020	11-5-2020	11-5-2020	
First Export Date					
Equipment					
Rating Timing					
Days After First/Last Applic.	154 128	154 128	154 128	154 128	154 128
Trt-Eval Interval					
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence					
ARM Action Codes	EC				EC TY1
Number of Decimals					1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	15	16	17
4 SURESTART II 4.25 SC	14.8 OZ A/A	A	30.973 a	16.53 a	55.85 a
AMSOL	2.5 % V/V	B			23.833 a
NIS	0.25 % V/V	B			
ACURON GT	32.3 OZ A/A	B			
5 HARNESS XTRA 5.6L	40.4 OZ A/A	A	31.523 a	16.48 a	56.65 a
AMSOL	2.5 % V/V	B			24.180 a
NIS	0.25 % V/V	B			
ACURON GT	32.3 OZ A/A	B			

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Excluded replicate 4 in column 14
Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

Pest ID Code					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time					
SE Group No.	15	16	17	18	19
SE Name					
SE Description					
Part Rated	GRAIN C	GRAIN C	GRAIN C	GRAIN C	GRAIN C
Rating Type	WEIGHT	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	LB	%	LB	FT	BU
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT				1 A
Collection Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Reporting Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	1 A
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number					
Assessed By					
Data Entry Date	11-5-2020	11-5-2020	11-5-2020	11-5-2020	
First Export Date					
Equipment					
Rating Timing					
Days After First/Last Applic.	154 128	154 128	154 128	154 128	154 128
Trt-Eval Interval					
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence					
ARM Action Codes	EC				EC TY1
Number of Decimals					1
Trt Treatment	Rate	Rate	Rate	Rate	Rate
No. Name	Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit
	Appl Code	Appl Code	Appl Code	Appl Code	Appl Code
6 VERDICT 5.57 EC	9.7 OZ A/A A	31.528 a	16.78 a	56.68 a	24.153 a
AMSOL	2.5 % V/V B				200.0 a
NIS	0.25 % V/V B				
ACURON GT	32.3 OZ A/A B				
7 SURESTART II 4.25 SC	14.8 OZ A/A A	33.148 a	16.23 a	55.83 a	24.100 a
AMSOL	2.5 % V/V B				212.2 a
RESICORE 3.29 SC	16.4 OZ A/A B				
ROUNDUP POWERMAX 5.5 SL	18.3 OZ A/A B				

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 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

Pest ID Code					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time					
SE Group No.	15	16	17	18	19
SE Name					
SE Description					
Part Rated	GRAIN C	GRAIN C	GRAIN C	GRAIN C	GRAIN C
Rating Type	WEIGHT	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	LB	%	LB	FT	BU
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT				1 A
Collection Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Reporting Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	1 A
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number					
Assessed By					
Data Entry Date	11-5-2020	11-5-2020	11-5-2020	11-5-2020	
First Export Date					
Equipment					
Rating Timing					
Days After First/Last Applic.	154 128	154 128	154 128	154 128	154 128
Trt-Eval Interval					
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence					
ARM Action Codes	EC				EC TY1
Number of Decimals					1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	15	16	17
8 HARNESS XTRA 5.6L	40.4 OZ AI/A	A	31.302 a	16.92 a	55.10 a
AMSOL	2.5 % V/V	B			
LAUDIS 3.5 SC	1.31 OZ AI/A	B			
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A	B			
SUPERB HC	0.5 % V/V	B			
9 VERDICT 5.57 EC	9.7 OZ AI/A	A	30.943 a	16.48 a	54.55 a
AMSOL	2.5 % V/V	B			
ARMEZON PRO	13.4 OZ AI/A	B			
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A	B			

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 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=15,16,17,18,19
 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

Pest ID Code					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time					
SE Group No.	15	16	17	18	19
SE Name					
SE Description					
Part Rated	GRAIN C	GRAIN C	GRAIN C	GRAIN C	GRAIN C
Rating Type	WEIGHT	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	LB	%	LB	FT	BU
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT				1 A
Collection Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Reporting Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	1 A
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number					
Assessed By					
Data Entry Date	11-5-2020	11-5-2020	11-5-2020	11-5-2020	
First Export Date					
Equipment					
Rating Timing					
Days After First/Last Applic.	154 128	154 128	154 128	154 128	154 128
Trt-Eval Interval					
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence					
ARM Action Codes	EC				EC TY1
Number of Decimals					1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	15	16	17
10 HARNESS MAX 3.85 SC	30.8 OZ AI/A	A	30.275 a	16.40 a	55.90 a
AMSOL	2.5 % V/V	B			24.055 a
CAPRENO 3.45 SC	1.29 OZ AI/A	B			
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A	B			
COC	1 % V/V	B			193.7 a

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 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

Pest ID Code							
Pest Code							
Pest Scientific Name							
Pest Name							
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD		
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR		
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>		
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn		
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM		
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020		
Rating Time							
SE Group No.	15	16	17	18	19		
SE Name							
SE Description							
Part Rated	GRAIN C	GRAIN C	GRAIN C	GRAIN C	GRAIN C		
Rating Type	WEIGHT	CONMOI	WEITES	LENGTH	YIELD		
Rating Unit	LB	%	LB	FT	BU		
Calculation	NC	NC	NC	NC	NC		
Sample Size	1 PLOT				1 A		
Collection Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU		
Reporting Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	1 A		
Number of Subsamples	1	1	1	1	1		
Crop Stage Scale							
Crop Stage Majority/Min/Max							
Crop Density							
Pest Stage Majority/Min/Max							
Pest Density							
Footnote Number							
Assessed By							
Data Entry Date	11-5-2020	11-5-2020	11-5-2020	11-5-2020			
First Export Date							
Equipment							
Rating Timing							
Days After First/Last Applic.	154 128	154 128	154 128	154 128	154 128		
Trt-Eval Interval							
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1		
Days After Emergence							
ARM Action Codes	EC				EC TY1		
Number of Decimals					1		
Trt Treatment							
No. Name	Rate Unit	Appl Code	15	16	17	18	19
11 BICEP II MAGNUM	35.3 OZ AI/A	A	31.405 a	16.13 a	54.08 a	24.070 a	201.8 a
AMSOL	2.5 % V/V	B					
IMPACTZ	4.26 OZ AI/A	B					
ROUNDUP POWERMAX 5.5 SL	18.3 OZ AI/A	B					
MSO	1 % V/V	B					

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 Excluded replicate 4 in column 14
 Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

Pest ID Code					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time					
SE Group No.	15	16	17	18	19
SE Name					
SE Description					
Part Rated	GRAIN C	GRAIN C	GRAIN C	GRAIN C	GRAIN C
Rating Type	WEIGHT	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	LB	%	LB	FT	BU
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT				1 A
Collection Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU
Reporting Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	1 A
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number					
Assessed By					
Data Entry Date	11-5-2020	11-5-2020	11-5-2020	11-5-2020	
First Export Date					
Equipment					
Rating Timing					
Days After First/Last Applic.	154 128	154 128	154 128	154 128	154 128
Trt-Eval Interval					
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence					
ARM Action Codes	EC				EC TY1
Number of Decimals					1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	15	16	17
12 ANTHEM ATZ 4.5 SE	18 OZ AI/A	A	31.332 a	16.30 a	56.56 a
AMSOL	2.5 % V/V	B			24.071 a
NIS	0.25 % V/V	B			200.2 a
ACURON GT	32.3 OZ AI/A	B			
LSD P=.05	3.0664		1.432	3.405	0.6068
Standard Deviation	2.1135		0.992	2.358	0.4202
CV	6.73		6.02	4.23	1.75
Levene's F	0.771		1.449	0.809	1.081
Levene's Prob(F)	0.655		0.198	0.631	0.405
Skewness	-0.4981		-0.1615	-1.2722*	-0.3226
Kurtosis	-0.4579		1.2935	1.0472	0.3664

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Excluded replicate 4 in column 14
Could not calculate LSD (% mean diff) for columns 1,5,6,9,12 because error mean square = 0.

University of Kentucky

Pest ID Code							
Pest Code							
Pest Scientific Name							
Pest Name							
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD		
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR		
Crop Scientific Name	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>	Zea mays indent>		
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn		
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM		
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020		
Rating Time							
SE Group No.	15	16	17	18	19		
SE Name							
SE Description							
Part Rated	GRAIN C	GRAIN C	GRAIN C	GRAIN C	GRAIN C		
Rating Type	WEIGHT	CONMOI	WEITES	LENGTH	YIELD		
Rating Unit	LB	%	LB	FT	BU		
Calculation	NC	NC	NC	NC	NC		
Sample Size	1 PLOT				1 A		
Collection Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU		
Reporting Basis	2 ROWNU	2 ROWNU	2 ROWNU	2 ROWNU	1 A		
Number of Subsamples	1	1	1	1	1		
Crop Stage Scale							
Crop Stage Majority/Min/Max							
Crop Density							
Pest Stage Majority/Min/Max							
Pest Density							
Footnote Number							
Assessed By							
Data Entry Date	11-5-2020	11-5-2020	11-5-2020	11-5-2020			
First Export Date							
Equipment							
Rating Timing							
Days After First/Last Applic.	154 128	154 128	154 128	154 128	154 128		
Trt-Eval Interval							
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1		
Days After Emergence							
ARM Action Codes	EC				EC TY1		
Number of Decimals					1		
Trt Treatment							
No. Name	Rate Rate Unit	Appl Code	15	16	17	18	19
Replicate F	11.193	0.408	1.940	0.855	12.124		
Replicate Prob(F)	0.0001	0.7481	0.1444	0.4751	0.0001		
Treatment F	0.432	0.424	0.868	0.289	0.498		
Treatment Prob(F)	0.9178	0.9335	0.5793	0.9833	0.8765		

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University of Kentucky

Acuron GT: Evaluation of weed control, crop tolerance and yield in a two pass system - Mid and South University (20-9_COR-REC)

Trial ID: USNG0H3542020 Location: Cully Scott FS Trial Year: 2020
 Protocol ID: HBI008A4-2020US Investigator (Creator): Scott Cully
 Master Protocol ID: Study Director: Travis Legleiter
 Official Trial ID: Sponsor Contact:
 Conducted Under GEP: No Trial Origin: P public institution trial

Pest ID Code

2, W, Weed, DIGSA, Digitaria sanguinalis, large crabgrass, = N
 1, W, Weed, AMBTR, Ambrosia trifida, Giant ragweed, = N
 6, W, Weed, AMACH, Amaranthus hybridus, Green pigweed, = N
 3, W, Weed, IPOSS, Ipomoea sp., Morning glory, = N
 7, W, Weed, SORHA, Sorghum halepense, Johnson grass, = N

Crop ID Code

1, ZEAMD, BCOR, Zea mays indentata, Dent corn, Pioneer P1077AM = RR/LL

Part Rated

PLANT = plant
 GRAIN = grain
 C = Crop is Part Rated
 P = Pest is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury
 CONTRO = control / burndown or knockdown
 WEIGHT = weight
 CONMOI = content - moisture
 WEITES = weight - test
 LENGTH = length
 YIELD = yield

Rating Unit

% = percent
 LB = pound
 FT = foot
 BU = bushel

Calculation

NC = no calculation

PLOT = total plot
 A = acre

PLOT = total plot
 ROWNU = number of rows

PLOT = total plot
 ROWNU = number of rows
 A = acre

Plant-Eval Interval

28 DP-1 = 1 ZEAMD 5-4-2020
 37 DP-1 = 1 ZEAMD 5-4-2020
 56 DP-1 = 1 ZEAMD 5-4-2020
 86 DP-1 = 1 ZEAMD 5-4-2020
 156 DP-1 = 1 ZEAMD 5-4-2020

ARM Action Codes

ER4 = Excluded replicate 4
 EC = Do not analyze untreated check, while still reporting treatment mean on AOV Means Table
 TY1 = $(777.8571 / (5 * [18])) * [15] * (100 - [16]) / 84.5$

University of Kentucky

Acuron XR and Acuron Flexi XR: Evaluation of weed control, crop tolerance, and yield - Medium/Fine soils <3% OM (20-10_COR-REC

Trial ID: USNG0H3512020 Location: Cully Scott FS Trial Year: 2020
 Protocol ID: HBI002B4-2020US Investigator (Creator): Scott Cully
 Master Protocol ID: Study Director: Travis Legleiter
 Official Trial ID: Sponsor Contact:
 Conducted Under GEP: No Trial Origin: P public institution trial

Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	Amt Product to Measure	Rep 1	2	3	4
1	UNTREATED CHECK									101	212	305	408
2	ACURON XR	424.57 gA/L		ZC	2980 g AI/ha			A	100.0 mL/mx	102	201	312	412
3	ACURON FLEXI XR	375.6 gA/L		ZC	2200 g AI/ha			A	83.49 mL/mx	103	205	314	410
4	RESICORE 3.29 SC	394.4 gA/L		SC	2310 g AI/ha			A	83.49 mL/mx	104	211	303	409
5	HARNESS MAX 3.85 SC	462 gA/L		SC	2530 g AI/ha			A	78.06 mL/mx	105	210	304	413
6	SURESTART II 4.25 SC	509.26 gA/L		SC	1490 g AI/ha			A	41.71 mL/mx	106	202	310	402
7	CORVUS 2.63 SC	315 gA/L		SC	129 g AI/ha			A	5.837 mL/mx	107	204	311	411
8	VERDICT 5.57 EC	667 gA/L		EC	731 g AI/ha			A	15.62 mL/mx	108	214	308	405
9	ACURON XR	424.57 gA/L		ZC	1490 g AI/ha			A	50.02 mL/mx	109	207	306	404
	AMSOL			SL	2.5 % V/V			B	50.0 mL/mx				
	ACURON XR	424.57 gA/L		ZC	1490 g AI/ha			B	50.02 mL/mx				
	ROUNDUP POWERMAX 4.5 SL	540 gAE/L		SL	868 g AE/ha			B	22.91 mL/mx				
10	ACURON FLEXI XR	375.6 gA/L		ZC	1100 g AI/ha			A	41.75 mL/mx	110	206	313	401
	AMSOL			SL	2.5 % V/V			B	50.0 mL/mx				
	ACURON FLEXI XR	375.6 gA/L		ZC	1100 g AI/ha			B	41.75 mL/mx				
	ROUNDUP POWERMAX 4.5 SL	540 gAE/L		SL	868 g AE/ha			B	22.91 mL/mx				
11	RESICORE 3.29 SC	394.4 gA/L		SC	1150 g AI/ha			A	41.56 mL/mx	111	213	307	403
	AMSOL			SL	2.5 % V/V			B	50.0 mL/mx				
	RESICORE 3.29 SC	394.4 gA/L		SC	1150 g AI/ha			B	41.56 mL/mx				
	ROUNDUP POWERMAX 4.5 SL	540 gAE/L		SL	868 g AE/ha			B	22.91 mL/mx				
12	HARNESS MAX 3.85 SC	462 gA/L		SC	1180 g AI/ha			A	36.41 mL/mx	112	203	309	406
	AMSOL			SL	2.5 % V/V			B	50.0 mL/mx				
	HARNESS MAX 3.85 SC	462 gA/L		SC	1350 g AI/ha			B	41.65 mL/mx				
	ROUNDUP POWERMAX 4.5 SL	540 gAE/L		SL	868 g AE/ha			B	22.91 mL/mx				
13	VERDICT 5.57 EC	667 gA/L		EC	731 g AI/ha			A	15.62 mL/mx	113	209	301	414
	AMSOL			SL	2.5 % V/V			B	50.0 mL/mx				
	STATUS 61.1 WG	61.1 %AW/WG		WG	128 g AI/ha			B	2.986 g/mx				
	ROUNDUP POWERMAX 4.5 SL	540 gAE/L		SL	868 g AE/ha			B	22.91 mL/mx				
14	CORVUS 2.63 SC	315 gA/L		SC	76 g AI/ha			A	3.439 mL/mx	114	208	302	407
	AMSOL			SL	2.5 % V/V			B	50.0 mL/mx				
	CAPRENO 3.45 SC	413 gA/L		SC	90.5 g AI/ha			B	3.124 mL/mx				
	ROUNDUP POWERMAX 4.5 SL	540 gAE/L		SL	868 g AE/ha			B	22.91 mL/mx				
	SUPERB HC			SL	0.5 % V/V			B	10.0 mL/mx				

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

University of Kentucky

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
250.122	mL	ACURON XR	424.57	gA/L	ZC	
208.729	mL	ACURON FLEXI XR	375.6	gA/L	ZC	
208.266	mL	RESICORE 3.29 SC	394.4	gA/L	SC	
195.148	mL	HARNESS MAX 3.85 SC	462	gA/L	SC	
52.132	mL	SURESTART II 4.25 SC	509.26	gA/L	SC	
11.596	mL	CORVUS 2.63 SC	315	gA/L	SC	
39.055	mL	VERDICT 5.57 EC	667	gA/L	EC	
375.000	mL	AMSOL			SL	
171.843	mL	ROUNDUP POWERMAX 4.5 SL	540	gAE/L	SL	
3.733	g	STATUS 61.1 WG	61.1	%AW/W	WG	
3.904	mL	CAPRENO 3.45 SC	413	gA/L	SC	
12.500	mL	SUPERB HC			SL	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.

General Trial Information

Study Director: Travis Legleiter **Title:** Assistant Professor

Investigator: Scott Cully

Discipline: H herbicide
Trial Status: I one-year/interim

Trial Status Date: 10-12-2020 9:09 PM

Last Export Date: 10-12-2020 9:11 PM

Trial Reliability: 1 usable data

Last Changed By: Travis Legleiter

ARM Trial Created On: 4-2-2020

Trial Usage/Type: 0 Research and Development

Protocol Revision Number: 1.0

Protocol Revision Date: 4-2-2020

Trial Location

Address (Location): 348 University Drive

City: Princeton

Country: USA United States

State/Prov.: Kentucky KY

Postal Code: 42445

Latitude of LL Corner °: 37.096036 N

Longitude of LL Corner °: -87.855457 W USAKY 39.147732 -36.497058
-81.964788 -89.571203

Conducted Under GLP: No

Conducted Under GEP: No

Contacts

Role: STYDIR study director

Study Director: Travis Legleiter

Title: Assistant Professor

Organization: University of Kentucky

Address 1: 348 University Drive

E-mail: Travis.Legleiter@uky.edu

City: Princeton, KY

Postal Code: 42445

University of Kentucky

Role: INVEST investigator
Investigator: Scott Cully
Organization: Syngenta
Address 1: 17256 New Dennison Rd. **Phone No.:** 618-982-9224 **Mobile No.:** 618-751-0715
Country: USA United States **E-mail:** scott.cully@syngenta.com
City: Marion, IL **Postal Code:** 62959

Crop Description

Crop 1: C ZEAMX Zea mays Corn **Stage Scale:** BBCH **BBCH Scale:** BCOR
Variety: Pioneer P1077AM
Attributes: RR/LL
Planting Date: 5-4-2020 **Planting Rate:** 32000 S/A
Depth: 1.5 IN **Planting Method:** PLANTD planted
Rows per Plot: 4 **Planting Equipment:** VP vacuum planter
Row Spacing: 30 IN **Harvested Width:** 5 FT
% Standard Moisture: 15.5

Pest Description

- Pest 1 Type:** W **Code:** IPOSS Ipomoea sp.
Common Name: Morning glory **Stage Scale:** BBCH
Artificial Population: N
- Pest 2 Type:** W **Code:** DIGSS Digitaria sp.
Common Name: Crabgrass **Stage Scale:** BBCH
Artificial Population: N
- Pest 3 Type:** W **Code:** CERAR Cerastium arvense
Common Name: chickweed, field **Stage Scale:** BBCH
Artificial Population: N
- Pest 4 Type:** W **Code:** CYPES Cyperus esculentus
Common Name: nutsedge, yellow **Stage Scale:** BBCH
Artificial Population: N
- Pest 5 Type:** W **Code:** AMACH Amaranthus hybridus
Common Name: pigweed, smooth **Stage Scale:** BBCH
Artificial Population: N
- Pest 6 Type:** W **Code:** SIDSP Sida spinosa
Common Name: sida, prickly **Stage Scale:** BBCH
Artificial Population: N
- Pest 7 Type:** W **Code:** XANST Xanthium strumarium
Common Name: Common cocklebur **Stage Scale:** BBCH
Artificial Population: N
- Pest 8 Type:** W **Code:** OXAST Oxalis stricta
Common Name: European wood sorrel **Stage Scale:** BBCH
Artificial Population: N
- Pest 9 Type:** W **Code:** SORHA Sorghum halepense
Common Name: Johnson grass **Stage Scale:** BBCH
Artificial Population: N

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Site and Design	
Treated Plot Width: 10 FT	Total Plot Width: 10 FT
Treated Plot Length: 30 FT	Site Type: FIELD field
Treated Plot Area: 300.0 FT ²	Experimental Unit: 1 PLOT plot
Replications: 4	Treatments: 14
	Tillage Type: CONTIL conventional-till
	Study Design: RACOB� Randomized Complete Block (RCB)

Maintenance									
No.	Date	Type	Maintenance Product Name	Form Conc	Form Unit	Form Type	Description	Rate	Rate Unit
1.	3-26-2020	FERT	POTASSIUM				0-0-60	83.3	LB/A
2.	4-6-2020	FERT	DAP 18-46-00			XX		200	LB/A
3.	4-28-2020	FERT	UREA 46%	46	%AW/W	XX		370	LB/A
Field Prep./Maintenance:									
4/16/20- Diskedonce.									
5/4/20- One pass field cultivator.									

Soil Description	
Description Name: 201-D	Texture: SIL silt loam
% Sand: 3.4	% OM: 2.4
% Silt: 79.9	pH: 5.66
% Clay: 16.7	Soil Name: Crider Silt Loam
	CEC: 10.62

Application Description		
	A	B
Application Date	5-6-2020	6-1-2020
Appl. Start Time	8:51 AM	4:46 PM
Appl. Stop Time	9:36 AM	5:18 AM
Interval to Prev. Appl.		26 DAYS
Application Method	SPRAY	SPRAY
Application Timing	PREPRE	POSPOS
Application Placement	BROSOI	BROFOL
Applied By	Jesse Gray	Jesse Gray
Air Temperature Start, Stop	42.3 41.3 F	81 81.1 F
% Relative Humidity Start, Stop	77.8 71.3	27.8 33.6
Wind Velocity+Dir. Start	6.3 MPH NW	1.1 MPH E
Wind Velocity+Dir. Stop	3.6 MPH NW	0.7 MPH E
Wind Velocity+Dir. Max	8.9 MPH NW	3.7 MPH E
Wet Leaves (Y/N)	N no	N no
Soil Temperature	50 F	79 F
Soil Moisture	ABONOR	DRY
% Cloud Cover	100	2

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Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used	BBCH	BBCH
Stage Majority, Percent		14 80
Stage Minimum, Percent		13 20
Stage Maximum, Percent		14 80
Height Average		10.5 in
Height Minimum, Maximum		7 14

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale	IPOSS W BBCH	IPOSS W BBCH
Height Average		1.50 IN
Height Minimum, Maximum		1 2.25
Density Average		0.625 FT2
Density Minimum, Maximum		1 3
Pest 2 Code, Type, Scale	DIGSS W BBCH	DIGSS W BBCH
Height Average		1.67 IN
Height Minimum, Maximum		0.75 3.50
Density Average		4.25 FT2
Density Minimum, Maximum		1 16
Pest 3 Code, Type, Scale	CERAR W BBCH	CERAR W BBCH
Height Average		0.875 IN
Height Minimum, Maximum		0.75 1
Density Average		0.875 FT2
Density Minimum, Maximum		1 6
Pest 4 Code, Type, Scale	CYPES W BBCH	CYPES W BBCH
Height Average		0.75 IN
Height Minimum, Maximum		0 0.75
Density Average		0.125 FT2
Density Minimum, Maximum		0 1
Pest 5 Code, Type, Scale	AMACH W BBCH	AMACH W BBCH
Height Average		0.75 IN
Height Minimum, Maximum		0.50 1
Density Average		1.25 FT2
Density Minimum, Maximum		3 7
Pest 6 Code, Type, Scale	SIDSP W BBCH	SIDSP W BBCH
Height Average		0.375 IN
Height Minimum, Maximum		0.25 0.50
Density Average		0.25 FT2
Density Minimum, Maximum		0 2

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Pest 7 Code, Type, Scale	XANST W BBCH	XANST W BBCH
Height Average		1.75 IN
Height Minimum, Maximum		0 1.75
Density Average		0.125 FT2
Density Minimum, Maximum		0 1
Pest 8 Code, Type, Scale	OXAST W BBCH	OXAST W BBCH
Height Average		0.625 IN
Height Minimum, Maximum		0.125 1
Density Average		1 FT2
Density Minimum, Maximum		0 1
Pest 9 Code, Type, Scale	SORHA W BBCH	SORHA W BBCH
Height Average		10.94 IN
Height Minimum, Maximum		9.25 13
Density Average		1 FT2
Density Minimum, Maximum		0 8

Application Equipment

	A	B
Equipment Type	SPRBAC	SPRBAC
Operation Pressure	50 PSI	32 PSI
Nozzle Type	TEEJAI	FLAFAN
Nozzle Size	015	02
Nozzle Spacing	20 IN	20 IN
Boom ID	blue tape	white tape
Boom Length	10 FT	10 FT
Boom Height	18 IN	18 IN
Ground Speed	3 MPH	3 MPH
Carrier	WATER	
Minimum Mix/Treatment	1.564 L	1.564 L

University of Kentucky

Pest ID Code		2 W Weed	5 W Weed		
Pest Code		DIGSS	AMACH		
Pest Scientific Name		Digitaria sp.	Amaranthus hybr>		
Pest Name		Crabgrass	pigweed, smooth		
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020
Rating Time					
SE Group No.	16	17	18	19	27
SE Name	ZUSX001	ZUSW001	ZUSW001	ZUSX001	ZUSX001
SE Description	%PHYTO-GENERAL	%Control	%Control	%PHYTO-GENERAL	%PHYTO-GENERAL
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number					
Assessed By					
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	10-6-2020	10-6-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment					
Rating Timing					
Days After First/Last Applic.	26 26	26 26	26 26	35 9	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A		
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1
Days After Emergence					
ARM Action Codes		ET14			
Number of Decimals					
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	1	2	3
1 UNTREATED CHECK		101	0.0	0.0	0.0
		212	0.0	0.0	0.0
		305	0.0	0.0	0.0
		408	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0
2 ACURON XR	2980 g AI/ha A	102	0.0	100.0	100.0
		201	0.0	100.0	100.0
		312	0.0	100.0	100.0
		412	0.0	100.0	100.0
		Mean =	0.0	100.0	100.0

University of Kentucky

Pest ID Code		2 W Weed	5 W Weed		
Pest Code		DIGSS	AMACH		
Pest Scientific Name		Digitaria sp.	Amaranthus hybr>		
Pest Name		Crabgrass	pigweed, smooth		
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020
Rating Time					
SE Group No.	16	17	18	19	27
SE Name	ZUSX001	ZUSW001	ZUSW001	ZUSX001	ZUSX001
SE Description	%PHYTO-GENERAL	%Control	%Control	%PHYTO-GENERAL	%PHYTO-GENERAL
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number					
Assessed By					
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	10-6-2020	10-6-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment					
Rating Timing					
Days After First/Last Applic.	26 26	26 26	26 26	35 9	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A		
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1
Days After Emergence					
ARM Action Codes		ET14			
Number of Decimals					
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	1	2	3
3 ACURON FLEXI XR	2200 g AI/ha	A 103	0.0	100.0	100.0
		205	0.0	100.0	100.0
		314	0.0	100.0	100.0
		410	0.0	100.0	100.0
		Mean =	0.0	100.0	100.0
4 RESICORE 3.29 SC	2310 g AI/ha	A 104	0.0	100.0	100.0
		211	0.0	100.0	100.0
		303	0.0	100.0	100.0
		409	0.0	100.0	100.0
		Mean =	0.0	100.0	100.0

University of Kentucky

Pest ID Code		2 W Weed	5 W Weed		
Pest Code		DIGSS	AMACH		
Pest Scientific Name		Digitaria sp.	Amaranthus hybr>		
Pest Name		Crabgrass	pigweed, smooth		
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020
Rating Time					
SE Group No.	16	17	18	19	27
SE Name	ZUSX001	ZUSW001	ZUSW001	ZUSX001	ZUSX001
SE Description	%PHYTO-GENERAL	%Control	%Control	%PHYTO-GENERAL	%PHYTO-GENERAL
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number					
Assessed By					
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	10-6-2020	10-6-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment					
Rating Timing					
Days After First/Last Applic.	26 26	26 26	26 26	35 9	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A		
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1
Days After Emergence					
ARM Action Codes		ET14			
Number of Decimals					
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	1	2	3
5 HARNESS MAX 3.85 SC	2530 g AI/ha	A 105	0.0	97.0	100.0
		210	0.0	100.0	100.0
		304	0.0	97.0	100.0
		413	0.0	97.0	100.0
		Mean =	0.0	97.8	100.0
6 SURESTART II 4.25 SC	1490 g AI/ha	A 106	0.0	97.0	100.0
		202	0.0	100.0	100.0
		310	0.0	100.0	100.0
		402	0.0	100.0	100.0
		Mean =	0.0	99.3	100.0

University of Kentucky

Pest ID Code		2 W Weed	5 W Weed		
Pest Code		DIGSS	AMACH		
Pest Scientific Name		Digitaria sp.	Amaranthus hybr>		
Pest Name		Crabgrass	pigweed, smooth		
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020
Rating Time					
SE Group No.	16	17	18	19	27
SE Name	ZUSX001	ZUSW001	ZUSW001	ZUSX001	ZUSX001
SE Description	%PHYTO-GENERAL	%Control	%Control	%PHYTO-GENERAL	%PHYTO-GENERAL
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number					
Assessed By					
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	10-6-2020	10-6-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment					
Rating Timing					
Days After First/Last Applic.	26 26	26 26	26 26	35 9	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A		
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1
Days After Emergence					
ARM Action Codes		ET14			
Number of Decimals					
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	1	2	3
7 CORVUS 2.63 SC	129 g AI/ha	A 107	0.0	98.0	100.0
		204	0.0	100.0	97.0
		311	0.0	98.0	98.0
		411	0.0	100.0	100.0
		Mean =	0.0	99.0	98.8
8 VERDICT 5.57 EC	731 g AI/ha	A 108	0.0	95.0	100.0
		214	0.0	100.0	100.0
		308	0.0	95.0	100.0
		405	0.0	100.0	100.0
		Mean =	0.0	97.5	100.0

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Pest ID Code		2 W Weed	5 W Weed		
Pest Code		DIGSS	AMACH		
Pest Scientific Name		Digitaria sp.	Amaranthus hybr>		
Pest Name		Crabgrass	pigweed, smooth		
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020
Rating Time					
SE Group No.	16	17	18	19	27
SE Name	ZUSX001	ZUSW001	ZUSW001	ZUSX001	ZUSX001
SE Description	%PHYTO-GENERAL	%Control	%Control	%PHYTO-GENERAL	%PHYTO-GENERAL
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number					
Assessed By					
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	10-6-2020	10-6-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment					
Rating Timing					
Days After First/Last Applic.	26 26	26 26	26 26	35 9	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A		
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1
Days After Emergence					
ARM Action Codes		ET14			
Number of Decimals					
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	1	2	3
9 ACURON XR	1490 g Al/ha	A 109	0.0	97.0	100.0
AMSOL	2.5 % V/V	B 207	0.0	97.0	100.0
ACURON XR	1490 g Al/ha	B 306	0.0	100.0	100.0
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 404	0.0	100.0	100.0
		Mean =	0.0	98.5	100.0
10 ACURON FLEXI XR	1100 g Al/ha	A 110	0.0	100.0	100.0
AMSOL	2.5 % V/V	B 206	0.0	100.0	100.0
ACURON FLEXI XR	1100 g Al/ha	B 313	0.0	100.0	100.0
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 401	0.0	100.0	100.0
		Mean =	0.0	100.0	100.0

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Pest ID Code		2 W Weed	5 W Weed		
Pest Code		DIGSS	AMACH		
Pest Scientific Name		Digitaria sp.	Amaranthus hybr>		
Pest Name		Crabgrass	pigweed, smooth		
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020
Rating Time					
SE Group No.	16	17	18	19	27
SE Name	ZUSX001	ZUSW001	ZUSW001	ZUSX001	ZUSX001
SE Description	%PHYTO-GENERAL	%Control	%Control	%PHYTO-GENERAL	%PHYTO-GENERAL
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number					
Assessed By					
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	10-6-2020	10-6-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment					
Rating Timing					
Days After First/Last Applic.	26 26	26 26	26 26	35 9	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A		
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1
Days After Emergence					
ARM Action Codes		ET14			
Number of Decimals					
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	1	2	3
11 RESICORE 3.29 SC	1150 g Al/ha	A 111	0.0	97.0	100.0
AMSOL	2.5 % V/V	B 213	0.0	100.0	100.0
RESICORE 3.29 SC	1150 g Al/ha	B 307	0.0	100.0	100.0
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 403	0.0	100.0	100.0
		Mean =	0.0	99.3	100.0
12 HARNESS MAX 3.85 SC	1180 g Al/ha	A 112	0.0	100.0	100.0
AMSOL	2.5 % V/V	B 203	0.0	100.0	100.0
HARNESS MAX 3.85 SC	1350 g Al/ha	B 309	0.0	95.0	100.0
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 406	0.0	100.0	100.0
		Mean =	0.0	98.8	100.0

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Pest ID Code		2 W Weed	5 W Weed		
Pest Code		DIGSS	AMACH		
Pest Scientific Name		Digitaria sp.	Amaranthus hybr>		
Pest Name		Crabgrass	pigweed, smooth		
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020
Rating Time					
SE Group No.	16	17	18	19	27
SE Name	ZUSX001	ZUSW001	ZUSW001	ZUSX001	ZUSX001
SE Description	%PHYTO-GENERAL	%Control	%Control	%PHYTO-GENERAL	%PHYTO-GENERAL
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number					
Assessed By					
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	10-6-2020	10-6-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment					
Rating Timing					
Days After First/Last Applic.	26 26	26 26	26 26	35 9	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A		
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1
Days After Emergence					
ARM Action Codes		ET14			
Number of Decimals					
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	1	2	3
13 VERDICT 5.57 EC	731 g Al/ha	A 113	0.0	100.0	100.0
AMSOL	2.5 % V/V	B 209	0.0	95.0	100.0
STATUS 61.1 WG	128 g Al/ha	B 301	0.0	100.0	100.0
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 414	0.0	100.0	100.0
	Mean =		0.0	98.8	100.0
14 CORVUS 2.63 SC	76 g Al/ha	A 114	0.0	95.0	100.0
AMSOL	2.5 % V/V	B 208	0.0	90.0	90.0
CAPRENO 3.45 SC	90.5 g Al/ha	B 302	0.0	100.0	97.0
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 407	0.0	100.0	100.0
SUPERB HC	0.5 % V/V	B			
	Mean =		0.0	96.3	96.8

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	2 W Weed	5 W Weed	9 W Weed	2 W Weed	5 W Weed	9 W Weed
Pest ID Code	DIGSS	AMACH	SORHA	DIGSS	AMACH	SORHA
Pest Code	DIGSS	AMACH	SORHA	DIGSS	AMACH	SORHA
Pest Scientific Name	Digitaria sp.	Amaranthus hybr>	Sorghum halepen>	Digitaria sp.	Amaranthus hybr>	Sorghum halepen>
Pest Name	Crabgrass	pigweed, smooth	Johnson grass	Crabgrass	pigweed, smooth	Johnson grass
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	6-29-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time						
SE Group No.	21	22	23	24	25	26
SE Name	ZUSW001	ZUSW001	ZUSW001	ZUSW001	ZUSW001	ZUSW001
SE Description	%Control	%Control	%Control	%Control	%Control	%Control
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-6-2020	10-6-2020	10-6-2020	10-7-2020	10-7-2020	10-7-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment						
Rating Timing						
Days After First/Last Applic.	54 28	54 28	54 28	154 128	154 128	154 128
Trt-Eval Interval						
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence						
ARM Action Codes			AS			AA
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	6	7	8	9
1 UNTREATED CHECK		101	0.0	0.0	0.0	0.0
		212	0.0	0.0	0.0	0.0
		305	0.0	0.0	0.0	0.0
		408	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0d	0.0
2 ACURON XR	2980 g AI/ha A	102	100.0	100.0	0.0	100.0
		201	90.0	90.0	70.0	95.0
		312	90.0	90.0	60.0	90.0
		412	90.0	90.0	50.0	90.0
		Mean =	92.5	92.5	35.5d	93.8

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	2 W Weed	5 W Weed	9 W Weed	2 W Weed	5 W Weed	9 W Weed
Pest ID Code	DIGSS	AMACH	SORHA	DIGSS	AMACH	SORHA
Pest Code	DIGSS	AMACH	SORHA	DIGSS	AMACH	SORHA
Pest Scientific Name	Digitaria sp.	Amaranthus hybr>	Sorghum halepen>	Digitaria sp.	Amaranthus hybr>	Sorghum halepen>
Pest Name	Crabgrass	pigweed, smooth	Johnson grass	Crabgrass	pigweed, smooth	Johnson grass
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	6-29-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time						
SE Group No.	21	22	23	24	25	26
SE Name	ZUSW001	ZUSW001	ZUSW001	ZUSW001	ZUSW001	ZUSW001
SE Description	%Control	%Control	%Control	%Control	%Control	%Control
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-6-2020	10-6-2020	10-6-2020	10-7-2020	10-7-2020	10-7-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment						
Rating Timing						
Days After First/Last Applic.	54 28	54 28	54 28	154 128	154 128	154 128
Trt-Eval Interval						
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence						
ARM Action Codes			AS			AA
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	6	7	8	9
3 ACURON FLEXI XR	2200 g Al/ha	A 103	95.0	95.0	90.0	95.0
		205	100.0	100.0	100.0	100.0
		314	100.0	100.0	100.0	100.0
		410	100.0	100.0	90.0	100.0
		Mean =	98.8	98.8	94.9d	98.8
4 RESICORE 3.29 SC	2310 g Al/ha	A 104	80.0	100.0	80.0	80.0
		211	80.0	96.0	100.0	80.0
		303	97.0	100.0	100.0	97.0
		409	90.0	80.0	70.0	97.0
		Mean =	86.8	94.0	87.0d	88.5

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	2 W Weed	5 W Weed	9 W Weed	2 W Weed	5 W Weed	9 W Weed
Pest ID Code	DIGSS	AMACH	SORHA	DIGSS	AMACH	SORHA
Pest Code	DIGSS	AMACH	SORHA	DIGSS	AMACH	SORHA
Pest Scientific Name	Digitaria sp.	Amaranthus hybr>	Sorghum halepen>	Digitaria sp.	Amaranthus hybr>	Sorghum halepen>
Pest Name	Crabgrass	pigweed, smooth	Johnson grass	Crabgrass	pigweed, smooth	Johnson grass
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	6-29-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time						
SE Group No.	21	22	23	24	25	26
SE Name	ZUSW001	ZUSW001	ZUSW001	ZUSW001	ZUSW001	ZUSW001
SE Description	%Control	%Control	%Control	%Control	%Control	%Control
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-6-2020	10-6-2020	10-6-2020	10-7-2020	10-7-2020	10-7-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment						
Rating Timing						
Days After First/Last Applic.	54 28	54 28	54 28	154 128	154 128	154 128
Trt-Eval Interval						
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence						
ARM Action Codes			AS			AA
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	6	7	8	9
5 HARNESS MAX 3.85 SC	2530 g Al/ha	A 105	80.0	100.0	80.0	80.0
		210	100.0	100.0	50.0	100.0
		304	95.0	80.0	80.0	95.0
		413	90.0	90.0	60.0	90.0
		Mean =	91.3	92.5	66.9d	91.3
6 SURESTART II 4.25 SC	1490 g Al/ha	A 106	90.0	100.0	50.0	90.0
		202	97.0	90.0	80.0	97.0
		310	80.0	80.0	70.0	50.0
		402	80.0	50.0	80.0	80.0
		Mean =	86.8	80.0	69.4d	79.3
						87.5
						55.1d

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	2 W Weed	5 W Weed	9 W Weed	2 W Weed	5 W Weed	9 W Weed
Pest ID Code	DIGSS	AMACH	SORHA	DIGSS	AMACH	SORHA
Pest Code	DIGSS	AMACH	SORHA	DIGSS	AMACH	SORHA
Pest Scientific Name	Digitaria sp.	Amaranthus hybr>	Sorghum halepen>	Digitaria sp.	Amaranthus hybr>	Sorghum halepen>
Pest Name	Crabgrass	pigweed, smooth	Johnson grass	Crabgrass	pigweed, smooth	Johnson grass
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	6-29-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time						
SE Group No.	21	22	23	24	25	26
SE Name	ZUSW001	ZUSW001	ZUSW001	ZUSW001	ZUSW001	ZUSW001
SE Description	%Control	%Control	%Control	%Control	%Control	%Control
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-6-2020	10-6-2020	10-6-2020	10-7-2020	10-7-2020	10-7-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment						
Rating Timing						
Days After First/Last Applic.	54 28	54 28	54 28	154 128	154 128	154 128
Trt-Eval Interval						
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence						
ARM Action Codes			AS			AA
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	6	7	8	9
7 CORVUS 2.63 SC	129 g Al/ha	A 107	60.0	100.0	70.0	60.0
		204	80.0	80.0	90.0	90.0
		311	70.0	60.0	50.0	70.0
		411	90.0	50.0	90.0	90.0
		Mean =	75.0	72.5	74.0d	77.5
8 VERDICT 5.57 EC	731 g Al/ha	A 108	70.0	100.0	80.0	60.0
		214	90.0	100.0	100.0	90.0
		308	70.0	100.0	50.0	50.0
		405	90.0	70.0	90.0	90.0
		Mean =	80.0	92.5	78.8d	72.5
						97.5
						77.2d

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	2 W Weed	5 W Weed	9 W Weed	2 W Weed	5 W Weed	9 W Weed
Pest ID Code	DIGSS	AMACH	SORHA	DIGSS	AMACH	SORHA
Pest Code	DIGSS	AMACH	SORHA	DIGSS	AMACH	SORHA
Pest Scientific Name	Digitaria sp.	Amaranthus hybr>	Sorghum halepen>	Digitaria sp.	Amaranthus hybr>	Sorghum halepen>
Pest Name	Crabgrass	pigweed, smooth	Johnson grass	Crabgrass	pigweed, smooth	Johnson grass
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	6-29-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time						
SE Group No.	21	22	23	24	25	26
SE Name	ZUSW001	ZUSW001	ZUSW001	ZUSW001	ZUSW001	ZUSW001
SE Description	%Control	%Control	%Control	%Control	%Control	%Control
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-6-2020	10-6-2020	10-6-2020	10-7-2020	10-7-2020	10-7-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment						
Rating Timing						
Days After First/Last Applic.	54 28	54 28	54 28	154 128	154 128	154 128
Trt-Eval Interval						
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence						
ARM Action Codes			AS			AA
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	6	7	8	9
9 ACURON XR	1490 g AI/ha	A 109	100.0	100.0	100.0	90.0
AMSOL	2.5 % V/V	B 207	100.0	100.0	100.0	100.0
ACURON XR	1490 g AI/ha	B 306	100.0	100.0	100.0	100.0
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 404	100.0	100.0	100.0	100.0
	Mean =		100.0	100.0	100.0d	97.5
10 ACURON FLEXI XR	1100 g AI/ha	A 110	100.0	100.0	100.0	100.0
AMSOL	2.5 % V/V	B 206	100.0	100.0	100.0	100.0
ACURON FLEXI XR	1100 g AI/ha	B 313	100.0	100.0	100.0	100.0
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 401	100.0	100.0	100.0	100.0
	Mean =		100.0	100.0	100.0d	100.0

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	2 W Weed	5 W Weed	9 W Weed	2 W Weed	5 W Weed	9 W Weed
Pest ID Code	DIGSS	AMACH	SORHA	DIGSS	AMACH	SORHA
Pest Code	DIGSS	AMACH	SORHA	DIGSS	AMACH	SORHA
Pest Scientific Name	Digitaria sp.	Amaranthus hybr>	Sorghum halepen>	Digitaria sp.	Amaranthus hybr>	Sorghum halepen>
Pest Name	Crabgrass	pigweed, smooth	Johnson grass	Crabgrass	pigweed, smooth	Johnson grass
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	6-29-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time						
SE Group No.	21	22	23	24	25	26
SE Name	ZUSW001	ZUSW001	ZUSW001	ZUSW001	ZUSW001	ZUSW001
SE Description	%Control	%Control	%Control	%Control	%Control	%Control
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-6-2020	10-6-2020	10-6-2020	10-7-2020	10-7-2020	10-7-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment						
Rating Timing						
Days After First/Last Applic.	54 28	54 28	54 28	154 128	154 128	154 128
Trt-Eval Interval						
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence						
ARM Action Codes			AS			AA
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	6	7	8	9
11 RESICORE 3.29 SC	1150 g AI/ha	A 111	100.0	100.0	100.0	100.0
AMSOL	2.5 % V/V	B 213	100.0	100.0	100.0	100.0
RESICORE 3.29 SC	1150 g AI/ha	B 307	100.0	100.0	95.0	100.0
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 403	100.0	100.0	100.0	100.0
		Mean =	100.0	100.0	98.7d	100.0
12 HARNESS MAX 3.85 SC	1180 g AI/ha	A 112	100.0	100.0	100.0	100.0
AMSOL	2.5 % V/V	B 203	100.0	100.0	100.0	100.0
HARNESS MAX 3.85 SC	1350 g AI/ha	B 309	100.0	100.0	85.0	100.0
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 406	100.0	100.0	100.0	100.0
		Mean =	100.0	100.0	96.1d	100.0

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	2 W Weed	5 W Weed	9 W Weed	2 W Weed	5 W Weed	9 W Weed
Pest ID Code	DIGSS	AMACH	SORHA	DIGSS	AMACH	SORHA
Pest Code	DIGSS	AMACH	SORHA	DIGSS	AMACH	SORHA
Pest Scientific Name	Digitaria sp.	Amaranthus hybr>	Sorghum halepen>	Digitaria sp.	Amaranthus hybr>	Sorghum halepen>
Pest Name	Crabgrass	pigweed, smooth	Johnson grass	Crabgrass	pigweed, smooth	Johnson grass
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	6-29-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time						
SE Group No.	21	22	23	24	25	26
SE Name	ZUSW001	ZUSW001	ZUSW001	ZUSW001	ZUSW001	ZUSW001
SE Description	%Control	%Control	%Control	%Control	%Control	%Control
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	10-6-2020	10-6-2020	10-6-2020	10-7-2020	10-7-2020	10-7-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment						
Rating Timing						
Days After First/Last Applic.	54 28	54 28	54 28	154 128	154 128	154 128
Trt-Eval Interval						
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence						
ARM Action Codes			AS			AA
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	6	7	8	9
13 VERDICT 5.57 EC	731 g AI/ha	A 113	100.0	100.0	100.0	100.0
AMSOL	2.5 % V/V	B 209	100.0	97.0	100.0	100.0
STATUS 61.1 WG	128 g AI/ha	B 301	100.0	100.0	100.0	100.0
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 414	100.0	100.0	100.0	100.0
	Mean =		100.0	99.3	100.0d	100.0
14 CORVUS 2.63 SC	76 g AI/ha	A 114	100.0	100.0	100.0	100.0
AMSOL	2.5 % V/V	B 208	97.0	100.0	100.0	90.0
CAPRENO 3.45 SC	90.5 g AI/ha	B 302	97.0	100.0	100.0	100.0
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 407	95.0	100.0	100.0	100.0
SUPERB HC	0.5 % V/V	B				
	Mean =		97.3	100.0	100.0d	97.5

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Pest ID Code					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time					
SE Group No.	12	13	15	14	28
SE Name					
SE Description					
Part Rated	GRAIN C	GRAIN C	GRAIN C	PLOT C	GRAIN C
Rating Type	WEIGHT	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	LB	%	LB	FT	BU
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 A
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 plot
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number	1	1	1		1
Assessed By					
Data Entry Date	10-8-2020	10-8-2020	10-8-2020	10-28-2020	
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM		
Equipment					
Rating Timing					
Days After First/Last Applic.	154 128	154 128	154 128	154 128	154 128
Trt-Eval Interval					
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence					
ARM Action Codes	ER1	ET8		ET12	ER1 TY1
Number of Decimals					1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	12	13	14
1 UNTREATED CHECK		101		16.50	55.90
		212	23.500	15.00	55.70
		305	27.520	16.00	47.10
		408	25.620	13.40	54.90
		Mean =	25.547	15.23	53.40
2 ACURON XR	2980 g AI/ha A	102		17.00	56.50
		201	28.470	17.10	55.00
		312	29.070	15.70	54.80
		412	30.600	16.90	56.10
		Mean =	29.380	16.68	55.60
					24.950
					23.860
					24.310
					23.630
					24.188
					25.000
					23.600
					23.920
					24.850
					24.343
					154.1
					175.1
					172.9
					167.4
					184.1
					188.6
					188.4
					187.0

University of Kentucky

Pest ID Code					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time					
SE Group No.	12	13	15	14	28
SE Name					
SE Description					
Part Rated	GRAIN C	GRAIN C	GRAIN C	PLOT C	GRAIN C
Rating Type	WEIGHT	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	LB	%	LB	FT	BU
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 A
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 plot
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number	1	1	1		1
Assessed By					
Data Entry Date	10-8-2020	10-8-2020	10-8-2020	10-28-2020	
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM		
Equipment					
Rating Timing					
Days After First/Last Applic.	154 128	154 128	154 128	154 128	154 128
Trt-Eval Interval					
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence					
ARM Action Codes	ER1	ET8		ET12	ER1 TY1
Number of Decimals					1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	12	13	14
3 ACURON FLEXI XR	2200 g Al/ha	A 103		17.30	56.20
		205	31.930	17.50	53.50
		314	30.850	18.60	55.20
		410	25.350	14.10	55.40
		Mean =	29.377	16.88	55.08
4 RESICORE 3.29 SC	2310 g Al/ha	A 104		14.80	55.70
		211	30.550	16.10	56.80
		303	30.120	17.10	56.90
		409	31.050	18.00	55.50
		Mean =	30.573	16.50	56.23
					24.410
					24.020
					23.180
					22.220
					23.458
					24.260
					23.780
					23.470
					24.220
					23.933
					201.9
					199.5
					180.4
					193.9
					198.4
					195.9
					193.5
					196.0

University of Kentucky

Pest ID Code					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time					
SE Group No.	12	13	15	14	28
SE Name					
SE Description					
Part Rated	GRAIN C	GRAIN C	GRAIN C	PLOT C	GRAIN C
Rating Type	WEIGHT	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	LB	%	LB	FT	BU
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 A
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 plot
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number	1	1	1		1
Assessed By					
Data Entry Date	10-8-2020	10-8-2020	10-8-2020	10-28-2020	
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM		
Equipment					
Rating Timing					
Days After First/Last Applic.	154 128	154 128	154 128	154 128	154 128
Trt-Eval Interval					
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence					
ARM Action Codes	ER1	ET8		ET12	ER1 TY1
Number of Decimals					1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	12	13	14
5 HARNESS MAX 3.85 SC	2530 g Al/ha	A 105		16.50	55.90
		210	27.060	16.00	52.10
		304	28.300	15.40	54.70
		413	30.130	15.60	54.50
		Mean =	28.497	15.88	54.30
6 SURESTART II 4.25 SC	1490 g Al/ha	A 106		15.40	51.60
		202	29.990	16.80	55.50
		310	31.150	17.40	56.20
		402	26.640	16.00	53.40
		Mean =	29.260	16.40	54.18
					24.200
					23.640
					24.070
					23.700
					23.903
					24.510
					23.740
					24.460
					22.830
					23.885
					177.0
					183.1
					197.5
					185.9
					193.5
					193.7
					180.5
					189.2

University of Kentucky

Pest ID Code					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time					
SE Group No.	12	13	15	14	28
SE Name					
SE Description					
Part Rated	GRAIN C	GRAIN C	GRAIN C	PLOT C	GRAIN C
Rating Type	WEIGHT	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	LB	%	LB	FT	BU
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 A
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 plot
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number	1	1	1		1
Assessed By					
Data Entry Date	10-8-2020	10-8-2020	10-8-2020	10-28-2020	
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM		
Equipment					
Rating Timing					
Days After First/Last Applic.	154 128	154 128	154 128	154 128	154 128
Trt-Eval Interval					
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence					
ARM Action Codes	ER1	ET8		ET12	ER1 TY1
Number of Decimals					1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	12	13	14
7 CORVUS 2.63 SC	129 g Al/ha	A 107		17.00	56.30
		204	31.920	16.00	55.30
		311	28.620	16.30	55.50
		411	28.410	15.90	51.90
		Mean =	29.650	16.30	54.75
8 VERDICT 5.57 EC	731 g Al/ha	A 108		11.60	47.30
		214	30.320	16.60	51.00
		308	23.920	15.40	56.60
		405	31.330	15.80	56.50
		Mean =	28.523	14.85	52.85
					23.680
					23.970
					23.990
					24.610
					24.063
					194.2
					155.3
					197.3
					182.3

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Pest ID Code					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time					
SE Group No.	12	13	15	14	28
SE Name					
SE Description					
Part Rated	GRAIN C	GRAIN C	GRAIN C	PLOT C	GRAIN C
Rating Type	WEIGHT	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	LB	%	LB	FT	BU
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 A
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 plot
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number	1	1	1		1
Assessed By					
Data Entry Date	10-8-2020	10-8-2020	10-8-2020	10-28-2020	
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM		
Equipment					
Rating Timing					
Days After First/Last Applic.	154 128	154 128	154 128	154 128	154 128
Trt-Eval Interval					
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence					
ARM Action Codes	ER1	ET8		ET12	ER1 TY1
Number of Decimals					1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	12	13	14
9 ACURON XR	1490 g AI/ha	A 109		16.50	56.00
AMSOL	2.5 % V/V	B 207	32.470	16.20	56.90
ACURON XR	1490 g AI/ha	B 306	30.560	16.30	55.50
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 404	32.560	16.40	58.10
		Mean =	31.863	16.35	56.63
10 ACURON FLEXI XR	1100 g AI/ha	A 110		16.50	55.70
AMSOL	2.5 % V/V	B 206	32.880	14.90	56.30
ACURON FLEXI XR	1100 g AI/ha	B 313	34.580	16.10	58.40
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 401	31.660	17.00	58.50
		Mean =	33.040	16.13	57.23
					23.900
					24.300
					23.360
					23.800
					24.220
					24.220
					206.9
					206.4
					214.5
					197.9
					222.3
					199.8
					212.1

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Pest ID Code					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time					
SE Group No.	12	13	15	14	28
SE Name					
SE Description					
Part Rated	GRAIN C	GRAIN C	GRAIN C	PLOT C	GRAIN C
Rating Type	WEIGHT	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	LB	%	LB	FT	BU
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 A
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 plot
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number	1	1	1		1
Assessed By					
Data Entry Date	10-8-2020	10-8-2020	10-8-2020	10-28-2020	
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM		
Equipment					
Rating Timing					
Days After First/Last Applic.	154 128	154 128	154 128	154 128	154 128
Trt-Eval Interval					
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence					
ARM Action Codes	ER1	ET8		ET12	ER1 TY1
Number of Decimals					1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	12	13	14
11 RESICORE 3.29 SC	1150 g Al/ha	A 111		14.90	55.40
AMSOL	2.5 % V/V	B 213	30.800	17.60	56.50
RESICORE 3.29 SC	1150 g Al/ha	B 307	32.530	17.00	58.80
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 403	32.650	16.50	58.00
		Mean =	31.993	16.50	57.18
12 HARNESS MAX 3.85 SC	1180 g Al/ha	A 112		16.40	58.70
AMSOL	2.5 % V/V	B 203	34.620	16.60	57.60
HARNESS MAX 3.85 SC	1350 g Al/ha	B 309	31.660	16.20	56.60
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 406	27.170	17.30	52.80
		Mean =	31.150	16.63	56.43
					24.960
					24.800
					22.800
					24.050
					24.153
					23.690
					24.190
					24.460
					19.410
					22.938
					188.4
					218.0
					208.7
					205.0
					219.8
					199.7
					213.1
					210.9

University of Kentucky

Pest ID Code					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time					
SE Group No.	12	13	15	14	28
SE Name					
SE Description					
Part Rated	GRAIN C	GRAIN C	GRAIN C	PLOT C	GRAIN C
Rating Type	WEIGHT	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	LB	%	LB	FT	BU
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 A
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 plot
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number	1	1	1		1
Assessed By					
Data Entry Date	10-8-2020	10-8-2020	10-8-2020	10-28-2020	
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM		
Equipment					
Rating Timing					
Days After First/Last Applic.	154 128	154 128	154 128	154 128	154 128
Trt-Eval Interval					
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence					
ARM Action Codes	ER1	ET8		ET12	ER1 TY1
Number of Decimals					1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	12	13	14
13 VERDICT 5.57 EC	731 g Al/ha	A 113		16.70	54.90
AMSOL	2.5 % V/V	B 209	31.520	17.10	56.30
STATUS 61.1 WG	128 g Al/ha	B 301	32.750	16.10	57.10
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 414	33.090	16.20	56.70
		Mean =	32.453	16.53	56.25
14 CORVUS 2.63 SC	76 g Al/ha	A 114		15.68*	54.26*
AMSOL	2.5 % V/V	B 208	33.220	15.60	56.80
CAPRENO 3.45 SC	90.5 g Al/ha	B 302	31.970	13.60	51.40
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B 407	31.600	18.00	55.80
SUPERB HC	0.5 % V/V	B			
		Mean =	32.263	15.72	54.56
					24.332
					206.8

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Acuron XR and Acuron Flexi XR: Evaluation of weed control, crop tolerance, and yield - Medium/Fine soils <3% OM (20-10_COR-REC

Trial ID: USNG0H3512020 Location: Cully Scott FS Trial Year: 2020
 Protocol ID: HBI002B4-2020US Investigator (Creator): Scott Cully
 Master Protocol ID: Study Director: Travis Legleiter
 Official Trial ID: Sponsor Contact:
 Conducted Under GEP: No Trial Origin: P public institution trial

Pest ID Code

2, W, Weed, DIGSS, Digitaria sp., Crabgrass, = N
 5, W, Weed, AMACH, Amaranthus hybridus, pigweed, smooth, = N
 9, W, Weed, SORHA, Sorghum halepense, Johnson grass, = N

Crop ID Code

1, ZEAMX, BCOR, Zea mays, Corn, Pioneer P1077AM = RR/LL

Part Rated

PLANT = plant
 GRAIN = grain
 PLOT = plot
 C = Crop is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury
 CONTRO = control / burndown or knockdown
 WEIGHT = weight
 CONMOI = content - moisture
 WEITES = weight - test
 LENGTH = length
 YIELD = yield

Rating Unit

% = percent
 LB = pound
 FT = foot
 BU = bushel

Calculation

NC = no calculation

PLOT = total plot
 A = acre

PLOT = total plot

PLOT = total plot

Plant-Eval Interval

28 DP-1 = 1 ZEAMX 5-4-2020
 37 DP-1 = 1 ZEAMX 5-4-2020
 56 DP-1 = 1 ZEAMX 5-4-2020
 156 DP-1 = 1 ZEAMX 5-4-2020

ARM Action Codes

ET14 = Excluded treatment 14
 AS = Automatic square root transformation of X+0.5
 AA = Automatic arcsine square root % transformation
 ER1 = Excluded replicate 1
 ET8 = Excluded treatment 8
 ET12 = Excluded treatment 12
 TY1 = $(777.8571/(5*[15]))*[12]*(100-@MVAVGREP([13]))/84.5$

Footnote 1: Combine grain weight system malfunction occurred on plot 114. Data for that plot excluded.

University of Kentucky

Acuron XR and Acuron Flexi XR: Evaluation of weed control, crop tolerance, and yield - Medium/Fine soils <3% OM (20-10_COR-REC

Trial ID: USNG0H3512020	Location: Cully Scott FS	Trial Year: 2020
Protocol ID: HBI002B4-2020US	Investigator (Creator): Scott Cully	
Master Protocol ID:	Study Director: Travis Legleiter	
Official Trial ID:	Sponsor Contact:	
Conducted Under GEP: No	Trial Origin: P public institution trial	

	1	2	3	4	5	6
Pest ID Code		2 W Weed	5 W Weed			2 W Weed
Pest Code		DIGSS	AMACH			DIGSS
Pest Scientific Name		Digitaria sp.	Amaranthus hybr>			Digitaria sp.
Pest Name		Crabgrass	pigweed, smooth			Crabgrass
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020	6-29-2020
Rating Time						
SE Group No.	16	17	18	19	27	21
SE Name	ZUSX001	ZUSW001	ZUSW001	ZUSX001	ZUSX001	ZUSW001
SE Description	%PHYTO-GENERAL	%Control	%Control	%PHYTO-GENERAL	%PHYTO-GENERAL	%Control
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	PHYGEN	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	10-6-2020	10-6-2020	10-6-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment						
Rating Timing						
Days After First/Last Applic.	26 26	26 26	26 26	35 9	54 28	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A			
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1	56 DP-1
Days After Emergence						
ARM Action Codes			ET14			
Number of Decimals						
Trt Treatment						
No. Name	1	2	3	4	5	6
Rate						
Unit						
Appl Code						
1 UNTREATED CHECK	0.0 a	0.0 b	0.0 c	0.0 a	0.0 a	0.0 d

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 t=Mean descriptions are reported in transformed data units, and are not de-transformed.
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=13,14,15
 Excluded replicate 1 in column 12; 1 in 16
 Could not calculate LSD (% mean diff) for columns 1,4,5 because error mean square = 0.

University of Kentucky

Pest ID Code		2 W Weed	5 W Weed			2 W Weed
Pest Code		DIGSS	AMACH			DIGSS
Pest Scientific Name		Digitaria sp.	Amaranthus hybr>			Digitaria sp.
Pest Name		Crabgrass	pigweed, smooth			Crabgrass
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020	6-29-2020
Rating Time						
SE Group No.	16	17	18	19	27	21
SE Name	ZUSX001	ZUSW001	ZUSW001	ZUSX001	ZUSX001	ZUSW001
SE Description	%PHYTO-GENERAL	%Control	%Control	%PHYTO-GENERAL	%PHYTO-GENERAL	%Control
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	PHYGEN	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	10-6-2020	10-6-2020	10-6-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment						
Rating Timing						
Days After First/Last Applic.	26 26	26 26	26 26	35 9	54 28	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A			
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1	56 DP-1
Days After Emergence						
ARM Action Codes		ET14				
Number of Decimals						
Trt Treatment						
No. Name	Rate Unit Appl Code					
8 VERDICT 5.57 EC	731 g AI/ha A	0.0 a	97.5 a	100.0 a	0.0 a	80.0 bc
9 ACURON XR	1490 g AI/ha A	0.0 a	98.5 a	100.0 a	0.0 a	100.0 a
AMSOL	2.5 % V/V B					
ACURON XR	1490 g AI/ha B					
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha B					

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 t=Mean descriptions are reported in transformed data units, and are not de-transformed.
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=13,14,15
 Excluded replicate 1 in column 12; 1 in 16
 Could not calculate LSD (% mean diff) for columns 1,4,5 because error mean square = 0.

University of Kentucky

		2 W Weed DIGSS	5 W Weed AMACH			2 W Weed DIGSS
Pest ID Code						
Pest Code						
Pest Scientific Name		Digitaria sp.	Amaranthus hybr>			Digitaria sp.
Pest Name		Crabgrass	pigweed, smooth			Crabgrass
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020	6-29-2020
Rating Time						
SE Group No.	16	17	18	19	27	21
SE Name	ZUSX001	ZUSW001	ZUSW001	ZUSX001	ZUSX001	ZUSW001
SE Description	%PHYTO-GENERAL	%Control	%Control	%PHYTO-GENERAL	%PHYTO-GENERAL	%Control
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	PHYGEN	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	10-6-2020	10-6-2020	10-6-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment						
Rating Timing						
Days After First/Last Applic.	26 26	26 26	26 26	35 9	54 28	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A			
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1	56 DP-1
Days After Emergence						
ARM Action Codes		ET14				
Number of Decimals						
Trt Treatment						
No. Name	1	2	3	4	5	6
Rate						
Unit						
Appl Code						
10 ACURON FLEXI XR	1100 g AI/ha A	100.0 a	100.0 a	0.0 a	0.0 a	100.0 a
AMSOL	2.5 % V/V B					
ACURON FLEXI XR	1100 g AI/ha B					
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha B					

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
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 Missing data estimates are included in columns: Yates=13,14,15
 Excluded replicate 1 in column 12; 1 in 16
 Could not calculate LSD (% mean diff) for columns 1,4,5 because error mean square = 0.

University of Kentucky

		2 W Weed DIGSS	5 W Weed AMACH			2 W Weed DIGSS
Pest ID Code						
Pest Code						
Pest Scientific Name		Digitaria sp.	Amaranthus hybr>			Digitaria sp.
Pest Name		Crabgrass	pigweed, smooth			Crabgrass
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020	6-29-2020
Rating Time						
SE Group No.	16	17	18	19	27	21
SE Name	ZUSX001	ZUSW001	ZUSW001	ZUSX001	ZUSX001	ZUSW001
SE Description	%PHYTO-GENERAL	%Control	%Control	%PHYTO-GENERAL	%PHYTO-GENERAL	%Control
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	PHYGEN	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	10-6-2020	10-6-2020	10-6-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment						
Rating Timing						
Days After First/Last Applic.	26 26	26 26	26 26	35 9	54 28	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A			
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1	56 DP-1
Days After Emergence						
ARM Action Codes		ET14				
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code	1	2	3	4
11 RESICORE 3.29 SC	1150 g AI/ha	A	0.0 a	99.3 a	100.0 a	0.0 a
AMSOL	2.5 % V/V	B				0.0 a
RESICORE 3.29 SC	1150 g AI/ha	B				
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B				

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 Excluded replicate 1 in column 12; 1 in 16
 Could not calculate LSD (% mean diff) for columns 1,4,5 because error mean square = 0.

University of Kentucky

		2 W Weed DIGSS	5 W Weed AMACH			2 W Weed DIGSS
Pest ID Code						
Pest Code						
Pest Scientific Name		Digitaria sp.	Amaranthus hybr>			Digitaria sp.
Pest Name		Crabgrass	pigweed, smooth			Crabgrass
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020	6-29-2020
Rating Time						
SE Group No.	16	17	18	19	27	21
SE Name	ZUSX001	ZUSW001	ZUSW001	ZUSX001	ZUSX001	ZUSW001
SE Description	%PHYTO-GENERAL	%Control	%Control	%PHYTO-GENERAL	%PHYTO-GENERAL	%Control
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	PHYGEN	CONTRO
Rating Unit	%	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						
Assessed By						
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	10-6-2020	10-6-2020	10-6-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment						
Rating Timing						
Days After First/Last Applic.	26 26	26 26	26 26	35 9	54 28	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A			
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1	56 DP-1
Days After Emergence						
ARM Action Codes		ET14				
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code	1	2	3	4
12 HARNESS MAX 3.85 SC	1180 g AI/ha	A	0.0 a	98.8 a	100.0 a	0.0 a
AMSOL	2.5 % V/V	B				0.0 a
HARNESS MAX 3.85 SC	1350 g AI/ha	B				
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B				

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University of Kentucky

		2 W Weed DIGSS	5 W Weed AMACH		2 W Weed DIGSS
Pest ID Code					
Pest Code					
Pest Scientific Name		Digitaria sp.	Amaranthus hybr>		Digitaria sp.
Pest Name		Crabgrass	pigweed, smooth		Crabgrass
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020
Rating Time					
SE Group No.	16	17	18	19	27
SE Name	ZUSX001	ZUSW001	ZUSW001	ZUSX001	ZUSX001
SE Description	%PHYTO-GENERAL	%Control	%Control	%PHYTO-GENERAL	%PHYTO-GENERAL
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number					
Assessed By					
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	10-6-2020	10-6-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment					
Rating Timing					
Days After First/Last Applic.	26 26	26 26	26 26	35 9	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A		
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1
Days After Emergence					
ARM Action Codes		ET14			
Number of Decimals					
Trt Treatment					
No. Name	1	2	3	4	5
Rate					
Unit					
Appl Code					
13 VERDICT 5.57 EC	0.0 a	98.8 a	100.0 a	0.0 a	0.0 a
AMSOL					
STATUS 61.1 WG					
ROUNDUP POWERMAX 4.5 SL					

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 Missing data estimates are included in columns: Yates=13,14,15
 Excluded replicate 1 in column 12; 1 in 16
 Could not calculate LSD (% mean diff) for columns 1,4,5 because error mean square = 0.

University of Kentucky

Pest ID Code		2 W Weed	5 W Weed		2 W Weed
Pest Code		DIGSS	AMACH		DIGSS
Pest Scientific Name		Digitaria sp.	Amaranthus hybr>		Digitaria sp.
Pest Name		Crabgrass	pigweed, smooth		Crabgrass
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 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
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-1-2020	6-1-2020	6-1-2020	6-10-2020	6-29-2020
Rating Time					
SE Group No.	16	17	18	19	27
SE Name	ZUSX001	ZUSW001	ZUSW001	ZUSX001	ZUSX001
SE Description	%PHYTO-GENERAL	%Control	%Control	%PHYTO-GENERAL	%PHYTO-GENERAL
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%
Calculation	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number					
Assessed By					
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	10-6-2020	10-6-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment					
Rating Timing					
Days After First/Last Applic.	26 26	26 26	26 26	35 9	54 28
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A		
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	37 DP-1	56 DP-1
Days After Emergence					
ARM Action Codes		ET14			
Number of Decimals					
Trt Treatment					
No. Name	1	2	3	4	5
Rate					
Unit					
Appl Code					
14 CORVUS 2.63 SC	0.0 a	96.3	96.8 b	0.0 a	0.0 a
AMSOL					
CAPRENO 3.45 SC					
ROUNDUP POWERMAX 4.5 SL					
SUPERB HC					
LSD P=.05		2.19	1.85		8.83
Standard Deviation	0.00	1.53	1.30	0.00	6.17
CV	0.0	1.67	1.4	0.0	7.15
Levene's F	0.00	1.576	3.68	0.00	7.41

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
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 Missing data estimates are included in columns: Yates=13,14,15
 Excluded replicate 1 in column 12; 1 in 16
 Could not calculate LSD (% mean diff) for columns 1,4,5 because error mean square = 0.

University of Kentucky

	1 ZEAMX BCOR Zea mays Corn Pioneer P1077AM 6-1-2020		2 W Weed DIGSS Digitaria sp. Crabgrass 1 ZEAMX BCOR Zea mays Corn Pioneer P1077AM 6-1-2020		5 W Weed AMACH Amaranthus hybr> pigweed, smooth 1 ZEAMX BCOR Zea mays Corn Pioneer P1077AM 6-1-2020		1 ZEAMX BCOR Zea mays Corn Pioneer P1077AM 6-10-2020		1 ZEAMX BCOR Zea mays Corn Pioneer P1077AM 6-29-2020		2 W Weed DIGSS Digitaria sp. Crabgrass 1 ZEAMX BCOR Zea mays Corn Pioneer P1077AM 6-29-2020	
Pest ID Code												
Pest Code												
Pest Scientific Name												
Pest Name												
Crop ID Code												
BBCH Scale												
Crop Scientific Name												
Crop Name												
Crop Variety												
Rating Date												
Rating Time												
SE Group No.												
SE Name												
SE Description												
Part Rated												
Rating Type												
Rating Unit												
Calculation												
Sample Size												
Collection Basis												
Reporting Basis												
Number of Subsamples												
Crop Stage Scale												
Crop Stage Majority/Min/Max												
Crop Density												
Pest Stage Majority/Min/Max												
Pest Density												
Footnote Number												
Assessed By												
Data Entry Date												
First Export Date												
Equipment												
Rating Timing												
Days After First/Last Applic.												
Trt-Eval Interval												
Plant-Eval Interval												
Days After Emergence												
ARM Action Codes												
Number of Decimals												
Trt Treatment												
No. Name												
Rate												
Rate Unit												
Appl Code												
Levene's Prob(F)												
Skewness												
Kurtosis												
Replicate F												
Replicate Prob(F)												
Treatment F												
Treatment Prob(F)												

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 Excluded replicate 1 in column 12; 1 in 16
 Could not calculate LSD (% mean diff) for columns 1,4,5 because error mean square = 0.

University of Kentucky

Pest ID Code	5 W Weed	9 W Weed	2 W Weed	5 W Weed	9 W Weed	
Pest Code	AMACH	SORHA	DIGSS	AMACH	SORHA	
Pest Scientific Name	Amaranthus hybr>	Sorghum halepen>	Digitaria sp.	Amaranthus hybr>	Sorghum halepen>	
Pest Name	pigweed, smooth	Johnson grass	Crabgrass	pigweed, smooth	Johnson grass	
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time						
SE Group No.	22	23	24	25	26	12
SE Name	ZUSW001	ZUSW001	ZUSW001	ZUSW001	ZUSW001	
SE Description	%Control	%Control	%Control	%Control	%Control	
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -	GRAIN C
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	WEIGHT
Rating Unit	%	%	%	%	%	LB
Calculation	NC	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						1
Assessed By						
Data Entry Date	10-6-2020	10-6-2020	10-7-2020	10-7-2020	10-7-2020	10-8-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment						
Rating Timing						
Days After First/Last Applic.	54 28	54 28	154 128	154 128	154 128	154 128
Trt-Eval Interval						
Plant-Eval Interval	56 DP-1	56 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence						
ARM Action Codes		AS			AA	ER1
Number of Decimals						
Trt Treatment						
No. Name	7	8	9	10	11	12
Rate Unit						
Appl Code						
1 UNTREATED CHECK	0.0 c	0.0 c	0.0 c	0.0 c	0.0 f	25.547 b

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University of Kentucky

Pest ID Code	5 W Weed	9 W Weed	2 W Weed	5 W Weed	9 W Weed	
Pest Code	AMACH	SORHA	DIGSS	AMACH	SORHA	
Pest Scientific Name	Amaranthus hybr>	Sorghum halepen>	Digitaria sp.	Amaranthus hybr>	Sorghum halepen>	
Pest Name	pigweed, smooth	Johnson grass	Crabgrass	pigweed, smooth	Johnson grass	
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	6-29-2020	6-29-2020	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time						
SE Group No.	22	23	24	25	26	12
SE Name	ZUSW001	ZUSW001	ZUSW001	ZUSW001	ZUSW001	
SE Description	%Control	%Control	%Control	%Control	%Control	
Part Rated	PLANT -	PLANT -	PLANT -	PLANT -	PLANT -	GRAIN C
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	WEIGHT
Rating Unit	%	%	%	%	%	LB
Calculation	NC	NC	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Scale						
Crop Stage Majority/Min/Max						
Crop Density						
Pest Stage Majority/Min/Max						
Pest Density						
Footnote Number						1
Assessed By						
Data Entry Date	10-6-2020	10-6-2020	10-7-2020	10-7-2020	10-7-2020	10-8-2020
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM	10-12-2020 9:09 PM
Equipment						
Rating Timing						
Days After First/Last Applic.	54 28	54 28	154 128	154 128	154 128	154 128
Trt-Eval Interval						
Plant-Eval Interval	56 DP-1	56 DP-1	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence						
ARM Action Codes		AS			AA	ER1
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit Code		7	8	9	10
2 ACURON XR	2980 g Al/ha A		92.5 a	35.5 b	93.8 a	93.8 ab
3 ACURON FLEXI XR	2200 g Al/ha A		98.8 a	94.9 a	98.8 a	98.8 a
4 RESICORE 3.29 SC	2310 g Al/ha A		94.0 a	87.0 a	88.5 ab	98.3 a
5 HARNESS MAX 3.85 SC	2530 g Al/ha A		92.5 a	66.9 a	91.3 ab	92.5 ab
6 SURESTART II 4.25 SC	1490 g Al/ha A		80.0 ab	69.4 a	79.3 ab	87.5 ab
7 CORVUS 2.63 SC	129 g Al/ha A		72.5 b	74.0 a	77.5 ab	86.3 b
						68.2 cde
						29.380 ab
						29.377 ab
						30.573 ab
						28.497 ab
						29.260 ab
						29.650 ab

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University of Kentucky

	5 W Weed		9 W Weed		2 W Weed		5 W Weed		9 W Weed							
Pest ID Code	AMACH		SORHA		DIGSS		AMACH		SORHA							
Pest Code	AMACH		SORHA		DIGSS		AMACH		SORHA							
Pest Scientific Name	Amaranthus hybr>		Sorghum halepen>		Digitaria sp.		Amaranthus hybr>		Sorghum halepen>							
Pest Name	pigweed, smooth		Johnson grass		Crabgrass		pigweed, smooth		Johnson grass							
Crop ID Code	1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX					
BBCH Scale	BCOR		BCOR		BCOR		BCOR		BCOR		BCOR					
Crop Scientific Name	Zea mays		Zea mays		Zea mays		Zea mays		Zea mays		Zea mays					
Crop Name	Corn		Corn		Corn		Corn		Corn		Corn					
Crop Variety	Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM					
Rating Date	6-29-2020		6-29-2020		10-7-2020		10-7-2020		10-7-2020		10-7-2020					
Rating Time																
SE Group No.	22		23		24		25		26		12					
SE Name	ZUSW001		ZUSW001		ZUSW001		ZUSW001		ZUSW001							
SE Description	%Control		%Control		%Control		%Control		%Control							
Part Rated	PLANT -		PLANT -		PLANT -		PLANT -		PLANT -		GRAIN C					
Rating Type	CONTRO		CONTRO		CONTRO		CONTRO		CONTRO		WEIGHT					
Rating Unit	%		%		%		%		%		LB					
Calculation	NC		NC		NC		NC		NC		NC					
Sample Size	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1					
Collection Basis	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1					
Reporting Basis	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1					
Number of Subsamples	1		1		1		1		1		1					
Crop Stage Scale																
Crop Stage Majority/Min/Max																
Crop Density																
Pest Stage Majority/Min/Max																
Pest Density																
Footnote Number											1					
Assessed By																
Data Entry Date	10-6-2020		10-6-2020		10-7-2020		10-7-2020		10-7-2020		10-8-2020					
First Export Date	10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM					
Equipment																
Rating Timing																
Days After First/Last Applic.	54 28		54 28		154 128		154 128		154 128		154 128					
Trt-Eval Interval																
Plant-Eval Interval	56 DP-1		56 DP-1		156 DP-1		156 DP-1		156 DP-1		156 DP-1					
Days After Emergence																
ARM Action Codes			AS						AA		ER1					
Number of Decimals																
Trt Treatment	7		8		9		10		11		12					
No. Name	7		8		9		10		11		12					
Rate																
Unit																
Appl Code																
8 VERDICT 5.57 EC		731 g AI/ha		A		92.5 a		78.8 a		72.5 b		97.5 ab		77.2 bcd		28.523 ab
9 ACURON XR		1490 g AI/ha		A		100.0 a		100.0 a		97.5 a		97.5 ab		97.9 abc		31.863 a
AMSOL		2.5 % V/V		B												
ACURON XR		1490 g AI/ha		B												
ROUNDUP POWERMAX 4.5 SL		868 g AE/ha		B												

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University of Kentucky

	5 W Weed		9 W Weed		2 W Weed		5 W Weed		9 W Weed		
Pest ID Code	AMACH		SORHA		DIGSS		AMACH		SORHA		
Pest Code	AMACH		SORHA		DIGSS		AMACH		SORHA		
Pest Scientific Name	Amaranthus hybr>		Sorghum halepen>		Digitaria sp.		Amaranthus hybr>		Sorghum halepen>		
Pest Name	pigweed, smooth		Johnson grass		Crabgrass		pigweed, smooth		Johnson grass		
Crop ID Code	1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX
BBCH Scale	BCOR		BCOR		BCOR		BCOR		BCOR		BCOR
Crop Scientific Name	Zea mays		Zea mays		Zea mays		Zea mays		Zea mays		Zea mays
Crop Name	Corn		Corn		Corn		Corn		Corn		Corn
Crop Variety	Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM
Rating Date	6-29-2020		6-29-2020		10-7-2020		10-7-2020		10-7-2020		10-7-2020
Rating Time											
SE Group No.	22		23		24		25		26		12
SE Name	ZUSW001		ZUSW001		ZUSW001		ZUSW001		ZUSW001		
SE Description	%Control		%Control		%Control		%Control		%Control		
Part Rated	PLANT -		PLANT -		PLANT -		PLANT -		PLANT -		GRAIN C
Rating Type	CONTRO		CONTRO		CONTRO		CONTRO		CONTRO		WEIGHT
Rating Unit	%		%		%		%		%		LB
Calculation	NC		NC		NC		NC		NC		NC
Sample Size	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1
Collection Basis	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1
Reporting Basis	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1
Number of Subsamples	1		1		1		1		1		1
Crop Stage Scale											
Crop Stage Majority/Min/Max											
Crop Density											
Pest Stage Majority/Min/Max											
Pest Density											
Footnote Number											1
Assessed By											
Data Entry Date	10-6-2020		10-6-2020		10-7-2020		10-7-2020		10-7-2020		10-8-2020
First Export Date	10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM
Equipment											
Rating Timing											
Days After First/Last Applic.	54 28		54 28		154 128		154 128		154 128		154 128
Trt-Eval Interval											
Plant-Eval Interval	56 DP-1		56 DP-1		156 DP-1		156 DP-1		156 DP-1		156 DP-1
Days After Emergence											
ARM Action Codes			AS						AA		ER1
Number of Decimals											
Trt Treatment	7		8		9		10		11		12
No. Name	7		8		9		10		11		12
Rate	1100 g AI/ha		100.0 a		100.0 a		100.0 a		100.0 a		33.040 a
Unit	A		B		B		B		B		
Appl Code	A		B		B		B		B		
	AMSOL		AMSOL		AMSOL		AMSOL		AMSOL		
	2.5 % V/V		2.5 % V/V		2.5 % V/V		2.5 % V/V		2.5 % V/V		
	B		B		B		B		B		
	ACURON FLEXI XR		ACURON FLEXI XR		ACURON FLEXI XR		ACURON FLEXI XR		ACURON FLEXI XR		
	1100 g AI/ha		1100 g AI/ha		1100 g AI/ha		1100 g AI/ha		1100 g AI/ha		
	B		B		B		B		B		
	ROUNDUP POWERMAX 4.5 SL		ROUNDUP POWERMAX 4.5 SL		ROUNDUP POWERMAX 4.5 SL		ROUNDUP POWERMAX 4.5 SL		ROUNDUP POWERMAX 4.5 SL		
	868 g AE/ha		868 g AE/ha		868 g AE/ha		868 g AE/ha		868 g AE/ha		
	B		B		B		B		B		

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University of Kentucky

	5 W Weed		9 W Weed		2 W Weed		5 W Weed		9 W Weed		
	AMACH		SORHA		DIGSS		AMACH		SORHA		
Pest ID Code	Amaranthus hybr>		Sorghum halepen>		Digitaria sp.		Amaranthus hybr>		Sorghum halepen>		
Pest Code	pigweed, smooth		Johnson grass		Crabgrass		pigweed, smooth		Johnson grass		
Pest Scientific Name	1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX
Pest Name	BCOR		BCOR		BCOR		BCOR		BCOR		BCOR
Crop ID Code	Zea mays		Zea mays		Zea mays		Zea mays		Zea mays		Zea mays
BBCH Scale	Corn		Corn		Corn		Corn		Corn		Corn
Crop Scientific Name	Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM
Crop Name	6-29-2020		6-29-2020		10-7-2020		10-7-2020		10-7-2020		10-7-2020
Crop Variety	22		23		24		25		26		12
Rating Date	ZUSW001		ZUSW001		ZUSW001		ZUSW001		ZUSW001		
Rating Time	%Control		%Control		%Control		%Control		%Control		
SE Group No.	PLANT -		PLANT -		PLANT -		PLANT -		PLANT -		GRAIN C
SE Name	CONTRO		CONTRO		CONTRO		CONTRO		CONTRO		WEIGHT
SE Description	%		%		%		%		%		LB
Part Rated	NC		NC		NC		NC		NC		NC
Rating Type	1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT
Rating Unit	1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT
Calculation	1		1		1		1		1		1
Sample Size	1		1		1		1		1		1
Collection Basis	1		1		1		1		1		1
Reporting Basis	1		1		1		1		1		1
Number of Subsamples	1		1		1		1		1		1
Crop Stage Scale											
Crop Stage Majority/Min/Max											
Crop Density											
Pest Stage Majority/Min/Max											
Pest Density											
Footnote Number											1
Assessed By											
Data Entry Date	10-6-2020		10-6-2020		10-7-2020		10-7-2020		10-7-2020		10-8-2020
First Export Date	10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM
Equipment											
Rating Timing											
Days After First/Last Applic.	54 28		54 28		154 128		154 128		154 128		154 128
Trt-Eval Interval											
Plant-Eval Interval	56 DP-1		56 DP-1		156 DP-1		156 DP-1		156 DP-1		156 DP-1
Days After Emergence											
ARM Action Codes			AS						AA		ER1
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code	7	8	9	10	11	12			
11 RESICORE 3.29 SC	1150 g AI/ha	A									
AMSOL	2.5 % V/V	B	100.0 a	98.7 a	100.0 a	100.0 a	98.7 ab	31.993 a			
RESICORE 3.29 SC	1150 g AI/ha	B									
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B									

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University of Kentucky

	5 W Weed		9 W Weed		2 W Weed		5 W Weed		9 W Weed		
	AMACH		SORHA		DIGSS		AMACH		SORHA		
Pest ID Code	Amaranthus hybr>		Sorghum halepen>		Digitaria sp.		Amaranthus hybr>		Sorghum halepen>		
Pest Code	pigweed, smooth		Johnson grass		Crabgrass		pigweed, smooth		Johnson grass		
Pest Scientific Name	1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX
Pest Name	BCOR		BCOR		BCOR		BCOR		BCOR		BCOR
Crop ID Code	Zea mays		Zea mays		Zea mays		Zea mays		Zea mays		Zea mays
BBCH Scale	Corn		Corn		Corn		Corn		Corn		Corn
Crop Scientific Name	Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM
Crop Name	6-29-2020		6-29-2020		10-7-2020		10-7-2020		10-7-2020		10-7-2020
Crop Variety	22		23		24		25		26		12
Rating Date	ZUSW001		ZUSW001		ZUSW001		ZUSW001		ZUSW001		
Rating Time	%Control		%Control		%Control		%Control		%Control		
SE Group No.	PLANT -		PLANT -		PLANT -		PLANT -		PLANT -		GRAIN C
SE Name	CONTRO		CONTRO		CONTRO		CONTRO		CONTRO		WEIGHT
SE Description	%		%		%		%		%		LB
Part Rated	NC		NC		NC		NC		NC		NC
Rating Type	1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT
Rating Unit	1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT
Calculation	1		1		1		1		1		1
Sample Size	Crop Stage Scale		Crop Stage Majority/Min/Max		Crop Density		Pest Stage Majority/Min/Max		Pest Density		Footnote Number
Collection Basis	10-6-2020		10-6-2020		10-7-2020		10-7-2020		10-7-2020		10-8-2020
Reporting Basis	10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM
Number of Subsamples	Equipment		Rating Timing		Days After First/Last Applic.		Trt-Eval Interval		Plant-Eval Interval		Days After Emergence
Crop Stage Scale	54 28		54 28		154 128		154 128		154 128		154 128
Crop Stage Majority/Min/Max	56 DP-1		56 DP-1		156 DP-1		156 DP-1		156 DP-1		156 DP-1
Crop Density	ARM Action Codes		AS		AA		ER1		Number of Decimals		
Pest Stage Majority/Min/Max	7		8		9		10		11		12
Pest Density	Rate		Rate		Rate		Rate		Rate		Rate
Footnote Number	1180 g AI/ha		1180 g AI/ha		100.0 a		100.0 a		100.0 a		97.1 abc
Assessed By	2.5 % V/V		2.5 % V/V		100.0 a		100.0 a		100.0 a		31.150 ab
Data Entry Date	1350 g AI/ha		1350 g AI/ha		100.0 a		100.0 a		100.0 a		
First Export Date	868 g AE/ha		868 g AE/ha		100.0 a		100.0 a		100.0 a		
Equipment	Rate Unit		Rate Unit		Rate Unit		Rate Unit		Rate Unit		Rate Unit
Rating Timing	A		A		A		A		A		A
Days After First/Last Applic.	B		B		B		B		B		B
Trt-Eval Interval	B		B		B		B		B		B
Plant-Eval Interval	B		B		B		B		B		B
Days After Emergence	B		B		B		B		B		B
ARM Action Codes	B		B		B		B		B		B
Number of Decimals	B		B		B		B		B		B
Trt Treatment	A		A		A		A		A		A
No. Name	B		B		B		B		B		B
Rate	B		B		B		B		B		B
Unit	B		B		B		B		B		B
Appl Code	B		B		B		B		B		B
Rate	B		B		B		B		B		B
Unit	B		B		B		B		B		B
Appl Code	B		B		B		B		B		B
12 HARNESS MAX 3.85 SC	1180 g AI/ha	A	100.0 a	96.1 a	100.0 a	100.0 a	97.1 abc	31.150 ab			
AMSOL	2.5 % V/V	B									
HARNESS MAX 3.85 SC	1350 g AI/ha	B									
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B									

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University of Kentucky

	5 W Weed		9 W Weed		2 W Weed		5 W Weed		9 W Weed			
Pest ID Code	AMACH		SORHA		DIGSS		AMACH		SORHA			
Pest Code	AMACH		SORHA		DIGSS		AMACH		SORHA			
Pest Scientific Name	Amaranthus hybr>		Sorghum halepen>		Digitaria sp.		Amaranthus hybr>		Sorghum halepen>			
Pest Name	pigweed, smooth		Johnson grass		Crabgrass		pigweed, smooth		Johnson grass			
Crop ID Code	1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX	
BBCH Scale	BCOR		BCOR		BCOR		BCOR		BCOR		BCOR	
Crop Scientific Name	Zea mays		Zea mays		Zea mays		Zea mays		Zea mays		Zea mays	
Crop Name	Corn		Corn		Corn		Corn		Corn		Corn	
Crop Variety	Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM	
Rating Date	6-29-2020		6-29-2020		10-7-2020		10-7-2020		10-7-2020		10-7-2020	
Rating Time												
SE Group No.	22		23		24		25		26		12	
SE Name	ZUSW001		ZUSW001		ZUSW001		ZUSW001		ZUSW001			
SE Description	%Control		%Control		%Control		%Control		%Control			
Part Rated	PLANT -		PLANT -		PLANT -		PLANT -		PLANT -		GRAIN C	
Rating Type	CONTRO		CONTRO		CONTRO		CONTRO		CONTRO		WEIGHT	
Rating Unit	%		%		%		%		%		LB	
Calculation	NC		NC		NC		NC		NC		NC	
Sample Size	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	
Collection Basis	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	
Reporting Basis	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	PLOT	1	
Number of Subsamples	1		1		1		1		1		1	
Crop Stage Scale												
Crop Stage Majority/Min/Max												
Crop Density												
Pest Stage Majority/Min/Max												
Pest Density												
Footnote Number											1	
Assessed By												
Data Entry Date	10-6-2020		10-6-2020		10-7-2020		10-7-2020		10-7-2020		10-8-2020	
First Export Date	10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM	
Equipment												
Rating Timing												
Days After First/Last Applic.	54 28		54 28		154 128		154 128		154 128		154 128	
Trt-Eval Interval												
Plant-Eval Interval	56 DP-1		56 DP-1		156 DP-1		156 DP-1		156 DP-1		156 DP-1	
Days After Emergence												
ARM Action Codes			AS						AA		ER1	
Number of Decimals												
Trt Treatment	7		8		9		10		11		12	
No. Name												
Rate												
Unit												
Appl Code												
13 VERDICT 5.57 EC		731 g AI/ha		99.3 a		100.0 a		100.0 a		99.8 ab		32.453 a
AMSOL		2.5 % V/V										
STATUS 61.1 WG		128 g AI/ha										
ROUNDUP POWERMAX 4.5 SL		868 g AE/ha										

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University of Kentucky

	5 W Weed		9 W Weed		2 W Weed		5 W Weed		9 W Weed		
	AMACH		SORHA		DIGSS		AMACH		SORHA		
Pest ID Code	Amaranthus hybr>		Sorghum halepen>		Digitaria sp.		Amaranthus hybr>		Sorghum halepen>		
Pest Code	pigweed, smooth		Johnson grass		Crabgrass		pigweed, smooth		Johnson grass		
Pest Scientific Name	1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX
Pest Name	BCOR		BCOR		BCOR		BCOR		BCOR		BCOR
Crop ID Code	Zea mays		Zea mays		Zea mays		Zea mays		Zea mays		Zea mays
BBCH Scale	Corn		Corn		Corn		Corn		Corn		Corn
Crop Scientific Name	Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM
Crop Name	6-29-2020		6-29-2020		10-7-2020		10-7-2020		10-7-2020		10-7-2020
Crop Variety	22		23		24		25		26		12
Rating Date	ZUSW001		ZUSW001		ZUSW001		ZUSW001		ZUSW001		
Rating Time	%Control		%Control		%Control		%Control		%Control		
SE Group No.	PLANT -		PLANT -		PLANT -		PLANT -		PLANT -		GRAIN C
SE Name	CONTRO		CONTRO		CONTRO		CONTRO		CONTRO		WEIGHT
SE Description	%		%		%		%		%		LB
Part Rated	NC		NC		NC		NC		NC		NC
Rating Type	1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT
Rating Unit	1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT
Calculation	1		1		1		1		1		1
Sample Size	1		1		1		1		1		1
Collection Basis	1		1		1		1		1		1
Reporting Basis	1		1		1		1		1		1
Number of Subsamples	1		1		1		1		1		1
Crop Stage Scale											
Crop Stage Majority/Min/Max											
Crop Density											
Pest Stage Majority/Min/Max											
Pest Density											
Footnote Number											1
Assessed By											
Data Entry Date	10-6-2020		10-6-2020		10-7-2020		10-7-2020		10-7-2020		10-8-2020
First Export Date	10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM
Equipment											
Rating Timing											
Days After First/Last Applic.	54 28		54 28		154 128		154 128		154 128		154 128
Trt-Eval Interval											
Plant-Eval Interval	56 DP-1		56 DP-1		156 DP-1		156 DP-1		156 DP-1		156 DP-1
Days After Emergence											
ARM Action Codes			AS						AA		ER1
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code	7	8	9	10	11	12			
14 CORVUS 2.63 SC	76 g AI/ha	A	100.0 a	100.0 a	97.5 a	100.0 a	99.8 ab	32.263 a			
AMSOL	2.5 % V/V	B									
CAPRENO 3.45 SC	90.5 g AI/ha	B									
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B									
SUPERB HC	0.5 % V/V	B									
LSD P=.05			12.82	21.94 - 29.73	13.46	7.69	8.56 - 29.25	3.7084			
Standard Deviation			8.96	1.13t	9.41	5.38	11.89t	2.2096			
CV			10.27	13.17t	11.01	6.01	18.25t	7.3			
Levene's F			3.018	1.659	5.931	5.306	1.729	1.486			

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University of Kentucky

	5 W Weed		9 W Weed		2 W Weed		5 W Weed		9 W Weed		
	AMACH		SORHA		DIGSS		AMACH		SORHA		
Pest ID Code	Amaranthus hybr>		Sorghum halepen>		Digitaria sp.		Amaranthus hybr>		Sorghum halepen>		
Pest Code	pigweed, smooth		Johnson grass		Crabgrass		pigweed, smooth		Johnson grass		
Pest Scientific Name	1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX		1 ZEAMX
Pest Name	BCOR		BCOR		BCOR		BCOR		BCOR		BCOR
Crop ID Code	Zea mays		Zea mays		Zea mays		Zea mays		Zea mays		Zea mays
BBCH Scale	Corn		Corn		Corn		Corn		Corn		Corn
Crop Scientific Name	Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM		Pioneer P1077AM
Crop Name	6-29-2020		6-29-2020		10-7-2020		10-7-2020		10-7-2020		10-7-2020
Crop Variety	Rating Time		Rating Time		Rating Time		Rating Time		Rating Time		Rating Time
Rating Date	22		23		24		25		26		12
Rating Time	ZUSW001		ZUSW001		ZUSW001		ZUSW001		ZUSW001		
SE Group No.	%Control		%Control		%Control		%Control		%Control		
SE Name	PLANT -		PLANT -		PLANT -		PLANT -		PLANT -		GRAIN C
SE Description	CONTRO		CONTRO		CONTRO		CONTRO		CONTRO		WEIGHT
Part Rated	%		%		%		%		%		LB
Rating Type	NC		NC		NC		NC		NC		NC
Rating Unit	1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT
Calculation	1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT		1 PLOT
Sample Size	1		1		1		1		1		1
Collection Basis	1		1		1		1		1		1
Reporting Basis	1		1		1		1		1		1
Number of Subsamples	1		1		1		1		1		1
Crop Stage Scale											
Crop Stage Majority/Min/Max											
Crop Density											
Pest Stage Majority/Min/Max											
Pest Density											
Footnote Number											1
Assessed By											
Data Entry Date	10-6-2020		10-6-2020		10-7-2020		10-7-2020		10-7-2020		10-8-2020
First Export Date	10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM		10-12-2020 9:09 PM
Equipment											
Rating Timing											
Days After First/Last Applic.	54 28		54 28		154 128		154 128		154 128		154 128
Trt-Eval Interval											
Plant-Eval Interval	56 DP-1		56 DP-1		156 DP-1		156 DP-1		156 DP-1		156 DP-1
Days After Emergence											
ARM Action Codes			AS						AA		ER1
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code	7	8	9	10	11	12			
Levene's Prob(F)			0.003*	0.107	0.001*	0.001*	0.09	0.184			
Skewness			-2.5523*	-2.3808*	-2.4374*	-3.0629*	-1.1344*	-0.8155*			
Kurtosis			5.6746*	4.7298*	5.2285*	8.3573*	0.7509	0.2134			
Replicate F			4.415	1.305	1.994	2.777	3.160	0.475			
Replicate Prob(F)			0.0091	0.2865	0.1308	0.0539	0.0352	0.6275			
Treatment F			34.851	20.035	31.271	94.608	17.781	2.566			
Treatment Prob(F)			0.0001	0.0001	0.0001	0.0001	0.0001	0.0198			

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University of Kentucky

Pest ID Code				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time				
SE Group No.	13	15	14	28
SE Name				
SE Description				
Part Rated	GRAIN C	GRAIN C	PLOT C	GRAIN C
Rating Type	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	%	LB	FT	BU
Calculation	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 A
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 plot
Number of Subsamples	1	1	1	1
Crop Stage Scale				
Crop Stage Majority/Min/Max				
Crop Density				
Pest Stage Majority/Min/Max				
Pest Density				
Footnote Number	1	1		1
Assessed By				
Data Entry Date	10-8-2020	10-8-2020	10-28-2020	
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM		
Equipment				
Rating Timing				
Days After First/Last Applic.	154 128	154 128	154 128	154 128
Trt-Eval Interval				
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence				
ARM Action Codes	ET8		ET12	ER1 TY1
Number of Decimals				1
Trt Treatment				
No. Name	13	14	15	16
Rate	15.23 a	53.40 a	24.188 a	167.4 b
Unit				
Appl Code				

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University of Kentucky

Pest ID Code					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX	
BBCH Scale	BCOR	BCOR	BCOR	BCOR	
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	
Crop Name	Corn	Corn	Corn	Corn	
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020	
Rating Time					
SE Group No.	13	15	14	28	
SE Name					
SE Description					
Part Rated	GRAIN C	GRAIN C	PLOT C	GRAIN C	
Rating Type	CONMOI	WEITES	LENGTH	YIELD	
Rating Unit	%	LB	FT	BU	
Calculation	NC	NC	NC	NC	
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 A	
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 plot	
Number of Subsamples	1	1	1	1	
Crop Stage Scale					
Crop Stage Majority/Min/Max					
Crop Density					
Pest Stage Majority/Min/Max					
Pest Density					
Footnote Number	1	1		1	
Assessed By					
Data Entry Date	10-8-2020	10-8-2020	10-28-2020		
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM			
Equipment					
Rating Timing					
Days After First/Last Applic.	154 128	154 128	154 128	154 128	
Trt-Eval Interval					
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1	
Days After Emergence					
ARM Action Codes	ET8		ET12	ER1 TY1	
Number of Decimals				1	
Trt Treatment					
No. Name	Rate Unit	Rate Unit	Rate Unit	Rate Unit	
	13	14	15	16	
2 ACURON XR	2980 g Al/ha A	16.68 a	55.60 a	24.343 a	187.0 ab
3 ACURON FLEXI XR	2200 g Al/ha A	16.88 a	55.08 a	23.458 a	193.9 ab
4 RESICORE 3.29 SC	2310 g Al/ha A	16.50 a	56.23 a	23.933 a	196.0 ab
5 HARNESS MAX 3.85 SC	2530 g Al/ha A	15.88 a	54.30 a	23.903 a	185.9 ab
6 SURESTART II 4.25 SC	1490 g Al/ha A	16.40 a	54.18 a	23.885 a	189.2 ab
7 CORVUS 2.63 SC	129 g Al/ha A	16.30 a	54.75 a	23.725 a	194.7 ab

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University of Kentucky

Pest ID Code				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time				
SE Group No.	13	15	14	28
SE Name				
SE Description				
Part Rated	GRAIN C	GRAIN C	PLOT C	GRAIN C
Rating Type	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	%	LB	FT	BU
Calculation	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 A
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 plot
Number of Subsamples	1	1	1	1
Crop Stage Scale				
Crop Stage Majority/Min/Max				
Crop Density				
Pest Stage Majority/Min/Max				
Pest Density				
Footnote Number	1	1		1
Assessed By				
Data Entry Date	10-8-2020	10-8-2020	10-28-2020	
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM		
Equipment				
Rating Timing				
Days After First/Last Applic.	154 128	154 128	154 128	154 128
Trt-Eval Interval				
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence				
ARM Action Codes	ET8		ET12	ER1 TY1
Number of Decimals				1
Trt Treatment				
No. Name	Rate Unit	Appl Code		
8 VERDICT 5.57 EC	731 g Al/ha	A	13	14
9 ACURON XR	1490 g Al/ha	A	15	16
AMSOL	2.5 % V/V	B		
ACURON XR	1490 g Al/ha	B		
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B		

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 Missing data estimates are included in columns: Yates=13,14,15
 Excluded replicate 1 in column 12; 1 in 16
 Could not calculate LSD (% mean diff) for columns 1,4,5 because error mean square = 0.

University of Kentucky

Pest ID Code				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time				
SE Group No.	13	15	14	28
SE Name				
SE Description				
Part Rated	GRAIN C	GRAIN C	PLOT C	GRAIN C
Rating Type	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	%	LB	FT	BU
Calculation	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 A
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 plot
Number of Subsamples	1	1	1	1
Crop Stage Scale				
Crop Stage Majority/Min/Max				
Crop Density				
Pest Stage Majority/Min/Max				
Pest Density				
Footnote Number	1	1		1
Assessed By				
Data Entry Date	10-8-2020	10-8-2020	10-28-2020	
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM		
Equipment				
Rating Timing				
Days After First/Last Applic.	154 128	154 128	154 128	154 128
Trt-Eval Interval				
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence				
ARM Action Codes	ET8		ET12	ER1 TY1
Number of Decimals				1
Trt Treatment				
No. Name	13	14	15	16
Rate				
Rate Unit				
Appl Code				
10 ACURON FLEXI XR	1100 g Al/ha	A		
AMSOL	2.5 % V/V	B		
ACURON FLEXI XR	1100 g Al/ha	B		
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B		
	16.13 a	57.23 a	24.048 a	212.1 a

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
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Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Missing data estimates are included in columns: Yates=13,14,15
Excluded replicate 1 in column 12; 1 in 16
Could not calculate LSD (% mean diff) for columns 1,4,5 because error mean square = 0.

University of Kentucky

Pest ID Code				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time				
SE Group No.	13	15	14	28
SE Name				
SE Description				
Part Rated	GRAIN C	GRAIN C	PLOT C	GRAIN C
Rating Type	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	%	LB	FT	BU
Calculation	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 A
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 plot
Number of Subsamples	1	1	1	1
Crop Stage Scale				
Crop Stage Majority/Min/Max				
Crop Density				
Pest Stage Majority/Min/Max				
Pest Density				
Footnote Number	1	1		1
Assessed By				
Data Entry Date	10-8-2020	10-8-2020	10-28-2020	
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM		
Equipment				
Rating Timing				
Days After First/Last Applic.	154 128	154 128	154 128	154 128
Trt-Eval Interval				
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence				
ARM Action Codes	ET8		ET12	ER1 TY1
Number of Decimals				1
Trt Treatment				
No. Name	13	14	15	16
Rate				
Rate Unit				
Appl Code				
11 RESICORE 3.29 SC	1150 g Al/ha	A		
AMSOL	2.5 % V/V	B		
RESICORE 3.29 SC	1150 g Al/ha	B		
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B		
	16.50 a	57.18 a	24.153 a	205.0 a

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 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=13,14,15
 Excluded replicate 1 in column 12; 1 in 16
 Could not calculate LSD (% mean diff) for columns 1,4,5 because error mean square = 0.

University of Kentucky

Pest ID Code				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time				
SE Group No.	13	15	14	28
SE Name				
SE Description				
Part Rated	GRAIN C	GRAIN C	PLOT C	GRAIN C
Rating Type	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	%	LB	FT	BU
Calculation	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 A
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 plot
Number of Subsamples	1	1	1	1
Crop Stage Scale				
Crop Stage Majority/Min/Max				
Crop Density				
Pest Stage Majority/Min/Max				
Pest Density				
Footnote Number	1	1		1
Assessed By				
Data Entry Date	10-8-2020	10-8-2020	10-28-2020	
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM		
Equipment				
Rating Timing				
Days After First/Last Applic.	154 128	154 128	154 128	154 128
Trt-Eval Interval				
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence				
ARM Action Codes	ET8		ET12	ER1 TY1
Number of Decimals				1
Trt Treatment				
No. Name	13	14	15	16
Rate				
Rate Unit				
Appl Code				
12 HARNESS MAX 3.85 SC	1180 g Al/ha	56.43 a	22.938	210.9 a
AMSOL	2.5 % V/V			
HARNESS MAX 3.85 SC	1350 g Al/ha			
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha			

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 Missing data estimates are included in columns: Yates=13,14,15
 Excluded replicate 1 in column 12; 1 in 16
 Could not calculate LSD (% mean diff) for columns 1,4,5 because error mean square = 0.

University of Kentucky

Pest ID Code				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time				
SE Group No.	13	15	14	28
SE Name				
SE Description				
Part Rated	GRAIN C	GRAIN C	PLOT C	GRAIN C
Rating Type	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	%	LB	FT	BU
Calculation	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 A
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 plot
Number of Subsamples	1	1	1	1
Crop Stage Scale				
Crop Stage Majority/Min/Max				
Crop Density				
Pest Stage Majority/Min/Max				
Pest Density				
Footnote Number	1	1		1
Assessed By				
Data Entry Date	10-8-2020	10-8-2020	10-28-2020	
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM		
Equipment				
Rating Timing				
Days After First/Last Applic.	154 128	154 128	154 128	154 128
Trt-Eval Interval				
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence				
ARM Action Codes	ET8		ET12	ER1 TY1
Number of Decimals				1
Trt Treatment				
No. Name	Rate Unit	Rate Unit	Rate Unit	Rate Unit
13 VERDICT 5.57 EC	731 g Al/ha A			
AMSOL	2.5 % V/V B			
STATUS 61.1 WG	128 g Al/ha B			
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha B			
	13	14	15	16
	16.53 a	56.25 a	23.565 a	210.8 a

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 Missing data estimates are included in columns: Yates=13,14,15
 Excluded replicate 1 in column 12; 1 in 16
 Could not calculate LSD (% mean diff) for columns 1,4,5 because error mean square = 0.

University of Kentucky

Pest ID Code				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time				
SE Group No.	13	15	14	28
SE Name				
SE Description				
Part Rated	GRAIN C	GRAIN C	PLOT C	GRAIN C
Rating Type	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	%	LB	FT	BU
Calculation	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 A
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 plot
Number of Subsamples	1	1	1	1
Crop Stage Scale				
Crop Stage Majority/Min/Max				
Crop Density				
Pest Stage Majority/Min/Max				
Pest Density				
Footnote Number	1	1		1
Assessed By				
Data Entry Date	10-8-2020	10-8-2020	10-28-2020	
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM		
Equipment				
Rating Timing				
Days After First/Last Applic.	154 128	154 128	154 128	154 128
Trt-Eval Interval				
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence				
ARM Action Codes	ET8		ET12	ER1 TY1
Number of Decimals				1
Trt Treatment				
No. Name	13	14	15	16
Rate				
Rate Unit				
Appl Code				
14 CORVUS 2.63 SC	76 g Al/ha	A		
AMSOL	2.5 % V/V	B		
CAPRENO 3.45 SC	90.5 g Al/ha	B		
ROUNDUP POWERMAX 4.5 SL	868 g AE/ha	B		
SUPERB HC	0.5 % V/V	B		
LSD P=.05	1.628	3.354	0.8314	20.59
Standard Deviation	1.134	2.343	0.5791	12.27
CV	6.96	4.23	2.42	6.25
Levene's F	1.275	1.232	1.583	0.556

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Missing data estimates are included in columns: Yates=13,14,15
Excluded replicate 1 in column 12; 1 in 16
Could not calculate LSD (% mean diff) for columns 1,4,5 because error mean square = 0.

University of Kentucky

Pest ID Code				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop ID Code	1 ZEAMX	1 ZEAMX	1 ZEAMX	1 ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn
Crop Variety	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM	Pioneer P1077AM
Rating Date	10-7-2020	10-7-2020	10-7-2020	10-7-2020
Rating Time				
SE Group No.	13	15	14	28
SE Name				
SE Description				
Part Rated	GRAIN C	GRAIN C	PLOT C	GRAIN C
Rating Type	CONMOI	WEITES	LENGTH	YIELD
Rating Unit	%	LB	FT	BU
Calculation	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 A
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 plot
Number of Subsamples	1	1	1	1
Crop Stage Scale				
Crop Stage Majority/Min/Max				
Crop Density				
Pest Stage Majority/Min/Max				
Pest Density				
Footnote Number	1	1		1
Assessed By				
Data Entry Date	10-8-2020	10-8-2020	10-28-2020	
First Export Date	10-12-2020 9:09 PM	10-12-2020 9:09 PM		
Equipment				
Rating Timing				
Days After First/Last Applic.	154 128	154 128	154 128	154 128
Trt-Eval Interval				
Plant-Eval Interval	156 DP-1	156 DP-1	156 DP-1	156 DP-1
Days After Emergence				
ARM Action Codes	ET8		ET12	ER1 TY1
Number of Decimals				1
Trt Treatment				
No. Name	13	14	15	16
Rate				
Rate Unit				
Appl Code				
Levene's Prob(F)	0.273	0.293	0.138	0.867
Skewness	-0.6433	-1.6335*	-0.5458	-0.597
Kurtosis	0.9993	3.5177*	0.6083	0.3973
Replicate F	0.022	0.133	2.392	0.255
Replicate Prob(F)	0.9956	0.9396	0.0851	0.7767
Treatment F	0.627	1.393	0.861	3.447
Treatment Prob(F)	0.8045	0.2078	0.5909	0.0035

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Missing data estimates are included in columns: Yates=13,14,15
Excluded replicate 1 in column 12; 1 in 16
Could not calculate LSD (% mean diff) for columns 1,4,5 because error mean square = 0.

University of Kentucky

Acuron XR and Acuron Flexi XR: Evaluation of weed control, crop tolerance, and yield - Medium/Fine soils <3% OM (20-10_COR-REC

Trial ID: USNG0H3512020 Location: Cully Scott FS Trial Year: 2020
 Protocol ID: HBI002B4-2020US Investigator (Creator): Scott Cully
 Master Protocol ID: Study Director: Travis Legleiter
 Official Trial ID: Sponsor Contact:
 Conducted Under GEP: No Trial Origin: P public institution trial

Pest ID Code

2, W, Weed, DIGSS, Digitaria sp., Crabgrass, = N
 5, W, Weed, AMACH, Amaranthus hybridus, pigweed, smooth, = N
 9, W, Weed, SORHA, Sorghum halepense, Johnson grass, = N

Crop ID Code

1, ZEAMX, BCOR, Zea mays, Corn, Pioneer P1077AM = RR/LL

Part Rated

PLANT = plant
 GRAIN = grain
 PLOT = plot
 C = Crop is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury
 CONTRO = control / burndown or knockdown
 WEIGHT = weight
 CONMOI = content - moisture
 WEITES = weight - test
 LENGTH = length
 YIELD = yield

Rating Unit

% = percent
 LB = pound
 FT = foot
 BU = bushel

Calculation

NC = no calculation

PLOT = total plot
 A = acre

PLOT = total plot

PLOT = total plot

Plant-Eval Interval

28 DP-1 = 1 ZEAMX 5-4-2020
 37 DP-1 = 1 ZEAMX 5-4-2020
 56 DP-1 = 1 ZEAMX 5-4-2020
 156 DP-1 = 1 ZEAMX 5-4-2020

ARM Action Codes

ET14 = Excluded treatment 14
 AS = Automatic square root transformation of X+0.5
 AA = Automatic arcsine square root % transformation
 ER1 = Excluded replicate 1
 ET8 = Excluded treatment 8
 ET12 = Excluded treatment 12
 TY1 = $(777.8571 / (5 * [15])) * [12] * (100 - @MVAVGREP([13])) / 84.5$

Footnote 1: Combine grain weight system malfunction occurred on plot 114. Data for that plot excluded.

University of Kentucky

Evaluating Authority Brands (Edge, Supreme, Elite) and Anthem Maxx for Residual Weed Control in Soybeans

Trial ID: 20-11_SOY-CAL Location: Caldwell County KY Trial Year: 2020
 Protocol ID: USA-20-002 Investigator (Creator): Travis Legleiter
 Project ID: Study Director: WIGGINS, M.
 Sponsor Contact:

Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	UNTREATED CHECK									101	301	601	702
2	AUTHORITY ELITE	7	LB/GAL	EC	26	FL OZ/A		A	27.08 mL/mx	102	401	604	701
3	AUTHORITY SUPREME	4.16	LB/GAL	SC	6.4	FL OZ/A		A	6.667 mL/mx	103	302	603	803
4	AUTHORITY EDGE	4.25	LB/GAL	SC	7	FL OZ/A		A	7.292 mL/mx	104	303	503	804
5	AUTHORITY EDGE	4.25	LB/GAL	SC	9	FL OZ/A		A	9.375 mL/mx	105	304	605	802
6	AUTHORITY EDGE METRIBUZIN	4.25 75 %	LB/GAL	SC WG	7 5	FL OZ/A OZ WT/A		A A	7.292 mL/mx 4.993 g/mx	106	305	501	705
7	BOUNDARY	6.5	LB/GAL	EC	24	FL OZ/A		A	25.0 mL/mx	201	306	505	706
8	ANTHEM MAXX	4.3	LB/GAL	SC	4	FL OZ/A		A	4.167 mL/mx	202	405	602	704
9	WARRANT	3	LB/GAL	CS	48	FL OZ/A		A	50.0 mL/mx	203	402	504	805
10	OUTLOOK	6	LB/GAL	EC	14	FL OZ/A		A	14.58 mL/mx	204	403	502	703
11	DUAL II MAGNUM	7.64	LB/GAL	EC	20.8	FL OZ/A		A	21.67 mL/mx	205	404	506	801

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
33.854	mL	AUTHORITY ELITE	7	LB/GAL	EC	
8.333	mL	AUTHORITY SUPREME	4.16	LB/GAL	SC	
29.948	mL	AUTHORITY EDGE	4.25	LB/GAL	SC	
6.241	g	METRIBUZIN	75	%	WG	
31.250	mL	BOUNDARY	6.5	LB/GAL	EC	
5.208	mL	ANTHEM MAXX	4.3	LB/GAL	SC	
62.500	mL	WARRANT	3	LB/GAL	CS	
18.229	mL	OUTLOOK	6	LB/GAL	EC	
27.083	mL	DUAL II MAGNUM	7.64	LB/GAL	EC	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

General Trial Information

Study Director: WIGGINS, M.

Investigator: Travis Legleiter **Title:** Assistant Extension Professor

Trial Status: E established

ARM Trial Created On: 4-8-2020

University of Kentucky

Trial Location

City: Princeton **Country:** USA United States
State/Prov.: Kentucky
Postal Code: 42445

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Role: STYDIR study director
Study Director: WIGGINS, M.

Role: INVEST investigator
Investigator: Travis Legleiter **Title:** Assistant Extension Professor
Organization: University of Kentucky
Address 1: 348 University Drive **Phone No.:** 859-562-1323
Country: USA United States **E-mail:** Travis.Legleiter@uky.edu
City: Princeton, KY **Postal Code:** 42445

Crop Description

Crop 1: C GLXMA Glycine max Soybean **BBCH Scale:** BSOY
Stage Scale: BBCH
Variety: Asgrow 42X6
Planting Date: 6-12-2020 **Planting Rate:** 140000 S/A
Depth: 1.5 IN
Rows per Plot: 7 **Planting Method:** PLANTD planted
Row Spacing: 15 IN **Planting Equipment:** VP vacuum planter

Pest Description

Pest 1 Type: W **Code:** AMATA **Amaranthus x tamariscinus**
Common Name: Common waterhemp **Stage Scale:** BBCH

Pest 2 Type: W **Code:** ECHSS **Echinochloa sp.**
Common Name: Barnyardgrass **Stage Scale:** BBCH

Pest 3 Type: W **Code:** IPOLA **Ipomoea lacunosa**
Common Name: pitted morning glory **Stage Scale:** BBCH

Site and Design

Treated Plot Width: 10 FT **Site Type:** FIELD field
Treated Plot Length: 30 FT **Experimental Unit:** 1 PLOT plot
Treated Plot Area: 300.0 FT2 **Treatments:** 11 **Tillage Type:** NOTILL no-till
Replications: 4 **Study Design:** RAOBL Randomized Complete Block (RCB)

Maintenance

No.	Date	Type	Maintenance Product Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Tank Mix
1.	5-1-2020	HERB	Roundup PowerMax	4.5	LBAE/GAL	SL	44	floz/a	yes
2.	5-1-2020	HERB	2,4-D LV6	6	lb/gal	L	11	floz/a	no
3.	6-11-2020	HERB	Gramoxone	2	LBA/GAL	L	3	pt/a	no

University of Kentucky

Soil Description

Description Name: Caldwell County Waterhemp
% Sand: 8 **% OM:** 2.5 **Texture:** SIL silt loam
% Silt: 76 **pH:** 6.5 **Soil Name:** Sadler silt loam
% Clay: 16 **CEC:** 14 **Fert. Level:** G good

Application Description

	A		
Application Date	6-12-2020		
Appl. Start Time	9:40 AM		
Appl. Stop Time	10:11 AM		
Application Method	SPRAY		
Application Timing	PREMCR		
Application Placement	SOIL		
Applied By	JG		
Air Temperature Start, Stop	82	82	F
% Relative Humidity Start, Stop	46	44	
Wind Velocity+Dir. Start	2.3	MPH	N
Wind Velocity+Dir. Stop	3.4	MPH	N
Wind Velocity+Dir. Max	4.2	MPH	N
Wet Leaves (Y/N)	N no		
Soil Temperature	70	F	
Soil Moisture	SLIWET		
% Cloud Cover	0		

Crop Stage At Each Application

	A	
Crop 1 Code, BBCH Scale	GLXMA	BSOY

Pest Stage At Each Application

	A		
Pest 1 Code, Type, Scale	AMATA	W	BBCH
Pest 2 Code, Type, Scale	ECHSS	W	BBCH
Pest 3 Code, Type, Scale	IPOLA	W	BBCH

University of Kentucky

Pest Type		W Weed AMATA					W Weed AMATA	W Weed AMATA		
Pest Code		Common waterhemp					Common waterhemp	Common waterhemp		
Pest Name										
Crop Type, Code	C GLXMA		C GLXMA	C GLXMA	C GLXMA	C GLXMA				
Crop Scientific Name	Glycine max		Glycine max	Glycine max	Glycine max	Glycine max				
Crop Name	Soybean		Soybean	Soybean	Soybean	Soybean				
Rating Date	6-17-2020	6-17-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020	7-6-2020		
Part Rated	PLANT C	PLANT P	PLANT C	PLANT C	PLANT C	PLANT C	PLANT P	PLANT P		
Rating Type	PHYGEN	CONTRO	PHYGEN	PHYSTU	PHYNEC	PHYCHL	CONTRO	COUPLA		
Rating Unit	%	%	%	%	%	%	%	FT2		
Number of Subsamples	1	1	1	1	1	1	1	1		
Data Entry Date		11-17-2020	11-17-2020	11-17-2020	11-17-2020	11-17-2020	11-17-2020	11-17-2020		
Rating Timing										
Days After First/Last Applic.	5 5	5 5	13 13	13 13	13 13	13 13	13 13	24 24		
Trt-Eval Interval	5 DA-A	5 DA-A	13 DA-A	13 DA-A	13 DA-A	13 DA-A	13 DA-A	24 DA-A		
Days After Emergence										
ARM Action Codes							EC	AL		
Number of Decimals										
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6		
3 AUTHORITY SUPREME	6.4 FL OZ/A	A	103	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			302	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			603	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			803	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			Mean =	100.0	0.0	0.0	0.0	0.0	100.0	0.0d
4 AUTHORITY EDGE	7 FL OZ/A	A	104	100.0	0.0	0.0	0.0	0.0	100.0	2.0
			303	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			503	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			804	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			Mean =	100.0	0.0	0.0	0.0	0.0	100.0	0.3d
5 AUTHORITY EDGE	9 FL OZ/A	A	105	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			304	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			605	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			802	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			Mean =	100.0	0.0	0.0	0.0	0.0	100.0	0.0d
6 AUTHORITY EDGE	7 FL OZ/A	A	106	100.0	0.0	0.0	0.0	0.0	100.0	0.0
METRIBUZIN	5 OZ WT/A	A	305	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			501	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			705	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			Mean =	100.0	0.0	0.0	0.0	0.0	100.0	0.0d
7 BOUNDARY	24 FL OZ/A	A	201	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			306	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			505	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			706	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			Mean =	100.0	0.0	0.0	0.0	0.0	100.0	0.0d
8 ANTHEM MAXX	4 FL OZ/A	A	202	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			405	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			602	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			704	100.0	0.0	0.0	0.0	0.0	100.0	0.0
			Mean =	100.0	0.0	0.0	0.0	0.0	100.0	0.0d

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Pest Type Pest Code Pest Name Crop Type, Code Crop Scientific Name Crop Name Rating Date Part Rated Rating Type Rating Unit Number of Subsamples Data Entry Date Rating Timing Days After First/Last Applic. Trt-Eval Interval Days After Emergence ARM Action Codes Number of Decimals	C GLXMA Glycine max Soybean	W Weed AMATA Common waterhemp	C GLXMA Glycine max Soybean	C GLXMA Glycine max Soybean	C GLXMA Glycine max Soybean	C GLXMA Glycine max Soybean	W Weed AMATA Common waterhemp	W Weed AMATA Common waterhemp		
	6-17-2020 PLANT C PHYGEN % 1 11-17-2020 5 5 5 DA-A	6-17-2020 PLANT P CONTRO % 1 11-17-2020 5 5 5 DA-A	6-25-2020 PLANT C PHYGEN % 1 11-17-2020 13 13 13 DA-A	6-25-2020 PLANT C PHYSTU % 1 11-17-2020 13 13 13 DA-A	6-25-2020 PLANT C PHYNEC % 1 11-17-2020 13 13 13 DA-A	6-25-2020 PLANT C PHYCHL % 1 11-17-2020 13 13 13 DA-A	6-25-2020 PLANT P CONTRO % 1 11-17-2020 13 13 13 DA-A EC	7-6-2020 PLANT P COUPLA FT2 1 11-17-2020 24 24 24 DA-A AL		
Trt Treatment No. Name	Rate Rate Unit	Appl Code Plot	1	2	3	4	5	6	7	8
9 WARRANT	48 FL OZ/A	A	203 402 504 805 Mean =	.	100.0 100.0 100.0 100.0 100.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0	0.5* 0.0 0.0 3.0 0.6d
10 OUTLOOK	14 FL OZ/A	A	204 403 502 703 Mean =	.	100.0 100.0 100.0 100.0 100.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0	0.0 1.0 1.0 3.0 1.0d
11 DUAL II MAGNUM	20.8 FL OZ/A	A	205 404 506 801 Mean =	.	100.0 100.0 100.0 100.0 100.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0	-0.1* 0.0 0.0 0.0 0.0d

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Pest Type			W Weed	W Weed	W Weed	W Weed	
Pest Code			SIDSP	ELEIN	AMATA	AMATA	
Pest Name			Prickly sida	Goosegrass	Common waterhemp	Common waterhemp	
Crop Type, Code							
Crop Scientific Name							
Crop Name							
Rating Date			7-6-2020	7-6-2020	7-9-2020	7-15-2020	
Part Rated			PLANT P	PLANT P	PLANT P	PLANT P	
Rating Type			COUPLA	COUPLA	CONTRO	CONTRO	
Rating Unit			FT2	FT2	%	%	
Number of Subsamples			1	1	1	1	
Data Entry Date			11-17-2020	11-17-2020	11-17-2020	11-17-2020	
Rating Timing							
Days After First/Last Applic.			24 24	24 24	27 27	33 33	
Trt-Eval Interval			24 DA-A	24 DA-A	27 DA-A	33 DA-A	
Days After Emergence							
ARM Action Codes				ET10			
Number of Decimals							
Trt	Treatment	Rate	Appl				
No.	Name	Rate Unit	Code Plot	9	10	11	12
1	UNTREATED CHECK		101	0.0	0.0	0.0	0.0
			301	0.0	0.0	0.0	0.0
			601	0.0	0.0	0.0	0.0
			702	0.0	0.0	0.0	0.0
			Mean =	0.0	0.0	0.0	0.0
2	AUTHORITY ELITE	26 FL OZ/A	A 102	0.0	0.0	100.0	100.0
			401	0.0	0.0	100.0	90.0
			604	0.0	0.0	100.0	80.0
			701	0.0	0.0	100.0	97.0
			Mean =	0.0	0.0	100.0	91.8

University of Kentucky

Pest Type	W Weed	W Weed	W Weed	W Weed		
Pest Code	SIDSP	ELEIN	AMATA	AMATA		
Pest Name	Prickly sida	Goosegrass	Common waterhemp	Common waterhemp		
Crop Type, Code						
Crop Scientific Name						
Crop Name						
Rating Date	7-6-2020	7-6-2020	7-9-2020	7-15-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	COUPLA	COUPLA	CONTRO	CONTRO		
Rating Unit	FT2	FT2	%	%		
Number of Subsamples	1	1	1	1		
Data Entry Date	11-17-2020	11-17-2020	11-17-2020	11-17-2020		
Rating Timing						
Days After First/Last Applic.	24 24	24 24	27 27	33 33		
Trt-Eval Interval	24 DA-A	24 DA-A	27 DA-A	33 DA-A		
Days After Emergence						
ARM Action Codes		ET10				
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	9	10		
			11	12		
3 AUTHORITY SUPREME	6.4 FL OZ/A	A 103	0.0	0.0	100.0	97.0
		302	1.0	0.0	100.0	97.0
		603	0.0	0.0	90.0	80.0
		803	0.0	0.0	100.0	100.0
		Mean =	0.3	0.0	97.5	93.5
4 AUTHORITY EDGE	7 FL OZ/A	A 104	0.0	0.0	100.0	100.0
		303	0.0	0.0	100.0	95.0
		503	0.0	0.0	100.0	95.0
		804	0.0	0.0	100.0	90.0
		Mean =	0.0	0.0	100.0	95.0
5 AUTHORITY EDGE	9 FL OZ/A	A 105	0.0	0.0	100.0	98.0
		304	0.0	0.0	100.0	95.0
		605	0.0	0.0	100.0	97.0
		802	0.0	0.0	100.0	97.0
		Mean =	0.0	0.0	100.0	96.8
6 AUTHORITY EDGE	7 FL OZ/A	A 106	0.0	0.0	100.0	100.0
METRIBUZIN	5 OZ WT/A	A 305	0.0	0.0	100.0	97.0
		501	0.0	0.0	80.0	90.0
		705	0.0	0.0	100.0	90.0
		Mean =	0.0	0.0	95.0	94.3
7 BOUNDARY	24 FL OZ/A	A 201	1.0	0.0	80.0	85.0
		306	0.0	0.0	95.0	80.0
		505	0.0	0.0	90.0	80.0
		706	0.0	0.0	95.0	90.0
		Mean =	0.3	0.0	90.0	83.8
8 ANTHEM MAXX	4 FL OZ/A	A 202	0.0	0.0	100.0	90.0
		405	0.0	0.0	100.0	100.0
		602	0.0	0.0	97.0	90.0
		704	5.0	0.0	100.0	90.0
		Mean =	1.3	0.0	99.3	92.5

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Pest Type				W Weed	W Weed	W Weed	W Weed
Pest Code				SIDSP	ELEIN	AMATA	AMATA
Pest Name				Prickly sida	Goosegrass	Common waterhemp	Common waterhemp
Crop Type, Code							
Crop Scientific Name							
Crop Name							
Rating Date				7-6-2020	7-6-2020	7-9-2020	7-15-2020
Part Rated				PLANT P	PLANT P	PLANT P	PLANT P
Rating Type				COUPLA	COUPLA	CONTRO	CONTRO
Rating Unit				FT2	FT2	%	%
Number of Subsamples				1	1	1	1
Data Entry Date				11-17-2020	11-17-2020	11-17-2020	11-17-2020
Rating Timing							
Days After First/Last Applic.				24 24	24 24	27 27	33 33
Trt-Eval Interval				24 DA-A	24 DA-A	27 DA-A	33 DA-A
Days After Emergence							
ARM Action Codes					ET10		
Number of Decimals							
Trt	Treatment	Rate	Appl				
No.	Name	Rate Unit	Code Plot	9	10	11	12
9	WARRANT	48 FL OZ/A	A 203	1.0	0.0	100.0	90.0
			402	0.0	0.0	80.0	80.0
			504	0.0	0.0	95.0	90.0
			805	0.0	0.0	80.0	80.0
			Mean =	0.3	0.0	88.8	85.0
10	OUTLOOK	14 FL OZ/A	A 204	0.0	0.0	95.0	80.0
			403	0.0	0.0	50.0	70.0
			502	0.0	0.0	90.0	60.0
			703	0.0	0.0	90.0	85.0
			Mean =	0.0	0.0	81.3	73.8
11	DUAL II MAGNUM	20.8 FL OZ/A	A 205	0.0	0.0	97.0	90.0
			404	0.0	0.0	80.0	80.0
			506	0.0	0.0	90.0	90.0
			801	0.0	0.0	100.0	90.0
			Mean =	0.0	0.0	91.8	87.5

University of Kentucky

Evaluating Authority Brands (Edge, Supreme, Elite) and Anthem Maxx for Residual Weed Control in Soybeans

Trial ID: 20-11_SOY-CAL Location: Caldwell County KY Trial Year: 2020
 Protocol ID: USA-20-002 Investigator (Creator): Travis Legleiter
 Project ID: Study Director: WIGGINS, M.
 Sponsor Contact:

Pest Type
 W, Weed = Weed or volunteer crop

Pest Code
 AMATA, Amaranthus x tamariscinus, Common waterhemp = US
 SIDSP, Sida spinosa, Prickly sida = US
 ELEIN, Eleusine indica, Goosegrass = US

Crop Type, Code
 C = EPPO species (Bayer) codes
 GLXMA, BSOY, Glycine max, Soybean = US

Part Rated
 PLANT = plant
 C = Crop is Part Rated
 P = Pest is Part Rated

Rating Type
 PHYGEN = phytotoxicity - general / injury
 CONTRO = control / burndown or knockdown
 PHYSTU = phytotoxicity - stunting
 PHYNEC = phytotoxicity - necrosis /burn
 PHYCHL = phytotoxicity - chlorosis
 COUPLA = count - plant / emergence - objective

Rating Unit
 % = percent
 FT2 = square foot

ARM Action Codes
 EC = Do not analyze untreated check, while still reporting treatment mean on AOV Means Table
 AL = Automatic log transformation of X+1
 ET10 = Excluded treatment 10

Pest Type		W Weed					W Weed	W Weed		
Pest Code		AMATA					AMATA	AMATA		
Pest Name		Common waterhemp					Common waterhemp	Common waterhemp		
Crop Type, Code	C GLXMA		C GLXMA	C GLXMA	C GLXMA	C GLXMA				
Crop Scientific Name	Glycine max		Glycine max	Glycine max	Glycine max	Glycine max				
Crop Name	Soybean		Soybean	Soybean	Soybean	Soybean				
Rating Date	6-17-2020	6-17-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020	7-6-2020		
Part Rated	PLANT C	PLANT P	PLANT C	PLANT C	PLANT C	PLANT C	PLANT P	PLANT P		
Rating Type	PHYGEN	CONTRO	PHYGEN	PHYSTU	PHYNEC	PHYCHL	CONTRO	COUPLA		
Rating Unit	%	%	%	%	%	%	%	FT2		
Number of Subsamples	1	1	1	1	1	1	1	1		
Data Entry Date		11-17-2020	11-17-2020	11-17-2020	11-17-2020	11-17-2020	11-17-2020	11-17-2020		
Rating Timing										
Days After First/Last Applic.	5 5	5 5	13 13	13 13	13 13	13 13	13 13	24 24		
Trt-Eval Interval	5 DA-A	5 DA-A	13 DA-A	13 DA-A	13 DA-A	13 DA-A	13 DA-A	24 DA-A		
Days After Emergence										
ARM Action Codes							EC	AL		
Number of Decimals										
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	1	2	3	4	5	6		
1 UNTREATED CHECK				100.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0	6.3 a
2 AUTHORITY ELITE	26 FL OZ/A	A		100.0 a	0.0 a	0.0 a	0.0 a	0.0 a	100.0 a	0.0 b
3 AUTHORITY SUPREME	6.4 FL OZ/A	A		100.0 a	0.0 a	0.0 a	0.0 a	0.0 a	100.0 a	0.0 b
4 AUTHORITY EDGE	7 FL OZ/A	A		100.0 a	0.0 a	0.0 a	0.0 a	0.0 a	100.0 a	0.3 b

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Pest Type			W Weed AMATA							W Weed AMATA			W Weed AMATA	
Pest Code			Common waterhemp							Common waterhemp			Common waterhemp	
Pest Name														
Crop Type, Code	C GLXMA			C GLXMA	C GLXMA	C GLXMA	C GLXMA	C GLXMA						
Crop Scientific Name	Glycine max			Glycine max	Glycine max	Glycine max	Glycine max	Glycine max						
Crop Name	Soybean			Soybean	Soybean	Soybean	Soybean	Soybean						
Rating Date	6-17-2020		6-17-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020	6-25-2020		6-25-2020			7-6-2020	
Part Rated	PLANT C		PLANT P	PLANT C	PLANT C	PLANT C	PLANT C	PLANT C		PLANT P			PLANT P	
Rating Type	PHYGEN		CONTRO	PHYGEN	PHYSTU	PHYNEC	PHYCHL			CONTRO			COUPLA	
Rating Unit	%		%	%	%	%	%	%		%			FT2	
Number of Subsamples	1		1	1	1	1	1	1		1			1	
Data Entry Date			11-17-2020	11-17-2020	11-17-2020	11-17-2020	11-17-2020	11-17-2020		11-17-2020			11-17-2020	
Rating Timing														
Days After First/Last Applic.	5 5		5 5	13 13	13 13	13 13	13 13	13 13		13 13			24 24	
Trt-Eval Interval	5 DA-A		5 DA-A	13 DA-A	13 DA-A	13 DA-A	13 DA-A	13 DA-A		13 DA-A			24 DA-A	
Days After Emergence														
ARM Action Codes										EC			AL	
Number of Decimals														
Trt Treatment	Rate	Appl												
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8				
5 AUTHORITY EDGE	9 FL OZ/A	A		100.0 a	0.0 a	0.0 a	0.0 a	0.0 a	100.0 a		0.0 b			
6 AUTHORITY EDGE METRIBUZIN	7 FL OZ/A 5 OZ WT/A	A A		100.0 a	0.0 a	0.0 a	0.0 a	0.0 a	100.0 a		0.0 b			
7 BOUNDARY	24 FL OZ/A	A		100.0 a	0.0 a	0.0 a	0.0 a	0.0 a	100.0 a		0.0 b			
8 ANTHEM MAXX	4 FL OZ/A	A		100.0 a	0.0 a	0.0 a	0.0 a	0.0 a	100.0 a		0.0 b			
9 WARRANT	48 FL OZ/A	A		100.0 a	0.0 a	0.0 a	0.0 a	0.0 a	100.0 a		0.6 b			
10 OUTLOOK	14 FL OZ/A	A		100.0 a	0.0 a	0.0 a	0.0 a	0.0 a	100.0 a		1.0 b			
11 DUAL II MAGNUM	20.8 FL OZ/A	A		100.0 a	0.0 a	0.0 a	0.0 a	0.0 a	100.0 a		0.0 b			
LSD P=.05												0.72 - 3.08		
Standard Deviation				0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.17t		
CV				0.0	0.0	0.0	0.0	0.0	0.0		0.0	123.76t		
Levene's F				0.00	0.00	0.00	0.00	0.00	0.00		0.00	1.762		
Levene's Prob(F)				0.00*	0.00*	0.00*	0.00*	0.00*	0.00*		0.00*	0.111		
Skewness				.	.	.	.	.	.		.	2.1602*	
Kurtosis				.	.	.	.	.	.		.	3.9177*	
Replicate F				0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.310		
Replicate Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		1.0000	0.8177		
Treatment F				0.000	0.000	0.000	0.000	0.000	0.000		0.000	10.108		
Treatment Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		1.0000	0.0001		

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SIDSP	ELEIN	AMATA	AMATA
Pest Name	Prickly sida	Goosegrass	Common waterhemp	Common waterhemp
Crop Type, Code				
Crop Scientific Name				
Crop Name				
Rating Date	7-6-2020	7-6-2020	7-9-2020	7-15-2020
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	COUPLA	COUPLA	CONTRO	CONTRO
Rating Unit	FT2	FT2	%	%
Number of Subsamples	1	1	1	1
Data Entry Date	11-17-2020	11-17-2020	11-17-2020	11-17-2020
Rating Timing				
Days After First/Last Applic.	24 24	24 24	27 27	33 33
Trt-Eval Interval	24 DA-A	24 DA-A	27 DA-A	33 DA-A
Days After Emergence				
ARM Action Codes		ET10		
Number of Decimals				
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	11	12
1 UNTREATED CHECK			0.0 a	0.0 a
2 AUTHORITY ELITE	26 FL OZ/A A		0.0 a	0.0 a
3 AUTHORITY SUPREME	6.4 FL OZ/A A		0.3 a	0.0 a
4 AUTHORITY EDGE	7 FL OZ/A A		0.0 a	0.0 a
			100.0 a	97.5 a
			100.0 a	95.0 a

University of Kentucky

Evaluating Authority Brands (Edge, Supreme, Elite) and Anthem Maxx for Residual Weed Control in Soybeans

Trial ID: 20-11_SOY-CAL Location: Caldwell County KY Trial Year: 2020
 Protocol ID: USA-20-002 Investigator (Creator): Travis Legleiter
 Project ID: Study Director: WIGGINS, M.
 Sponsor Contact:

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

AMATA, Amaranthus x tamariscinus, Common waterhemp = US

SIDSP, Sida spinosa, Prickly sida = US

ELEIN, Eleusine indica, Goosegrass = US

Crop Type, Code

C = EPPO species (Bayer) codes

GLXMA, BSOY, Glycine max, Soybean = US

Part Rated

PLANT = plant

C = Crop is Part Rated

P = Pest is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

PHYSTU = phytotoxicity - stunting

PHYNEC = phytotoxicity - necrosis /burn

PHYCHL = phytotoxicity - chlorosis

COUPLA = count - plant / emergence - objective

Rating Unit

% = percent

FT2 = square foot

ARM Action Codes

EC = Do not analyze untreated check, while still reporting treatment mean on AOV Means Table

AL = Automatic log transformation of X+1

ET10 = Excluded treatment 10

University of Kentucky

2020 SL-575D Visibility Protocol

Trial ID: 20-12_COR-REC Location: UKREC 201-E Trial Year: 2020
 Protocol ID: Investigator (Creator): Travis Legleiter
 Project ID: Study Director: Chuck Foresman
 Sponsor Contact: Jay Turner

Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2000 mL (total for 4 plots; minimum=1564 mL, overage=436 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	Amt to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	SL-575D	6.49	LB/GAL	EC	1.88	PT/A	PREPRE	A	31.33 mL/mx	101	203	306	402
	Atrazine	4	LBA/GAL	F	0.5	LB AI/A	PREPRE	A	16.66 mL/mx				
	Shieldex	3.33	LB/GAL	SC	1	FL OZ/A	POSPOS	B	1.042 mL/mx				
	Atrazine	4	LBA/GAL	F	0.5	LB AI/A	POSPOS	B	16.66 mL/mx				
	COC	100 %		SL	1 %	V/V	POSPOS	B	20.0 mL/mx				
2	SL-575D	6.49	LB/GAL	EC	2.25	PT/A	PREPRE	A	37.5 mL/mx	102	206	305	406
	Atrazine	4	LBA/GAL	F	0.5	LB AI/A	PREPRE	A	16.66 mL/mx				
	Shieldex	3.33	LB/GAL	SC	1	FL OZ/A	POSPOS	B	1.042 mL/mx				
	Atrazine	4	LBA/GAL	F	0.5	LB AI/A	POSPOS	B	16.66 mL/mx				
	COC	100 %		SL	1 %	V/V	POSPOS	B	20.0 mL/mx				
3	SL-575D	6.49	LB/GAL	EC	1.125	PT/A	PREPRE	A	18.75 mL/mx	103	201	307	405
	Atrazine	4	LBA/GAL	F	0.5	LB AI/A	PREPRE	A	16.66 mL/mx				
	SL-575D	6.49	LB/GAL	EC	1.125	PT/A	POSPOS	B	18.75 mL/mx				
	Atrazine	4	LBA/GAL	F	0.5	LB AI/A	POSPOS	B	16.66 mL/mx				
	COC	100 %		SL	1 %	V/V	POSPOS	B	20.0 mL/mx				
4	Resicore	3.29	LB/GAL	SL	40	FL OZ/A	PREPRE	A	41.67 mL/mx	104	202	303	407
	Atrazine	4	LB/GAL	F	0.5	LB AI/A	PREPRE	A	16.66 mL/mx				
	Resicore	3.29	LB/GAL	SL	40	FL OZ/A	POSPOS	B	41.67 mL/mx				
	Atrazine	4	LB/GAL	F	0.5	LB AI/A	POSPOS	B	16.66 mL/mx				
	COC	100 %		SL	1 %	V/V	POSPOS	B	20.0 mL/mx				
5	Acuron	3.44	LB/GAL	ZC	40	FL OZ/A	PREPRE	A	41.67 mL/mx	105	204	301	408
	Acuron	3.44	LB/GAL	ZC	40	FL OZ/A	POSPOS	B	41.67 mL/mx				
	COC	100 %		SL	1 %	V/V	POSPOS	B	20.0 mL/mx				
6	Armezon Pro	5.35	LB/GAL	SC	20	FL OZ/A	PREPRE	A	20.83 mL/mx	106	205	302	403
	Atrazine	4	LBA/GAL	F	0.5	LB AI/A	PREPRE	A	16.66 mL/mx				
	Atrazine	4	LBA/GAL	F	0.5	LB AI/A	POSPOS	B	16.66 mL/mx				
	Roundup	4.5	LBA/GAL	SL	32	FL OZ/A	POSPOS	B	33.33 mL/mx				
	COC	100 %		SL	1 %	V/V	POSPOS	B	20.0 mL/mx				
	Amsol AMS	3.4	lba/gal	SL	2.5 %	V/V	POSPOS	B	49.99 mL/mx				
7	Harness Max	3.85	LB/GAL	SE	1.72	QT/A	PREPRE	A	57.33 mL/mx	107	208	304	401
	Atrazine	4	LBA/GAL	F	0.5	LB AI/A	PREPRE	A	16.66 mL/mx				
	Roundup	4.5	LBA/GAL	SL	32	FL OZ/A	POSPOS	B	33.33 mL/mx				
	Atrazine	4	LBA/GAL	F	0.5	LB AI/A	POSPOS	B	16.66 mL/mx				
	COC	100 %		SL	1 %	V/V	POSPOS	B	20.0 mL/mx				
	Amsol AMS	3.4	lba/gal	SL	2.5 %	V/V	POSPOS	B	49.99 mL/mx				
8	Untreated Check								108	207	308	404	

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

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Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
132.917	mL	SL-575D	6.49	LB/GAL	EC	
208.311	mL	Atrazine	4	LBA/GAL	F	
2.604	mL	Shieldex	3.33	LB/GAL	SC	
174.981	mL	COC	100	%	SL	
104.167	mL	Resicore	3.29	LB/GAL	SL	
41.662	mL	Atrazine	4	LB/GAL	F	
104.167	mL	Acuron	3.44	LB/GAL	ZC	
26.042	mL	Armezon Pro	5.35	LB/GAL	SC	
83.333	mL	Roundup	4.5	LBA/GAL	SL	
124.986	mL	Amsol AMS	3.4	lba/gal	SL	
71.666	mL	Harness Max	3.85	LB/GAL	SE	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2000 mL (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2000 mL.

General Trial Information

Study Director: Chuck Foresman
Investigator: Travis Legleiter

Trial Status: E established
ARM Trial Created On: 4-7-2020

Trial Location

City: Princeton **Country:** USA United States
State/Prov.: Kentucky
Postal Code: 42445

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Role: STYDIR study director
Study Director: Chuck Foresman

Role: INVEST investigator
Investigator: Travis Legleiter
Organization: University of Kentucky
Address 1: 1205 Hopkinsville Street

E-mail: Travis.Legleiter@uky.edu

City: Princeton, KY

Postal Code: 42445

Role: SPONSR sponsor
Sponsor: Jay Turner

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Crop Description
Crop 1: C ZEAMX Zea mays Corn **Stage Scale:** BBCH
Variety: Pioneer P1077AM
Planting Date: 5-4-2020 **Planting Rate:** 32000 S/A
Depth: 1.5 IN
Rows per Plot: 4 **Planting Method:** PLANTD planted
Row Spacing: 30 IN **Planting Equipment:** VP vacuum planter

Pest Description
Pest 1 Type: W **Code:** IPOSS Ipomoea sp. **Stage Scale:** BBCH
Common Name: Morning glory
Pest 2 Type: W **Code:** SORHA Sorghum halepense **Stage Scale:** BBCH
Common Name: Johnson grass
Pest 3 Type: W **Code:** AMBTR Ambrosia trifida **Stage Scale:** BBCH
Common Name: Giant ragweed

Site and Design
Treated Plot Width: 10 FT
Treated Plot Length: 30 FT
Treated Plot Area: 300.0 FT2 **Treatments:** 8
Replications: 4 **Study Design:** RACOBL Randomized Complete Block (RCB)

Maintenance

No.	Type	Maintenance Product Name	Form Conc	Form Unit	Form Type	Description	Rate	Rate Unit
1.	FERT	Urea	46	% N	SG	46-0-0	370	LB/A
2.	FERT	DAP	46	% P2O5	GR	18-46-0	100	lb/a
3.	FERT	Muriate of Potash 0-0-60	60	%	GR	0-0-60	50	lb/a

Field Prep./Maintenance:
3/26/20- Applied 83.3 lbs/a of 0-0-60.
4/16/20- Disked field once
4/6/20- Applied 100 lbs of DAP.
4/28/20- Applied 370 lbs/a of urea.
5/4/20- Field cultivator once.
1.75 ton/a Lime applied

Soil Description
Description Name: 201-E
% Sand: 4.2 **% OM:** 2.4 **Texture:** SIL silt loam
% Silt: 80.1 **pH:** 5.43 **Soil Name:** Crider Silt Loam
% Clay: 15.7 **CEC:** 11.91

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Application Description		
	A	B
Application Date	5-6-2020	6-3-2020
Appl. Start Time	7:17 AM	9:50 AM
Appl. Stop Time	7:40 AM	10:10 AM
Application Method	SPRAY	SPRAY
Application Timing	PRE	POST
Application Placement	SOIL	FOLIAR
Applied By	JG	TL
Air Temperature Start, Stop	50.7 48.2 F	85 86 F
% Relative Humidity Start, Stop	78.5 80.8	56 60
Wind Velocity+Dir. Start	10 MPH NW	3 MPH S
Wind Velocity+Dir. Stop	8.9 MPH NW	4 MPH S
Wind Velocity+Dir. Max		5.8 MPH S
Wet Leaves (Y/N)	N no	N no
Soil Temperature	51 F	
Soil Moisture	damp	dry
% Cloud Cover	100	

Crop Stage At Each Application		
	A	B
Crop 1 Code, BBCH Scale	ZEAMX BCOR	ZEAMX BCOR
Stage Majority, Percent		V5
Stage Minimum, Percent		V4
Stage Maximum, Percent		V5
Height Average		12 IN
Height Minimum, Maximum		10 14

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Pest Stage At Each Application		
	A	B
Pest 1 Code, Type, Scale	IPOSS W BBCH	IPOSS W BBCH
Height Average		1 IN
Height Minimum, Maximum		0.5 2
Density Average		1 FT2
Density Minimum, Maximum		0 1
Pest 2 Code, Type, Scale	SORHA W BBCH	SORHA W BBCH
Height Average		12 IN
Height Minimum, Maximum		6 18
Density Average		1.67 FT2
Density Minimum, Maximum		1 2
Pest 3 Code, Type, Scale	AMBTR W BBCH	AMBTR W BBCH
Height Average		2 IN
Height Minimum, Maximum		1 3
Density Average		1.143 FT2
Density Minimum, Maximum		1 2

Application Equipment		
	A	B
Appl. Equipment	SPRBAC	SPRBAC
Operation Pressure	50 PSI	18 PSI
Nozzle Type	TTI-015	XR11002
Nozzle Size	015	02
Nozzle Spacing	20 IN	20 IN
Boom ID	blue tape	white tape
Boom Length	10 FT	10 FT
Boom Height	18 IN	18 FT
Ground Speed	3 MPH	3 MPH
Carrier	WATER	WATER
Application Amount	15 GAL/AC	15 GAL/AC
Mix Overage	436 mL	436 mL
Mix Size	2000 mL	2000 mL
Propellant	COMCO2	COMCO2

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Pest Type		W Weed		W Weed		W Weed	W Weed	W Weed			
Pest Code		AMBTR		AMBTR		AMBTR	AMAHH	DIGSA			
Pest Name		Giant ragweed		Giant ragweed		Giant ragweed	Amaranthus hybr>	large crabgrass			
Crop Type, Code	C ZEAMX		C ZEAMX		C ZEAMX				C ZEAMX		
Crop Scientific Name	Zea mays		Zea mays		Zea mays				Zea mays		
Crop Name	Corn		Corn		Corn				Corn		
Rating Date	5-11-2020	5-11-2020	5-20-2020	5-20-2020	5-27-2020	5-27-2020	5-27-2020	5-27-2020	6-10-2020		
Part Rated	PLANT C	PLANT P	PLANT C	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C		
Rating Type	PHYGEN	CONTRO	PHYGEN	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN		
Rating Unit	%	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	6-10-2020	6-10-2020	6-10-2020	6-10-2020	6-10-2020	8-7-2020		
Rating Timing											
Days After First/Last Applic.	5 5	5 5	14 14	14 14	21 21	21 21	21 21	21 21	35 7		
Trt-Eval Interval	5 DA-A	5 DA-A	14 DA-A	14 DA-A	21 DA-A	21 DA-A	21 DA-A	21 DA-A			
Days After Emergence											
ARM Action Codes						ET8			AS		
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7	8	9
1 SL-575D	1.88 PT/A	A 101	0.0	100.0	0.0	100.0	0.0	100.0	100.0	100.0	0.0
Atrazine	0.5 LB AI/A	A 203	0.0	100.0	0.0	100.0	0.0	100.0	100.0	100.0	0.0
Shieldex	1 FL OZ/A	B 306	0.0	100.0	0.0	95.0	0.0	97.0	100.0	100.0	0.0
Atrazine	0.5 LB AI/A	B 402	0.0	100.0	0.0	100.0	0.0	100.0	100.0	100.0	0.0
COC	1 % V/V	B									
	Mean =		0.0	100.0	0.0	98.8	0.0	99.3	100.0	100.0	0.0d
2 SL-575D	2.25 PT/A	A 102	0.0	100.0	0.0	100.0	0.0	100.0	100.0	100.0	0.0
Atrazine	0.5 LB AI/A	A 206	0.0	100.0	0.0	100.0	0.0	97.0	100.0	100.0	0.0
Shieldex	1 FL OZ/A	B 305	0.0	100.0	0.0	97.0	0.0	100.0	100.0	100.0	0.0
Atrazine	0.5 LB AI/A	B 406	0.0	100.0	0.0	100.0	0.0	100.0	100.0	100.0	0.0
COC	1 % V/V	B									
	Mean =		0.0	100.0	0.0	99.3	0.0	99.3	100.0	100.0	0.0d
3 SL-575D	1.125 PT/A	A 103	0.0	100.0	0.0	100.0	0.0	100.0	100.0	100.0	2.0
Atrazine	0.5 LB AI/A	A 201	0.0	100.0	0.0	100.0	0.0	97.0	100.0	100.0	0.0
SL-575D	1.125 PT/A	B 307	0.0	100.0	0.0	90.0	0.0	95.0	100.0	100.0	1.0
Atrazine	0.5 LB AI/A	B 405	0.0	100.0	0.0	95.0	0.0	95.0	100.0	100.0	0.0
COC	1 % V/V	B									
	Mean =		0.0	100.0	0.0	96.3	0.0	96.8	100.0	100.0	0.6d
4 Resicore	40 FL OZ/A	A 104	0.0	100.0	0.0	100.0	0.0	100.0	100.0	100.0	2.0
Atrazine	0.5 LB AI/A	A 202	0.0	100.0	0.0	100.0	0.0	100.0	100.0	100.0	2.0
Resicore	40 FL OZ/A	B 303	0.0	100.0	0.0	100.0	0.0	97.0	100.0	100.0	3.0
Atrazine	0.5 LB AI/A	B 407	0.0	100.0	0.0	100.0	0.0	95.0	100.0	100.0	0.0
COC	1 % V/V	B									
	Mean =		0.0	100.0	0.0	100.0	0.0	98.0	100.0	100.0	1.6d
5 Acuron	40 FL OZ/A	A 105	0.0	100.0	0.0	100.0	0.0	100.0	100.0	100.0	0.0
Acuron	40 FL OZ/A	B 204	0.0	100.0	0.0	100.0	0.0	100.0	100.0	100.0	2.0
COC	1 % V/V	B 301	0.0	100.0	0.0	100.0	0.0	100.0	100.0	100.0	0.0
		408	0.0	100.0	0.0	90.0	0.0	95.0	100.0	100.0	3.0
	Mean =		0.0	100.0	0.0	97.5	0.0	98.8	100.0	100.0	1.0d

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Pest Type	W Weed	W Weed	W Weed		W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	DIGSA	AMBTR	AMAHH		DIGSA	AMBTR	AMAHH	SORHA			
Pest Name	large crabgrass	Giant ragweed	Amaranthus hybr>		large crabgrass	Giant ragweed	Amaranthus hybr>	Johnson grass			
Crop Type, Code				C ZEAMX					C ZEAMX		
Crop Scientific Name				Zea mays					Zea mays		
Crop Name				Corn					Corn		
Rating Date	6-10-2020	6-10-2020	6-10-2020	6-17-2020	6-17-2020	6-17-2020	6-17-2020	6-17-2020	6-23-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT C		
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN		
Rating Unit	%	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Data Entry Date	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020		
Rating Timing											
Days After First/Last Applic.	35 7	35 7	35 7	42 14	42 14	42 14	42 14	42 14	48 20		
Trt-Eval Interval											
Days After Emergence											
ARM Action Codes	ET8	ET8	ET8					AA			
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code Plot	10	11	12	13	14	15	16	17	18
1 SL-575D	1.88 PT/A	A 101	100.0	100.0	100.0	0.0	100.0	100.0	100.0	90.0	0.0
Atrazine	0.5 LB AI/A	A 203	100.0	100.0	100.0	0.0	100.0	100.0	100.0	97.0	0.0
Shieldex	1 FL OZ/A	B 306	100.0	100.0	100.0	0.0	100.0	100.0	100.0	80.0	0.0
Atrazine	0.5 LB AI/A	B 402	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0	0.0
COC	1 % V/V	B									
	Mean =		100.0	100.0	100.0	0.0	100.0	100.0	100.0	94.4d	0.0
2 SL-575D	2.25 PT/A	A 102	100.0	100.0	100.0	0.0	97.0	100.0	100.0	95.0	0.0
Atrazine	0.5 LB AI/A	A 206	100.0	100.0	100.0	0.0	100.0	100.0	100.0	50.0	0.0
Shieldex	1 FL OZ/A	B 305	100.0	100.0	100.0	0.0	100.0	100.0	100.0	98.0	0.0
Atrazine	0.5 LB AI/A	B 406	100.0	100.0	100.0	0.0	100.0	100.0	100.0	90.0	0.0
COC	1 % V/V	B									
	Mean =		100.0	100.0	100.0	0.0	99.3	100.0	100.0	87.0d	0.0
3 SL-575D	1.125 PT/A	A 103	100.0	100.0	100.0	0.0	100.0	100.0	100.0	95.0	0.0
Atrazine	0.5 LB AI/A	A 201	100.0	100.0	100.0	0.0	100.0	100.0	100.0	97.0	0.0
SL-575D	1.125 PT/A	B 307	100.0	100.0	100.0	0.0	97.0	100.0	100.0	80.0	0.0
Atrazine	0.5 LB AI/A	B 405	100.0	100.0	100.0	0.0	100.0	100.0	100.0	95.0	0.0
COC	1 % V/V	B									
	Mean =		100.0	100.0	100.0	0.0	99.3	100.0	100.0	92.8d	0.0
4 Resicore	40 FL OZ/A	A 104	100.0	100.0	100.0	0.0	100.0	100.0	100.0	80.0	0.0
Atrazine	0.5 LB AI/A	A 202	100.0	100.0	100.0	0.0	100.0	100.0	100.0	97.0	0.0
Resicore	40 FL OZ/A	B 303	100.0	100.0	100.0	0.0	100.0	100.0	100.0	97.0	0.0
Atrazine	0.5 LB AI/A	B 407	100.0	100.0	100.0	0.0	100.0	100.0	100.0	75.0	0.0
COC	1 % V/V	B									
	Mean =		100.0	100.0	100.0	0.0	100.0	100.0	100.0	89.3d	0.0
5 Acuron	40 FL OZ/A	A 105	100.0	100.0	100.0	0.0	100.0	100.0	100.0	50.0	0.0
Acuron	40 FL OZ/A	B 204	100.0	100.0	100.0	0.0	100.0	100.0	100.0	70.0	0.0
COC	1 % V/V	B 301	100.0	100.0	100.0	0.0	100.0	100.0	100.0	95.0	0.0
		408	100.0	100.0	100.0	0.0	100.0	100.0	100.0	70.0	0.0
	Mean =		100.0	100.0	100.0	0.0	100.0	100.0	100.0	73.3d	0.0

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	
Pest Code	DIGSA	AMBTR	AMAHH	SORHA	DIGSA	AMBTR	AMAHH	SORHA	SORHA	
Pest Name	large crabgrass	Giant ragweed	Amaranthus hybr>	Johnson grass	large crabgrass	Giant ragweed	Amaranthus hybr>	Johnson grass	Johnson grass	
Crop Type, Code										
Crop Scientific Name										
Crop Name										
Rating Date	6-29-2020	6-29-2020	6-29-2020	6-29-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020	
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	
Rating Unit	%	%	%	%	%	%	%	%	%	
Number of Subsamples	1	1	1	1	1	1	1	1	1	
Data Entry Date	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	
Rating Timing										
Days After First/Last Applic.	54 26	54 26	54 26	54 26	70 42	70 42	70 42	70 42	70 42	
Trt-Eval Interval										
Days After Emergence										
ARM Action Codes										
Number of Decimals										
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code Plot	19	20	21	22	23	24	25	26
1 SL-575D	1.88 PT/A	A 101	97.0	100.0	100.0	100.0	97.0	100.0	100.0	100.0
Atrazine	0.5 LB AI/A	A 203	100.0	100.0	100.0	95.0	100.0	100.0	100.0	95.0
Shieldex	1 FL OZ/A	B 306	100.0	100.0	100.0	60.0	100.0	100.0	100.0	60.0
Atrazine	0.5 LB AI/A	B 402	100.0	100.0	100.0	97.0	100.0	100.0	100.0	97.0
COC	1 % V/V	B								
	Mean =		99.3	100.0	100.0	88.0	99.3	100.0	100.0	88.0
2 SL-575D	2.25 PT/A	A 102	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.0
Atrazine	0.5 LB AI/A	A 206	100.0	100.0	100.0	50.0	100.0	100.0	90.0	50.0
Shieldex	1 FL OZ/A	B 305	100.0	100.0	100.0	90.0	100.0	100.0	100.0	90.0
Atrazine	0.5 LB AI/A	B 406	100.0	95.0	100.0	90.0	100.0	95.0	100.0	90.0
COC	1 % V/V	B								
	Mean =		100.0	98.8	100.0	82.5	100.0	98.8	97.5	81.8
3 SL-575D	1.125 PT/A	A 103	97.0	100.0	100.0	100.0	97.0	100.0	100.0	97.0
Atrazine	0.5 LB AI/A	A 201	100.0	100.0	100.0	97.0	100.0	100.0	100.0	97.0
SL-575D	1.125 PT/A	B 307	100.0	100.0	100.0	70.0	100.0	100.0	100.0	50.0
Atrazine	0.5 LB AI/A	B 405	100.0	100.0	100.0	90.0	100.0	100.0	100.0	90.0
COC	1 % V/V	B								
	Mean =		99.3	100.0	100.0	89.3	99.3	100.0	100.0	83.5
4 Resicore	40 FL OZ/A	A 104	100.0	100.0	100.0	90.0	100.0	100.0	100.0	90.0
Atrazine	0.5 LB AI/A	A 202	100.0	100.0	100.0	95.0	100.0	100.0	100.0	90.0
Resicore	40 FL OZ/A	B 303	100.0	100.0	100.0	98.0	100.0	100.0	100.0	98.0
Atrazine	0.5 LB AI/A	B 407	100.0	100.0	100.0	50.0	100.0	100.0	100.0	50.0
COC	1 % V/V	B								
	Mean =		100.0	100.0	100.0	83.3	100.0	100.0	100.0	82.0
5 Acuron	40 FL OZ/A	A 105	100.0	100.0	100.0	50.0	100.0	100.0	100.0	50.0
Acuron	40 FL OZ/A	B 204	100.0	100.0	100.0	90.0	100.0	100.0	100.0	90.0
COC	1 % V/V	B 301	100.0	100.0	100.0	95.0	100.0	100.0	100.0	95.0
		408	100.0	100.0	100.0	80.0	100.0	100.0	100.0	80.0
	Mean =		100.0	100.0	100.0	78.8	100.0	100.0	100.0	78.8

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Pest Type		W Weed AMBTR		W Weed AMBTR		W Weed AMBTR	W Weed AMAHH	W Weed DIGSA		W Weed DIGSA				
Pest Code		Giant ragweed		Giant ragweed		Giant ragweed	Amaranthus hybr>	large crabgrass		large crabgrass				
Pest Name														
Crop Type, Code	C ZEAMX		C ZEAMX		C ZEAMX				C ZEAMX					
Crop Scientific Name	Zea mays		Zea mays		Zea mays				Zea mays					
Crop Name	Corn		Corn		Corn				Corn					
Rating Date	5-11-2020	5-11-2020	5-20-2020	5-20-2020	5-27-2020	5-27-2020	5-27-2020	5-27-2020	6-10-2020	6-10-2020				
Part Rated	PLANT C	PLANT P	PLANT C	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P				
Rating Type	PHYGEN	CONTRO	PHYGEN	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO				
Rating Unit	%	%	%	%	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1	1	1	1	1				
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	6-10-2020	6-10-2020	6-10-2020	6-10-2020	6-10-2020	8-7-2020	8-7-2020				
Rating Timing														
Days After First/Last Applic.	5 5	5 5	14 14	14 14	21 21	21 21	21 21	21 21	35 7	35 7				
Trt-Eval Interval	5 DA-A	5 DA-A	14 DA-A	14 DA-A	21 DA-A	21 DA-A	21 DA-A	21 DA-A						
Days After Emergence														
ARM Action Codes						ET8			AS	ET8				
Number of Decimals														
Trt Treatment	Rate	Appl												
No. Name	Rate	Unit	Code	1	2	3	4	5	6	7	8	9	10	
8 Untreated Check	0.0	a		100.0	a	0.0	a	0.0	b	0.0	b	0.0	a	25.0
LSD P=.05	.			.		.		4.10		.		1.17 - 1.28		.
Standard Deviation	0.00			0.00		0.00		2.79		0.00		0.34t		0.00
CV	0.0			0.0		0.0		3.23		0.0		37.03t		0.0
Levene's F	0.00			0.00		0.00		1.083		0.00		6.172		0.00
Levene's Prob(F)	0.00*			0.00*		0.00*		0.404		0.00*		0.001*		0.00*
Skewness	.			.		.		-2.3498*		.		1.6352*		.
Kurtosis	.			.		.		3.8164*		.		1.0122		.
Replicate F	0.000			0.000		0.000		1.355		0.000		0.089		0.000
Replicate Prob(F)	1.0000			1.0000		1.0000		0.2836		1.0000		0.9653		1.0000
Treatment F	0.000			0.000		0.000		625.549		0.000		3.032		0.000
Treatment Prob(F)	1.0000			1.0000		1.0000		0.0001		1.0000		0.0229		1.0000

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Pest Type	W Weed AMBTR	W Weed AMAHH		W Weed DIGSA	W Weed AMBTR	W Weed AMAHH	W Weed SORHA		W Weed DIGSA
Pest Code	Giant ragweed	Amaranthus hybr>	C ZEAMX Zea mays Corn	large crabgrass	Giant ragweed	Amaranthus hybr>	Johnson grass	C ZEAMX Zea mays Corn	large crabgrass
Pest Name									
Crop Type, Code									
Crop Scientific Name									
Crop Name									
Rating Date	6-10-2020	6-10-2020	6-17-2020	6-17-2020	6-17-2020	6-17-2020	6-17-2020	6-23-2020	6-29-2020
Part Rated	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO
Rating Unit	%	%	%	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1	1	1	1
Data Entry Date	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020
Rating Timing									
Days After First/Last Applic.	35 7	35 7	42 14	42 14	42 14	42 14	42 14	48 20	54 26
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes	ET8	ET8					AA		
Number of Decimals									
Trt Treatment									
No. Name	11	12	13	14	15	16	17	18	19
Rate									
Unit									
Appl Code									
8 Untreated Check	25.0	25.0	0.0 a	0.0 b	0.0 b	0.0 b	0.0 c	0.0 a	0.0 b
LSD P=.05				1.13			10.83 - 19.22		1.14
Standard Deviation	0.00	0.00	0.00	0.77	0.00	0.00	10.38t	0.00	0.78
CV	0.0	0.0	0.0	0.88	0.0	0.0	15.99t	0.0	0.89
Levene's F	0.00	0.00	0.00	0.00	0.00	0.00	1.139	0.00	0.00
Levene's Prob(F)	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.373	0.00*	0.00*
Skewness	.	.	.	-2.3786*	-2.3809*	-2.3809*	-1.6084*	.	-2.3776*
Kurtosis	.	.	.	3.9029*	3.9094*	3.9094*	1.6173	.	3.9*
Replicate F	0.000	0.000	0.000	0.636	0.000	0.000	0.623	0.000	4.200
Replicate Prob(F)	1.0000	1.0000	1.0000	0.5999	1.0000	1.0000	0.6081	1.0000	0.0178
Treatment F	0.000	0.000	0.000	8449.304	0.000	0.000	28.225	0.000	8243.964
Treatment Prob(F)	1.0000	1.0000	1.0000	0.0001	1.0000	1.0000	0.0001	1.0000	0.0001

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	AMBTR	AMAHH	SORHA	DIGSA	AMBTR	AMAHH	SORHA		
Pest Name	Giant ragweed	Amaranthus hybr>	Johnson grass	large crabgrass	Giant ragweed	Amaranthus hybr>	Johnson grass		
Crop Type, Code									
Crop Scientific Name									
Crop Name									
Rating Date	6-29-2020	6-29-2020	6-29-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Data Entry Date	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020		
Rating Timing									
Days After First/Last Applic.	54 26	54 26	54 26	70 42	70 42	70 42	70 42		
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes									
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	20	21	22	23	24	25	26
1 SL-575D	1.88 PT/A	A	100.0 a	100.0 a	88.0 a	99.3 a	100.0 a	100.0 a	88.0 a
Atrazine	0.5 LB A/A	A							
Shieldex	1 FL OZ/A	B							
Atrazine	0.5 LB A/A	B							
COC	1 % V/V	B							

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	AMBTR	AMAHH	SORHA	DIGSA	AMBTR	AMAHH	SORHA		
Pest Name	Giant ragweed	Amaranthus hybr>	Johnson grass	large crabgrass	Giant ragweed	Amaranthus hybr>	Johnson grass		
Crop Type, Code									
Crop Scientific Name									
Crop Name									
Rating Date	6-29-2020	6-29-2020	6-29-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Data Entry Date	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020		
Rating Timing									
Days After First/Last Applic.	54 26	54 26	54 26	70 42	70 42	70 42	70 42		
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes									
Number of Decimals									
Trt Treatment	Rate	Rate	Rate	Rate	Rate	Rate	Rate		
No. Name	Unit	Unit	Unit	Unit	Unit	Unit	Unit		
Appl Code	20	21	22	23	24	25	26		
2 SL-575D	2.25 PT/A	A	98.8 a	100.0 a	82.5 a	100.0 a	98.8 a	97.5 a	81.8 a
Atrazine	0.5 LB AI/A	A							
Shieldex	1 FL OZ/A	B							
Atrazine	0.5 LB AI/A	B							
COC	1 % V/V	B							
3 SL-575D	1.125 PT/A	A	100.0 a	100.0 a	89.3 a	99.3 a	100.0 a	100.0 a	83.5 a
Atrazine	0.5 LB AI/A	A							
SL-575D	1.125 PT/A	B							
Atrazine	0.5 LB AI/A	B							
COC	1 % V/V	B							
4 Resicore	40 FL OZ/A	A	100.0 a	100.0 a	83.3 a	100.0 a	100.0 a	100.0 a	82.0 a
Atrazine	0.5 LB AI/A	A							
Resicore	40 FL OZ/A	B							
Atrazine	0.5 LB AI/A	B							
COC	1 % V/V	B							
5 Acuron	40 FL OZ/A	A	100.0 a	100.0 a	78.8 a	100.0 a	100.0 a	100.0 a	78.8 a
Acuron	40 FL OZ/A	B							
COC	1 % V/V	B							
6 Armezon Pro	20 FL OZ/A	A	100.0 a	100.0 a	91.0 a	100.0 a	100.0 a	100.0 a	88.5 a
Atrazine	0.5 LB AI/A	A							
Atrazine	0.5 LB AI/A	B							
Roundup	32 FL OZ/A	B							
COC	1 % V/V	B							
Amsol AMS	2.5 % V/V	B							
7 Harness Max	1.72 QT/A	A	99.5 a	100.0 a	96.3 a	99.3 a	99.5 a	100.0 a	96.8 a
Atrazine	0.5 LB AI/A	A							
Roundup	32 FL OZ/A	B							
Atrazine	0.5 LB AI/A	B							
COC	1 % V/V	B							
Amsol AMS	2.5 % V/V	B							

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Pest Type	W Weed AMBTR	W Weed AMAHH	W Weed SORHA	W Weed DIGSA	W Weed AMBTR	W Weed AMAHH	W Weed SORHA
Pest Code	Giant ragweed	Amaranthus hybr>	Johnson grass	large crabgrass	Giant ragweed	Amaranthus hybr>	Johnson grass
Pest Name							
Crop Type, Code							
Crop Scientific Name							
Crop Name							
Rating Date	6-29-2020	6-29-2020	6-29-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1	1
Data Entry Date	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020
Rating Timing							
Days After First/Last Applic.	54 26	54 26	54 26	70 42	70 42	70 42	70 42
Trt-Eval Interval							
Days After Emergence							
ARM Action Codes							
Number of Decimals							
Trt Treatment							
No. Name	20	21	22	23	24	25	26
Rate							
Unit							
Appl Code							
8 Untreated Check	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b
LSD P=.05	1.42	.	24.90	1.14	1.42	2.60	27.00
Standard Deviation	0.97	0.00	16.94	0.78	0.97	1.77	18.36
CV	1.11	0.0	22.25	0.89	1.11	2.03	24.51
Levene's F	0.901	0.00	0.576	0.00	0.901		0.517
Levene's Prob(F)	0.521	0.00*	0.768	0.00*	0.521		0.813
Skewness	-2.3773*	-2.3809*	-1.617*	-2.3776*	-2.3773*	-2.3685*	-1.5131*
Kurtosis	3.8987*	3.9094*	1.3807	3.9*	3.8987*	3.8711*	1.0574
Replicate F	0.746	0.000	0.052	4.200	0.746	1.000	0.018
Replicate Prob(F)	0.5369	1.0000	0.9840	0.0178	0.5369	0.4123	0.9965
Treatment F	5315.977	0.000	13.612	8243.964	5315.977	1589.572	11.241
Treatment Prob(F)	0.0001	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001

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2020 SL-575D Visibility Protocol

Trial ID: 20-12_COR-REC Location: UKREC 201-E Trial Year: 2020
Protocol ID: Investigator (Creator): Travis Legleiter
Project ID: Study Director: Chuck Foresman
 Sponsor Contact: Jay Turner

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

AMBTR, Ambrosia trifida, Giant ragweed = US

AMAHH, Amaranthus hybridus, Amaranthus hybridus = US

DIGSA, Digitaria sanguinalis, large crabgrass = US

SORHA, Sorghum halepense, Johnson grass = US

Crop Type Code

C = EPPO species (Bayer) codes

ZEAMX, BCOR, Zea mays, Corn = US

Part Rated

PLANT = plant

C = Crop is Part Rated

P = Pest is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

ARM Action Codes

ET8 = Excluded treatment 8

AS = Automatic square root transformation of X+0.5

AA = Automatic arcsine square root % transformation

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2020 Shieldex Visibility Protocol

Trial ID: 20-13_COR-REC Location: Trial Year: 2020
 Protocol ID: Investigator (Creator): Travis Legleiter
 Project ID: Study Director: Chuck Foresman
 Sponsor Contact: Jay Turner

Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	Bicep II Magnum	5.5	LBA/GAL	F	1.67	QT/A		A	55.67 mL/mx	101	204	302	404
2	Bicep II Magnum	5.5	LBA/GAL	F	1.67	QT/A		A	55.67 mL/mx	102	201	303	402
	Shieldex	3.33	LB/GAL	SC	1	FL OZ/A	3" - 5" Amar B	1.042 mL/mx					
	Atrazine	4	LBA/GAL	F	0.5	LB AI/A	3" - 5" Amar B	16.66 mL/mx					
	COC	100 %		SL	1 %	V/V		20.0 mL/mx					
3	Bicep II Magnum	5.5	LBA/GAL	F	1.67	QT/A		A	55.67 mL/mx	103	202	304	405
	Impact	2.8	LB/GAL	SC	1	FL OZ/A	3" - 5" Amar B	1.042 mL/mx					
	Atrazine	4	LBA/GAL	F	0.5	LB AI/A	3" - 5" Amar B	16.66 mL/mx					
	COC	100 %		SL	1 %	V/V		20.0 mL/mx					
4	Bicep II Magnum	5.5	LBA/GAL	F	1.67	QT/A		A	55.67 mL/mx	104	205	301	403
	Laudis	3.5	LB/GAL	SC	3	FL OZ/A	3" - 5" Amar B	3.125 mL/mx					
	Atrazine	4	LBA/GAL	F	0.5	LB AI/A	3" - 5" Amar B	16.66 mL/mx					
	COC	100 %		SL	1 %	V/V		20.0 mL/mx					
5	Check								105	203	305	401	

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
278.332	mL	Bicep II Magnum	5.5	LBA/GAL	F	
1.302	mL	Shieldex	3.33	LB/GAL	SC	
62.493	mL	Atrazine	4	LBA/GAL	F	
74.992	mL	COC	100	%	SL	
1.302	mL	Impact	2.8	LB/GAL	SC	
3.906	mL	Laudis	3.5	LB/GAL	SC	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.

General Trial Information

Study Director: Chuck Foresman
Investigator: Travis Legleiter

Trial Status: E established

ARM Trial Created On: 4-7-2020

Trial Location

City: PRINCETON **Country:** USA United States
State/Prov.: Kentucky
Postal Code: 42445

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Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Role: STYDIR study director
Study Director: Chuck Foresman

Role: INVEST investigator
Investigator: Travis Legleiter
Organization: University of Kentucky
Address 1: 1205 Hopkinsville Street

City: Princeton, KY

E-mail: Travis.Legleiter@uky.edu
Postal Code: 42445

Role: SPONSR sponsor
Sponsor: Jay Turner

Crop Description

Crop 1: C ZEAMX Zea mays Corn

Stage Scale: BBCH

Variety: Pioneer P1077AM

Attributes: RR/LL

Planting Date: 5-4-2020

Planting Rate: 32000 S/A

Depth: 1.5 IN

Rows per Plot: 4

Planting Method: PLANTD planted

Row Spacing: 30 IN

Planting Equipment: VP vacuum planter

Pest Description

Pest 1 Type: W **Code:** AMBTR Ambrosia trifida

Common Name: Giant ragweed

Stage Scale: BBCH

Pest 2 Type: W **Code:** SORHA Sorghum halepense

Common Name: Johnson grass

Stage Scale: BBCH

Pest 3 Type: W **Code:** AMARE Amaranthus retroflexus

Common Name: Redroot pigweed

Stage Scale: BBCH

Site and Design

Treated Plot Width: 10 FT

Treated Plot Length: 30 FT

Treated Plot Area: 300.0 FT² **Treatments:** 5 **Tillage Type:** CONTIL conventional-till

Replications: 4 **Study Design:** RACOB� Randomized Complete Block (RCB)

Maintenance

No.	Type	Maintenance Product Name	Form Conc	Form Unit	Form Type	Description	Rate	Rate Unit
1.	FERT	Urea	46	% N	SG	46-0-0	370	LB/A
2.	FERT	DAP	46	% P2O5	GR	18-46-0	100	lb/a
3.	FERT	Muriate of Potash 0-0-60	60	%	GR	0-0-60	50	lb/a

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Field Prep./Maintenance:

3/26/20- Applied 83.3 lbs/a of 0-0-60.
 4/6/20- Applied 100 lbs/a of DAP.
 4/16/20- Disked field once.
 4/28/20- Applied 370 lbs/a of urea.
 5/4/20- Field cultivated one time.

1.75ton/a Lime applied

Soil Description

Description Name: 201-E

% Sand: 4.2 **% OM:** 2.4 **Texture:** SIL silt loam
% Silt: 80.1 **pH:** 5.43 **Soil Name:** Crider Silt Loam
% Clay: 15.7 **CEC:** 11.91

Application Description

	A	B
Application Date	5-6-2020	6-3-2020
Appl. Start Time	7:48 AM	10:12 AM
Appl. Stop Time	7:56 AM	10:20 AM
Application Method	SPRAY	SPRAY
Application Timing	PRE	POST
Application Placement	SOIL	FOLIAR
Applied By	JLG	TL
Air Temperature Start, Stop	50.7 48.2 F	86 86 F
% Relative Humidity Start, Stop	78.5 80.8	60 60
Wind Velocity+Dir. Start	5.5 MPH NW	4 MPH S
Wind Velocity+Dir. Stop	4.1 MPH NW	5 MPH S
Wind Velocity+Dir. Max	10 MPH NW	5.9 MPH S
Wet Leaves (Y/N)	N no	N no
Soil Temperature	51 F	
Soil Moisture	damp	DRY
% Cloud Cover	100	

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale	ZEAMX BCOR	ZEAMX BCOR
Stage Majority, Percent		V5
Stage Minimum, Percent		V4
Stage Maximum, Percent		V5
Height Average		12 IN
Height Minimum, Maximum		10 12

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Pest Stage At Each Application		
	A	B
Pest 1 Code, Type, Scale	AMBTR W BBCH	AMBTR W BBCH
Height Average		4 IN
Height Minimum, Maximum		0.5 6
Density Average		7 FT2
Density Minimum, Maximum		4 10
Pest 2 Code, Type, Scale	SORHA W BBCH	SORHA W BBCH
Height Average		6 IN
Height Minimum, Maximum		1 12
Density Average		0.5 FT2
Density Minimum, Maximum		0 1
Pest 3 Code, Type, Scale	AMARE W BBCH	AMARE W BBCH
Height Average		1 IN
Height Minimum, Maximum		0.5 2
Density Average		0.5 FT2
Density Minimum, Maximum		0 1

Application Equipment		
	A	B
Appl. Equipment	CO2 BACKPACK	CO2 BACKPACK
Equipment Type	SPRBAC	SPRBAC
Operation Pressure	50 PSI	18 PSI
Nozzle Type	TTI-015	XR11002
Nozzle Size	015	02
Nozzle Spacing	20 IN	20 IN
Boom ID	Blue taped	White taped
Boom Length	10 FT	10 FT
Boom Height	18 IN	18 IN
Ground Speed	3 MPH	3 MPH
Carrier	WATER	WATER
Application Amount	15 GAL/AC	15 GAL/AC
Mix Overage	436 mL	436 mL
Mix Size	2 L	2 L
Propellant	COMCO2	COMCO2

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Pest Type		W Weed		W Weed		W Weed		W Weed		W Weed		
Pest Code				AMBTR		AMBTR		AMAHH		DIGSA		
Pest Name				Giant ragweed		Giant ragweed		Amaranthus hybr>		large crabgrass		
Crop Type, Code	C ZEAMX		C ZEAMX		C ZEAMX					C ZEAMX		
Crop Scientific Name	Zea mays		Zea mays		Zea mays					Zea mays		
Crop Name	Corn		Corn		Corn					Corn		
Rating Date	5-11-2020	5-11-2020	5-20-2020	5-20-2020	5-27-2020	5-27-2020	5-27-2020	5-27-2020	5-27-2020	6-10-2020	6-10-2020	
Part Rated	PLANT C	PLANT P	PLANT C	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	
Rating Type	PHYGEN	CONTRO	PHYGEN	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	
Rating Unit	%	%	%	%	%	%	%	%	%	%	%	
Number of Subsamples	1	1	1	1	1	1	1	1	1	1	1	
Data Entry Date	6-10-2020	6-10-2020	6-10-2020	6-10-2020	6-10-2020	6-10-2020	6-10-2020	6-10-2020	6-10-2020	8-7-2020	8-7-2020	
Rating Timing												
Days After First/Last Applic.	5 5	5 5	14 14	14 14	21 21	21 21	21 21	21 21	21 21	35 7	35 7	
Trt-Eval Interval	5 DA-A	5 DA-A	14 DA-A	14 DA-A	21 DA-A	21 DA-A	21 DA-A	21 DA-A	21 DA-A			
Days After Emergence												
ARM Action Codes				ET5				ET5			ET2	
Number of Decimals												
Trt Treatment	Rate	Appl										
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8	9	10
3 Bicep II Magnum	1.67 QT/A	A	0.0 a	100.0 a	0.0 a	95.3 a	0.0 a	94.3 a	98.8 a	100.0 a	0.0 a	98.5 a
Impact	1 FL OZ/A	B										
Atrazine	0.5 LB AI/A	B										
COC	1 % V/V	B										
4 Bicep II Magnum	1.67 QT/A	A	0.0 a	100.0 a	0.0 a	91.3 a	0.0 a	92.3 a	98.8 a	100.0 a	0.0 a	96.0 a
Laudis	3 FL OZ/A	B										
Atrazine	0.5 LB AI/A	B										
COC	1 % V/V	B										
5 Check			0.0 a	100.0 a	0.0 a	0.0	0.0 a	0.0 b	0.0	0.0 c	0.0 a	0.0 c
LSD P=.05						3.78		11.07	3.50	1.60		14.74
Standard Deviation			0.00	0.00	0.00	2.36	0.00	7.19	2.19	1.04	0.00	9.21
CV			0.0	0.0	0.0	2.52	0.0	9.91	2.22	1.31	0.0	13.55
Levene's F			0.00	0.00	0.00	1.23	0.00	0.847	0.148	1.472	0.00	2.185
Levene's Prob(F)			0.00*	0.00*	0.00*	0.342	0.00*	0.517	0.929	0.26	0.00*	0.143
Skewness						0.1199		-1.4684*	-0.8668	-1.6194*		-1.0402
Kurtosis						-1.678		0.3583	-1.0533	0.6901		-0.8382
Replicate F			0.000	0.000	0.000	7.328	0.000	2.603	1.500	2.047	0.000	1.469
Replicate Prob(F)			1.0000	1.0000	1.0000	0.0087	1.0000	0.1002	0.2797	0.1611	1.0000	0.2874
Treatment F			0.000	0.000	0.000	2.313	0.000	128.652	0.105	7316.908	0.000	100.971
Treatment Prob(F)			1.0000	1.0000	1.0000	0.1445	1.0000	0.0001	0.9553	0.0001	1.0000	0.0001

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Pest Type	W Weed AMBTR	W Weed AMAHH		W Weed DIGSA	W Weed AMBTR	W Weed AMAHH	W Weed SORHA		W Weed DIGSA		
Pest Code	Giant ragweed	Amaranthus hybr>		large crabgrass	Giant ragweed	Amaranthus hybr>	Johnson grass		large crabgrass		
Pest Name											
Crop Type, Code			C ZEAMX					C ZEAMX			
Crop Scientific Name			Zea mays					Zea mays			
Crop Name			Corn					Corn			
Rating Date	6-10-2020	6-10-2020	6-17-2020	6-17-2020	6-17-2020	6-17-2020	6-17-2020	6-23-2020	6-29-2020		
Part Rated	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P		
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO		
Rating Unit	%	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Data Entry Date	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020		
Rating Timing											
Days After First/Last Applic.	35 7	35 7	42 14	42 14	42 14	42 14	42 14	48 20	54 26		
Trt-Eval Interval											
Days After Emergence											
ARM Action Codes				ET3	ET3 EC		ET2				
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code	11	12	13	14	15	16	17	18	19
3 Bicep II Magnum	1.67 QT/A	A	98.5 a	100.0 a	0.0 a	71.8	100.0	98.8 a	75.0 a	0.0 a	97.5 a
Impact	1 FL OZ/A	B									
Atrazine	0.5 LB AI/A	B									
COC	1 % V/V	B									
4 Bicep II Magnum	1.67 QT/A	A	91.8 a	100.0 a	0.0 a	97.8 a	99.3 a	100.0 a	67.5 a	0.0 a	98.8 a
Laudis	3 FL OZ/A	B									
Atrazine	0.5 LB AI/A	B									
COC	1 % V/V	B									
5 Check			0.0 c	0.0 c	0.0 a	0.0 b	0.0 b	0.0 b	0.0 b	0.0 a	0.0 c
LSD P=.05	18.05	1.72	.	17.83	9.24	18.19	26.12	.	22.85		
Standard Deviation	11.72	1.12	0.00	11.15	5.34	11.37	16.96	0.00	14.83		
CV	17.78	1.42	0.0	16.07	8.33	16.17	28.74	0.0	22.06		
Levene's F	10.421	0.00	4.704	2.005	1.617	1.659	0.00	1.829			
Levene's Prob(F)	0.001*	0.00*	0.021*	0.191	0.237	0.212	0.00*	0.176			
Skewness	-0.7802	-1.6074*	.	-1.0455	-0.7694	-1.0595	-0.899	-0.891			
Kurtosis	-1.2426	0.6688	.	-0.8514	-1.6638	-0.8406	-0.4704	.	-1.044		
Replicate F	0.569	1.000	0.000	1.295	0.860	0.850	0.116	0.000	1.597		
Replicate Prob(F)	0.6457	0.4262	1.0000	0.3347	0.5110	0.5009	0.9490	1.0000	0.2419		
Treatment F	56.157	6225.001	0.000	70.692	433.230	69.918	15.852	0.000	34.977		
Treatment Prob(F)	0.0001	0.0001	1.0000	0.0001	0.0001	0.0001	0.0001	1.0000	0.0001		

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Pest Type	W Weed AMBTR	W Weed AMAHH	W Weed SORHA	W Weed DIGSA	W Weed AMBTR	W Weed AMAHH	W Weed SORHA
Pest Code	Giant ragweed	Amaranthus hybr>	Johnson grass	large crabgrass	Giant ragweed	Amaranthus hybr>	Johnson grass
Pest Name							
Crop Type, Code							
Crop Scientific Name							
Crop Name							
Rating Date	6-29-2020	6-29-2020	6-29-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1	1
Data Entry Date	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020	8-7-2020
Rating Timing							
Days After First/Last Applic.	54 26	54 26	54 26	70 42	70 42	70 42	70 42
Trt-Eval Interval							
Days After Emergence							
ARM Action Codes	ER2				EC		
Number of Decimals							
Trt Treatment							
No. Name	20	21	22	23	24	25	26
Rate							
Rate Unit							
Appl Code							
1 Bicep II Magnum	1.67 QT/A	47.5 b	12.5 b	45.0 b	25.0	47.5 b	12.5 b
2 Bicep II Magnum	1.67 QT/A	87.5 a	75.0 a	93.8 a	86.8 a	86.8 a	67.5 a
Shieldex	1 FL OZ/A						
Atrazine	0.5 LB AI/A						
COC	1 % V/V						

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2020 Shieldex Visibility Protocol

Trial ID: 20-13_COR-REC Location: Trial Year: 2020
Protocol ID: Investigator (Creator): Travis Legleiter
Project ID: Study Director: Chuck Foresman
 Sponsor Contact: Jay Turner

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

AMBTR, Ambrosia trifida, Giant ragweed = US

AMAHH, Amaranthus hybridus, Amaranthus hybridus = US

DIGSA, Digitaria sanguinalis, large crabgrass = US

SORHA, Sorghum halepense, Johnson grass = US

Crop Type, Code

C = EPPO species (Bayer) codes

ZEAMX, BCOR, Zea mays, Corn = US

Part Rated

PLANT = plant

C = Crop is Part Rated

P = Pest is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

ARM Action Codes

ET5 = Excluded treatment 5

ET2 = Excluded treatment 2

ET3 = Excluded treatment 3

EC = Do not analyze untreated check, while still reporting treatment mean on AOV Means Table

ER2 = Excluded replicate 2

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Warrant/Xtend Soybean/POST Safety/Grass & Broadleaf/Phyto & Efficacy 2020-01-24-06 WALDO#

Trial ID: HP20USAE06TDC2 TD Number: LOCALCREATED Protocol Edition No.: 1.05
 Project ID: LOCAL_PROJ
 Project Number(s): 100 % LFAA0409 % %
 Protocol Developer: Riley, Eric
 License User: Childs, Dan

Reps: 3 Plots: 10 by 44 feet
 Appl. Amount: 140.3 L/ha Mix Size: 2.2 L (total for 3 plots; minimum=1.7205 L)

Entry No.	Entry/Trt. Description	Form. Type	AI Conc. Unit	Dose Unit	Dose Unit	Appl. Timing	Appl. Code	Amt Product to Measure	Rep 1	Rep 2	Rep 3
1	UNTREATED								101	208	309
2	WARRANT	CS	2.99167 LBA/GAL	17.97 OZ A/A	17.97 OZ A/A	PREPRE	A	61.12 g/mx	102	206	303
	XTENDIMAX VAPORGRIP	LF	2.91667 LBA/GAL	8.03 OZ A/A	8.03 OZ A/A	PREPRE	A	30.38 g/mx			
	TAVIUM	CS	3.375 LBA/GAL	23.87 OZ A/A	23.87 OZ A/A	EAPOCR	B	73.26 g/mx			
	ROUNDUP POWER MAX	SL	4.5 LBA/GAL	18.03 OZ A/A	18.03 OZ A/A	EAPOCR	B	49.84 g/mx			
	INTACT DRIFT CONTROL & FOLIAR AGENT (DFR)	XL	43.2 %AW/W	4.587 OZ A/A	4.587 OZ A/A	EAPOCR	B	11.65 g/mx			
3	WARRANT	CS	2.99167 LBA/GAL	17.97 OZ A/A	17.97 OZ A/A	PREPRE	A	61.12 g/mx	103	210	307
	XTENDIMAX VAPORGRIP	LF	2.91667 LBA/GAL	8.03 OZ A/A	8.03 OZ A/A	PREPRE	A	30.38 g/mx			
	DUAL MAGNUM	EC	7.6 LBA/GAL	15.89 OZ A/A	15.89 OZ A/A	EAPOCR	B	20.89 g/mx			
	XTENDIMAX VAPORGRIP	LF	2.91667 LBA/GAL	8.03 OZ A/A	8.03 OZ A/A	EAPOCR	B	30.38 g/mx			
	ROUNDUP POWER MAX	SL	4.5 LBA/GAL	18.03 OZ A/A	18.03 OZ A/A	EAPOCR	B	49.84 g/mx			
	INTACT DRIFT CONTROL & FOLIAR AGENT (DFR)	XL	43.2 %AW/W	4.587 OZ A/A	4.587 OZ A/A	EAPOCR	B	11.65 g/mx			
4	WARRANT	CS	2.99167 LBA/GAL	17.97 OZ A/A	17.97 OZ A/A	PREPRE	A	61.12 g/mx	104	209	310
	XTENDIMAX VAPORGRIP	LF	2.91667 LBA/GAL	8.03 OZ A/A	8.03 OZ A/A	PREPRE	A	30.38 g/mx			
	WARRANT	CS	2.99167 LBA/GAL	17.97 OZ A/A	17.97 OZ A/A	EAPOCR	B	61.12 g/mx			
	XTENDIMAX VAPORGRIP	LF	2.91667 LBA/GAL	8.03 OZ A/A	8.03 OZ A/A	EAPOCR	B	30.38 g/mx			
	ROUNDUP POWER MAX	SL	4.5 LBA/GAL	18.03 OZ A/A	18.03 OZ A/A	EAPOCR	B	49.84 g/mx			
	INTACT DRIFT CONTROL & FOLIAR AGENT (DFR)	XL	43.2 %AW/W	4.587 OZ A/A	4.587 OZ A/A	EAPOCR	B	11.65 g/mx			
5	WARRANT	CS	2.99167 LBA/GAL	17.97 OZ A/A	17.97 OZ A/A	PREPRE	A	61.12 g/mx	105	201	302
	XTENDIMAX VAPORGRIP	LF	2.91667 LBA/GAL	8.03 OZ A/A	8.03 OZ A/A	PREPRE	A	30.38 g/mx			
	OUTLOOK	EC	5.99167 LBA/GAL	10.5 OZ A/A	10.5 OZ A/A	EAPOCR	B	16.06 mL/mx			
	ENGENIA	SL	5 LBA/GAL	8.01 OZ A/A	8.01 OZ A/A	EAPOCR	B	18.27 g/mx			
	ROUNDUP POWER MAX	SL	4.5 LBA/GAL	18.03 OZ A/A	18.03 OZ A/A	EAPOCR	B	49.84 g/mx			
	INTACT DRIFT CONTROL & FOLIAR AGENT (DFR)	XL	43.2 %AW/W	4.587 OZ A/A	4.587 OZ A/A	EAPOCR	B	11.65 g/mx			
6	WARRANT	CS	2.99167 LBA/GAL	17.97 OZ A/A	17.97 OZ A/A	PREPRE	A	61.12 g/mx	106	205	306
	XTENDIMAX VAPORGRIP	LF	2.91667 LBA/GAL	8.03 OZ A/A	8.03 OZ A/A	PREPRE	A	30.38 g/mx			
	ZIDUA HERBICIDE	WG	85 %AW/W	1.7 OZ A/A	1.7 OZ A/A	EAPOCR	B	2.197 g/mx			
	ENGENIA	SL	5 LBA/GAL	8.01 OZ A/A	8.01 OZ A/A	EAPOCR	B	18.27 g/mx			
	ROUNDUP POWER MAX	SL	4.5 LBA/GAL	18.03 OZ A/A	18.03 OZ A/A	EAPOCR	B	49.84 g/mx			
7	WARRANT	CS	2.99167 LBA/GAL	17.97 OZ A/A	17.97 OZ A/A	PREPRE	A	61.12 g/mx	107	203	304
	XTENDIMAX VAPORGRIP	LF	2.91667 LBA/GAL	8.03 OZ A/A	8.03 OZ A/A	PREPRE	A	30.38 g/mx			
	WARRANT ULTRA HERBICIDE	CS	3.44167 LBA/GAL	21.54 OZ A/A	21.54 OZ A/A	EAPOCR	B	64.48 g/mx			
	ROUNDUP POWER MAX	SL	4.5 LBA/GAL	18.03 OZ A/A	18.03 OZ A/A	EAPOCR	B	49.84 g/mx			
	XTENDIMAX VAPORGRIP	LF	2.91667 LBA/GAL	8.03 OZ A/A	8.03 OZ A/A	EAPOCR	B	30.38 g/mx			
	INTACT DRIFT CONTROL & FOLIAR AGENT (DFR)	XL	43.2 %AW/W	4.587 OZ A/A	4.587 OZ A/A	EAPOCR	B	11.65 g/mx			

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Reps: 3 Plots: 10 by 44 feet
Appl. Amount: 140.3 L/ha Mix Size: 2.2 L (total for 3 plots; minimum=1.7205 L)

Entry No.	Entry/Trt. Description	Form. Type	AI Conc.	AI Conc. Unit	Dose Unit	Dose Unit	Appl. Timing	Appl. Code	Amt Product to Measure	Rep 1	2	3
8	WARRANT	CS	2.99167	LBA/GAL	17.97	OZ	A/A	PREPRE A	61.12 g/mx	108	202	301
	XTENDIMAX VAPORGRIP	LF	2.91667	LBA/GAL	8.03	OZ	A/A	PREPRE A	30.38 g/mx			
	WARRANT ULTRA HERBICIDE	CS	3.44167	LBA/GAL	21.54	OZ	A/A	EAPOCR B	64.48 g/mx			
	ROUNDUP POWER MAX	SL	4.5	LBA/GAL	18.03	OZ	A/A	EAPOCR B	49.84 g/mx			
9	WARRANT	CS	2.99167	LBA/GAL	17.97	OZ	A/A	PREPRE A	61.12 g/mx	109	204	305
	XTENDIMAX VAPORGRIP	LF	2.91667	LBA/GAL	8.03	OZ	A/A	PREPRE A	30.38 g/mx			
	ROUNDUP POWER MAX	SL	4.5	LBA/GAL	18.03	OZ	A/A	EAPOCR B	49.84 g/mx			
	PREFIX	EC	83.7	%AW/W	30.45	OZ	A/A	EAPOCR B	39.91 g/mx			
10	WARRANT	CS	2.99167	LBA/GAL	17.97	OZ	A/A	PREPRE A	61.12 g/mx	110	207	308
	XTENDIMAX VAPORGRIP	LF	2.91667	LBA/GAL	8.03	OZ	A/A	PREPRE A	30.38 g/mx			
	ROUNDUP POWER MAX	SL	4.5	LBA/GAL	18.03	OZ	A/A	EAPOCR B	49.84 g/mx			
	COBRA	EC	2	LBA/GAL	3.13	OZ	A/A	EAPOCR B	14.63 g/mx			

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Entry/Trt. Description	Identification Code	AI Conc.	AI Conc. Unit	Form. Type	Lot Batch Number
688.233	mL	WARRANT	BCORKA_WARRANT	2.99167	LBA/GAL	CS	
378.539	mL	XTENDIMAX VAPORGRIP	BCMOSI_17022302	2.91667	LBA/GAL	LF	
81.036	mL	TAVIUM	BCMOSI_19052701	3.375	LBA/GAL	CS	
413.168	mL	ROUNDUP POWER MAX	BCADDM_03120101	4.5	LBA/GAL	SL	
68.685	mL	INTACT DRIFT CONTROL & FOLIAR AGENT (DFR)	BCSCMA_19022701	43.2	%AW/W	XL	
23.956	mL	DUAL MAGNUM	BCROJO_DUAL MAGNUM	7.6	LBA/GAL	EC	
20.079	mL	OUTLOOK	AEFDQM_970313353	5.99167	LBA/GAL	EC	
36.711	mL	ENGENIA	BCMOSI_17022301	5	LBA/GAL	SL	
2.746	g	ZIDUA HERBICIDE	KIH-485 85WG	85	%AW/W	WG	
143.419	mL	WARRANT ULTRA HERBICIDE	BCMOSI_16111501	3.44167	LBA/GAL	CS	
45.771	mL	PREFIX	BCORKA_PREFIX	83.7	%AW/W	EC	
17.931	mL	COBRA	AE F073050 00 EC24 A1	2	LBA/GAL	EC	

* 'Per area' calculations based on application amount= 140.3 L/HA, mix size= 2.2 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

General Trial Information

Trial Initiation Date: 6-2-2020
Trial Status: R
Last change done by: Sara Carter
Trial Objectives fulfilled: FULLY
GEP level: Conducted under GEP
External Trial: X

Protocol Edition No.: 1.05
Trial Status Date: 8-17-2020
Date of last export: 8-21-2020 2:59 PM
Trial Purpose: PHYTOTOX

End date: 7-30-2020

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Target Description

Target 1: AMBTR Discipline: W Target Scale: BDIC
Ambrosia trifida L.

Ragweed, giant

Target 2: IPOSS Discipline: W Target Scale: BDIC
Ipomoea spec.

Morningglory

Target 3: SETFA Discipline: W Target Scale: BGRM
Setaria faberi HERRM.

Foxtail, giant

Application Description

	A	B
Application Date	6-2-2020	7-9-2020
Interval to prev. Appl.		37 DAY
Application Timing	PREPRE	EAPOCR
Appl.Start - Time of Day	6:00 PM	11:00 AM
Appl. Stop	6:30 PM	11:30 AM
% Relative Humidity	60	55
Air Temperature	27.78 C	31.67 C
% Cloud Cover	20	40
Appl. Wind Strength	CLM	CLM
Wind Velocity	3.22 KPH	3.22 KPH
Wind Direction/Degrees	SW	SE
Soil Temperature	25 C	23.9 C
Soil Moisture	DAMP	WET
Soil Condition (surface)	SMOOTH	SMOOTH
Problems with Application?	No	No

Crop Stage at Application

	A	B
Crop 1/Disc./Scale	GLXMA C BSOY	GLXMA C BSOY
Days after Emergence	-3	34
Stage Majority/Percent	00	16
Majority Height/Unit		25.4 CM

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Target Stage at Application

	A	B
Target 1/Disc./Scale	AMBTR W BDIC	AMBTR W BDIC
Stage Majority/Percent	12	14
Majority Height/Unit	7.62 CM	15.24 CM
Target 2/Disc./Scale	IPOSS W BDIC	IPOSS W BDIC
Stage Majority/Percent	12	14
Majority Height/Unit	2.54 CM	7.62 CM
Target 3/Disc./Scale	SETFA W BGRM	SETFA W BGRM
Stage Majority/Percent	12	15
Majority Height/Unit	5.08 CM	12.7 CM

Application Equipment

	A	B
Application Method	SPRAY	SPRAY
Application Placement	BROFOL	BROFOL
Application Equipment	BELSPR	BELSPR
Equipment ID	Sara	Sara
Ground Speed	6.44000006 KPH	6.44000006 KPH
Propellant Type	COMCO2	COMCO2
Carrier	WATER	WATER
Appl./Slurry Volume	140.3	140.3
Appl./Slurry Volume Unit	L/HA	L/HA
Minimum Mix/Treatment	1.7205 L	1.7205 L
Mix Size	2.2 L	2.2 L
Operating Pressure	2.758 BAR	2.758 BAR
Spray Swath Width	3.0480001 M	3.0480001 M
Nozzle Type	FLAEVE	TJAIXR
Nozzle Size	8002	11002
Nozzle Spacing	50.8 CM	50.8 CM
Plot Size	40.8 M2	40.8 M2

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Unique Col. ID	1	4	5	6	7	8	9
Orig./Calc. Flag	O	O	O	O	O	O	O
SE Group	1	2	3	4	5	6	7
SE ID							
SE Label							
Target					1 AMBTR	2 IPOSS	3 SETFA
-Disc./Scale					W BDIC	W BDIC	W BGRM
-Characteristic							
-Stage Majority							
-Stage Minimum							
-Stage Maximum							
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA			
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY			
Variety	AG 43X0	AG 43X0	AG 43X0	AG 43X0			
-Stage Maj/Min/Max							
Part Rated							
-Part Rated Detail							
Assessment Class							
Assessment Type							
Assessment Unit							
Sample Size							
Sample Size Unit							
Sample Size (total)							
Assessment Date	7-13-2020	7-16-2020	7-23-2020	7-30-2020	7-30-2020	7-30-2020	7-30-2020
Assessment Time							
Assessment Code	A1	A2	A3	A4	A4	A4	A4
Appl.-Ass.Interval							
Days after first Appl.	41 DAA	44 DAA	51 DAA	58 DAA	58 DAA	58 DAA	58 DAA
Days after last Appl.	4 DAB	7 DAB	14 DAB	21 DAB	21 DAB	21 DAB	21 DAB
Plant.-Ass.Interval	41 DP1	44 DP1	51 DP1	58 DP1	58 DP1	58 DP1	58 DP1
Days after Emergence	38 DE1	41 DE1	48 DE1	55 DE1	55 DE1	55 DE1	55 DE1
Decimals Printed							
ARM Action Codes							
Entry Entry/Trt.							
No. Description							
Dose Dose Appl.							
Unit Code Plot							
	1	2	3	4	5	6	7
1 UNTREATED							
	101	0.0	0.0	0.0	0.0	0.0	0.0
	208	0.0	0.0	0.0	0.0	0.0	0.0
	309	0.0	0.0	0.0	0.0	0.0	0.0
Mean =		0.0	0.0	0.0	0.0	0.0	0.0
2 WARRANT							
	17.97 OZ A/A A	102	5.0	0.0	0.0	95.0	95.0
XTENDIMAX VAPORGRIP	8.03 OZ A/A A	206	0.0	0.0	0.0	90.0	95.0
TAVIUM	23.87 OZ A/A B	303	0.0	0.0	0.0	90.0	95.0
ROUNDUP POWER MAX	18.03 OZ A/A B						
INTACT DRIFT CONTROL & FOLIAR AGENT (DFR) 4.587 OZ A/A B							
Mean =		1.7	0.0	0.0	0.0	91.7	95.0
3 WARRANT							
	17.97 OZ A/A A	103	5.0	10.0	5.0	95.0	95.0
XTENDIMAX VAPORGRIP	8.03 OZ A/A A	210	5.0	10.0	5.0	90.0	95.0
DUAL MAGNUM	15.89 OZ A/A B	307	5.0	10.0	5.0	95.0	95.0
XTENDIMAX VAPORGRIP	8.03 OZ A/A B						
ROUNDUP POWER MAX	18.03 OZ A/A B						
INTACT DRIFT CONTROL & FOLIAR AGENT (DFR) 4.587 OZ A/A B							
Mean =		5.0	10.0	5.0	0.0	93.3	95.0

University of Kentucky

Unique Col. ID	1	4	5	6	7	8	9
Orig./Calc. Flag	O	O	O	O	O	O	O
SE Group	1	2	3	4	5	6	7
SE ID							
SE Label							
Target					1 AMBTR	2 IPOSS	3 SETFA
-Disc./Scale					W BDIC	W BDIC	W BGRM
-Characteristic							
-Stage Majority							
-Stage Minimum							
-Stage Maximum							
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA			
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY			
Variety	AG 43X0	AG 43X0	AG 43X0	AG 43X0			
-Stage Maj/Min/Max							
Part Rated							
-Part Rated Detail							
Assessment Class							
Assessment Type							
Assessment Unit							
Sample Size							
Sample Size Unit							
Sample Size (total)							
Assessment Date	7-13-2020	7-16-2020	7-23-2020	7-30-2020	7-30-2020	7-30-2020	7-30-2020
Assessment Time							
Assessment Code	A1	A2	A3	A4	A4	A4	A4
Appl.-Ass.Interval							
Days after first Appl.	41 DAA	44 DAA	51 DAA	58 DAA	58 DAA	58 DAA	58 DAA
Days after last Appl.	4 DAB	7 DAB	14 DAB	21 DAB	21 DAB	21 DAB	21 DAB
Plant.-Ass.Interval	41 DP1	44 DP1	51 DP1	58 DP1	58 DP1	58 DP1	58 DP1
Days after Emergence	38 DE1	41 DE1	48 DE1	55 DE1	55 DE1	55 DE1	55 DE1
Decimals Printed							
ARM Action Codes							
Entry No.							
Entry/Trt. Description							
Dose Unit							
Dose							
Appl. Code							
Plot	1	2	3	4	5	6	7
4 WARRANT	17.97 OZ A/A A						
XTENDIMAX VAPORGRIP	8.03 OZ A/A A						
WARRANT	17.97 OZ A/A B						
XTENDIMAX VAPORGRIP	8.03 OZ A/A B						
ROUNDUP POWER MAX	18.03 OZ A/A B						
INTACT DRIFT CONTROL & FOLIAR AGENT (DFR)	4.587 OZ A/A B						
Mean =	0.0	0.0	0.0	0.0	90.7	95.0	97.7
5 WARRANT	17.97 OZ A/A A						
XTENDIMAX VAPORGRIP	8.03 OZ A/A A						
OUTLOOK	10.5 OZ A/A B						
ENGENIA	8.01 OZ A/A B						
ROUNDUP POWER MAX	18.03 OZ A/A B						
INTACT DRIFT CONTROL & FOLIAR AGENT (DFR)	4.587 OZ A/A B						
Mean =	0.0	0.0	0.0	0.0	95.0	95.0	97.7

University of Kentucky

Unique Col. ID	1	4	5	6	7	8	9				
Orig./Calc. Flag	O	O	O	O	O	O	O				
SE Group	1	2	3	4	5	6	7				
SE ID											
SE Label											
Target					1 AMBTR W BDIC	2 IPOSS W BDIC	3 SETFA W BGRM				
-Disc./Scale											
-Characteristic											
-Stage Majority											
-Stage Minimum											
-Stage Maximum											
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA							
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY							
Variety	AG 43X0	AG 43X0	AG 43X0	AG 43X0							
-Stage Maj/Min/Max											
Part Rated											
-Part Rated Detail											
Assessment Class											
Assessment Type											
Assessment Unit											
Sample Size											
Sample Size Unit											
Sample Size (total)											
Assessment Date	7-13-2020	7-16-2020	7-23-2020	7-30-2020	7-30-2020	7-30-2020	7-30-2020				
Assessment Time											
Assessment Code	A1	A2	A3	A4	A4	A4	A4				
Appl.-Ass.Interval											
Days after first Appl.	41 DAA	44 DAA	51 DAA	58 DAA	58 DAA	58 DAA	58 DAA				
Days after last Appl.	4 DAB	7 DAB	14 DAB	21 DAB	21 DAB	21 DAB	21 DAB				
Plant.-Ass.Interval	41 DP1	44 DP1	51 DP1	58 DP1	58 DP1	58 DP1	58 DP1				
Days after Emergence	38 DE1	41 DE1	48 DE1	55 DE1	55 DE1	55 DE1	55 DE1				
Decimals Printed											
ARM Action Codes											
Entry Entry/Trt.											
No. Description	Dose Unit	Dose Unit	Appl. Code	Plot	1	2	3	4	5	6	7
6 WARRANT	17.97 OZ A/A A	106			0.0	0.0	0.0	0.0	92.0	95.0	95.0
XTENDIMAX VAPORGRIP	8.03 OZ A/A A	205			0.0	0.0	0.0	0.0	95.0	95.0	95.0
ZIDUA HERBICIDE	1.7 OZ A/A B	306			0.0	0.0	0.0	0.0	95.0	95.0	95.0
ENGENIA	8.01 OZ A/A B										
ROUNDUP POWER MAX	18.03 OZ A/A B										
	Mean =				0.0	0.0	0.0	0.0	94.0	95.0	95.0
7 WARRANT	17.97 OZ A/A A	107			10.0	15.0	10.0	5.0	100.0	95.0	99.0
XTENDIMAX VAPORGRIP	8.03 OZ A/A A	203			10.0	15.0	10.0	5.0	95.0	95.0	95.0
WARRANT ULTRA HERBICIDE	21.54 OZ A/A B	304			10.0	15.0	10.0	5.0	100.0	95.0	95.0
ROUNDUP POWER MAX	18.03 OZ A/A B										
XTENDIMAX VAPORGRIP	8.03 OZ A/A B										
INTACT DRIFT CONTROL & FOLIAR AGENT (DFR)	4.587 OZ A/A B										
	Mean =				10.0	15.0	10.0	5.0	98.3	95.0	96.3
8 WARRANT	17.97 OZ A/A A	108			15.0	20.0	15.0	5.0	95.0	95.0	95.0
XTENDIMAX VAPORGRIP	8.03 OZ A/A A	202			15.0	20.0	15.0	5.0	95.0	95.0	95.0
WARRANT ULTRA HERBICIDE	21.54 OZ A/A B	301			15.0	20.0	15.0	5.0	92.0	95.0	95.0
ROUNDUP POWER MAX	18.03 OZ A/A B										
	Mean =				15.0	20.0	15.0	5.0	94.0	95.0	95.0

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Unique Col. ID	1	4	5	6	7	8	9
Orig./Calc. Flag	O	O	O	O	O	O	O
SE Group	1	2	3	4	5	6	7
SE ID							
SE Label							
Target					1 AMBTR	2 IPOSS	3 SETFA
-Disc./Scale					W BDIC	W BDIC	W BGRM
-Characteristic							
-Stage Majority							
-Stage Minimum							
-Stage Maximum							
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA			
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY			
Variety	AG 43X0	AG 43X0	AG 43X0	AG 43X0			
-Stage Maj/Min/Max							
Part Rated							
-Part Rated Detail							
Assessment Class							
Assessment Type							
Assessment Unit							
Sample Size							
Sample Size Unit							
Sample Size (total)							
Assessment Date	7-13-2020	7-16-2020	7-23-2020	7-30-2020	7-30-2020	7-30-2020	7-30-2020
Assessment Time							
Assessment Code	A1	A2	A3	A4	A4	A4	A4
Appl.-Ass.Interval							
Days after first Appl.	41 DAA	44 DAA	51 DAA	58 DAA	58 DAA	58 DAA	58 DAA
Days after last Appl.	4 DAB	7 DAB	14 DAB	21 DAB	21 DAB	21 DAB	21 DAB
Plant.-Ass.Interval	41 DP1	44 DP1	51 DP1	58 DP1	58 DP1	58 DP1	58 DP1
Days after Emergence	38 DE1	41 DE1	48 DE1	55 DE1	55 DE1	55 DE1	55 DE1
Decimals Printed							
ARM Action Codes							

Entry No.	Entry/Trt. Description	Dose Unit	Dose	Appl. Code	Plot	1	2	3	4	5	6	7
9	WARRANT	17.97 OZ	A/A	A	109	10.0	15.0	10.0	5.0	95.0	95.0	95.0
	XTENDIMAX VAPORGRIP	8.03 OZ	A/A	A	204	10.0	15.0	10.0	5.0	95.0	95.0	99.0
	ROUNDUP POWER MAX	18.03 OZ	A/A	B	305	10.0	15.0	10.0	5.0	95.0	95.0	99.0
	PREFIX	30.45 OZ	A/A	B								
					Mean =	10.0	15.0	10.0	5.0	95.0	95.0	97.7
10	WARRANT	17.97 OZ	A/A	A	110	10.0	15.0	10.0	5.0	90.0	95.0	95.0
	XTENDIMAX VAPORGRIP	8.03 OZ	A/A	A	207	10.0	15.0	10.0	5.0	95.0	95.0	99.0
	ROUNDUP POWER MAX	18.03 OZ	A/A	B	308	10.0	15.0	10.0	5.0	92.0	95.0	99.0
	COBRA	3.13 OZ	A/A	B								
					Mean =	10.0	15.0	10.0	5.0	92.3	95.0	97.7

Target
1, AMBTR, W, BDIC, , , = Ambrosia trifida L.
2, IPOSS, W, BDIC, , , = Ipomoea spec.
3, SETFA, W, BGRM, , , = Setaria faberi HERRM.

Crop
1, GLXMA, C, BSOY, AG 43X0, RR2X = Glycine max (L.) MERR.

Plant.-Ass.Interval
41 DP1 = 1 GLXMA 6-2-2020
44 DP1 = 1 GLXMA 6-2-2020
51 DP1 = 1 GLXMA 6-2-2020
58 DP1 = 1 GLXMA 6-2-2020

University of Kentucky

Unique Col. ID	1	4	5	6	7	8	9
Orig./Calc. Flag	O	O	O	O	O	O	O
SE Group	1	2	3	4	5	6	7
SE ID							
SE Label							
Target					1 AMBTR	2 IPOSS	3 SETFA
-Disc./Scale					W BDIC	W BDIC	W BGRM
-Characteristic							
-Stage Majority							
-Stage Minimum							
-Stage Maximum							
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA			
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY			
Variety	AG 43X0	AG 43X0	AG 43X0	AG 43X0			
-Stage Maj/Min/Max							
Part Rated							
-Part Rated Detail							
Assessment Class							
Assessment Type							
Assessment Unit							
Sample Size							
Sample Size Unit							
Sample Size (total)							
Assessment Date	7-13-2020	7-16-2020	7-23-2020	7-30-2020	7-30-2020	7-30-2020	7-30-2020
Assessment Time							
Assessment Code	A1	A2	A3	A4	A4	A4	A4
Appl.-Ass.Interval							
Days after first Appl.	41 DAA	44 DAA	51 DAA	58 DAA	58 DAA	58 DAA	58 DAA
Days after last Appl.	4 DAB	7 DAB	14 DAB	21 DAB	21 DAB	21 DAB	21 DAB
Plant.-Ass.Interval	41 DP1	44 DP1	51 DP1	58 DP1	58 DP1	58 DP1	58 DP1
Days after Emergence	38 DE1	41 DE1	48 DE1	55 DE1	55 DE1	55 DE1	55 DE1
Decimals Printed							
ARM Action Codes							
Entry Entry/Trt.							
No. Description	Dose	Dose	Appl.				
	Unit	Unit	Code				
1 UNTREATED	0.0 d	0.0 d	0.0 d	0.0 b	0.0 c	0.0 b	0.0 b
2 WARRANT	17.97 OZ A/A A						
XTENDIMAX VAPORGRIP	8.03 OZ A/A A						
TAVIUM	23.87 OZ A/A B						
ROUNDUP POWER MAX	18.03 OZ A/A B						
INTACT DRIFT CONTROL & FOLIAR AGENT (DFR)	4.587 OZ A/A B						
3 WARRANT	17.97 OZ A/A A						
XTENDIMAX VAPORGRIP	8.03 OZ A/A A						
DUAL MAGNUM	15.89 OZ A/A B						
XTENDIMAX VAPORGRIP	8.03 OZ A/A B						
ROUNDUP POWER MAX	18.03 OZ A/A B						
INTACT DRIFT CONTROL & FOLIAR AGENT (DFR)	4.587 OZ A/A B						
4 WARRANT	17.97 OZ A/A A						
XTENDIMAX VAPORGRIP	8.03 OZ A/A A						
WARRANT	17.97 OZ A/A B						
XTENDIMAX VAPORGRIP	8.03 OZ A/A B						
ROUNDUP POWER MAX	18.03 OZ A/A B						
INTACT DRIFT CONTROL & FOLIAR AGENT (DFR)	4.587 OZ A/A B						

University of Kentucky

Unique Col. ID	1	4	5	6	7	8	9
Orig./Calc. Flag	O	O	O	O	O	O	O
SE Group	1	2	3	4	5	6	7
SE ID							
SE Label							
Target					1 AMBTR	2 IPOSS	3 SETFA
-Disc./Scale					W BDIC	W BDIC	W BGRM
-Characteristic							
-Stage Majority							
-Stage Minimum							
-Stage Maximum							
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA			
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY			
Variety	AG 43X0	AG 43X0	AG 43X0	AG 43X0			
-Stage Maj/Min/Max							
Part Rated							
-Part Rated Detail							
Assessment Class							
Assessment Type							
Assessment Unit							
Sample Size							
Sample Size Unit							
Sample Size (total)							
Assessment Date	7-13-2020	7-16-2020	7-23-2020	7-30-2020	7-30-2020	7-30-2020	7-30-2020
Assessment Time							
Assessment Code	A1	A2	A3	A4	A4	A4	A4
Appl.-Ass.Interval							
Days after first Appl.	41 DAA	44 DAA	51 DAA	58 DAA	58 DAA	58 DAA	58 DAA
Days after last Appl.	4 DAB	7 DAB	14 DAB	21 DAB	21 DAB	21 DAB	21 DAB
Plant.-Ass.Interval	41 DP1	44 DP1	51 DP1	58 DP1	58 DP1	58 DP1	58 DP1
Days after Emergence	38 DE1	41 DE1	48 DE1	55 DE1	55 DE1	55 DE1	55 DE1
Decimals Printed							
ARM Action Codes							
Entry No.							
Entry/Trt. Description							
Dose							
Dose Unit							
Appl. Code							
1	0.0 d	0.0 d	0.0 d	0.0 b	95.0 ab	95.0 a	97.7 a
2							
3							
4							
5							
6							
7							
5 WARRANT	17.97 OZ A/A A						
XTENDIMAX VAPORGRIP	8.03 OZ A/A A						
OUTLOOK	10.5 OZ A/A B						
ENGENIA	8.01 OZ A/A B						
ROUNDUP POWER MAX	18.03 OZ A/A B						
INTACT DRIFT CONTROL & FOLIAR AGENT (DFR)	4.587 OZ A/A B						
6 WARRANT	17.97 OZ A/A A	0.0 d	0.0 d	0.0 d	0.0 b	94.0 ab	95.0 a
XTENDIMAX VAPORGRIP	8.03 OZ A/A A						
ZIDUA HERBICIDE	1.7 OZ A/A B						
ENGENIA	8.01 OZ A/A B						
ROUNDUP POWER MAX	18.03 OZ A/A B						
7 WARRANT	17.97 OZ A/A A	10.0 b	15.0 b	10.0 b	5.0 a	98.3 a	96.3 a
XTENDIMAX VAPORGRIP	8.03 OZ A/A A						
WARRANT ULTRA HERBICIDE	21.54 OZ A/A B						
ROUNDUP POWER MAX	18.03 OZ A/A B						
XTENDIMAX VAPORGRIP	8.03 OZ A/A B						
INTACT DRIFT CONTROL & FOLIAR AGENT (DFR)	4.587 OZ A/A B						

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Unique Col. ID	1	4	5	6	7	8	9
Orig./Calc. Flag	O	O	O	O	O	O	O
SE Group	1	2	3	4	5	6	7
SE ID							
SE Label							
Target					1 AMBTR	2 IPOSS	3 SETFA
-Disc./Scale					W BDIC	W BDIC	W BGRM
-Characteristic							
-Stage Majority							
-Stage Minimum							
-Stage Maximum							
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA			
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY			
Variety	AG 43X0	AG 43X0	AG 43X0	AG 43X0			
-Stage Maj/Min/Max							
Part Rated							
-Part Rated Detail							
Assessment Class							
Assessment Type							
Assessment Unit							
Sample Size							
Sample Size Unit							
Sample Size (total)							
Assessment Date	7-13-2020	7-16-2020	7-23-2020	7-30-2020	7-30-2020	7-30-2020	7-30-2020
Assessment Time							
Assessment Code	A1	A2	A3	A4	A4	A4	A4
Appl.-Ass.Interval							
Days after first Appl.	41 DAA	44 DAA	51 DAA	58 DAA	58 DAA	58 DAA	58 DAA
Days after last Appl.	4 DAB	7 DAB	14 DAB	21 DAB	21 DAB	21 DAB	21 DAB
Plant.-Ass.Interval	41 DP1	44 DP1	51 DP1	58 DP1	58 DP1	58 DP1	58 DP1
Days after Emergence	38 DE1	41 DE1	48 DE1	55 DE1	55 DE1	55 DE1	55 DE1
Decimals Printed							
ARM Action Codes							
Entry No.							
Entry/Trt. Description							
Dose							
Dose Unit							
Appl. Code							
1	15.0 a	20.0 a	15.0 a	5.0 a	94.0 ab	95.0 a	95.0 a
8 WARRANT	17.97 OZ A/A A						
XTENDIMAX VAPORGRIP	8.03 OZ A/A A						
WARRANT ULTRA HERBICIDE	21.54 OZ A/A B						
ROUNDUP POWER MAX	18.03 OZ A/A B						
2	10.0 b	15.0 b	10.0 b	5.0 a	95.0 ab	95.0 a	97.7 a
9 WARRANT	17.97 OZ A/A A						
XTENDIMAX VAPORGRIP	8.03 OZ A/A A						
ROUNDUP POWER MAX	18.03 OZ A/A B						
PREFIX	30.45 OZ A/A B						

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Unique Col. ID	1	4	5	6	7	8	9
Orig./Calc. Flag	O	O	O	O	O	O	O
SE Group	1	2	3	4	5	6	7
SE ID							
SE Label							
Target					1 AMBTR	2 IPOSS	3 SETFA
-Disc./Scale					W BDIC	W BDIC	W BGRM
-Characteristic							
-Stage Majority							
-Stage Minimum							
-Stage Maximum							
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA			
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY			
Variety	AG 43X0	AG 43X0	AG 43X0	AG 43X0			
-Stage Maj/Min/Max							
Part Rated							
-Part Rated Detail							
Assessment Class							
Assessment Type							
Assessment Unit							
Sample Size							
Sample Size Unit							
Sample Size (total)							
Assessment Date	7-13-2020	7-16-2020	7-23-2020	7-30-2020	7-30-2020	7-30-2020	7-30-2020
Assessment Time							
Assessment Code	A1	A2	A3	A4	A4	A4	A4
Appl.-Ass.Interval							
Days after first Appl.	41 DAA	44 DAA	51 DAA	58 DAA	58 DAA	58 DAA	58 DAA
Days after last Appl.	4 DAB	7 DAB	14 DAB	21 DAB	21 DAB	21 DAB	21 DAB
Plant.-Ass.Interval	41 DP1	44 DP1	51 DP1	58 DP1	58 DP1	58 DP1	58 DP1
Days after Emergence	38 DE1	41 DE1	48 DE1	55 DE1	55 DE1	55 DE1	55 DE1
Decimals Printed							
ARM Action Codes							
Entry No.							
Entry/Trt. Description							
Dose Unit							
Dose Code							
10 WARRANT	10.0 b	15.0 b	10.0 b	5.0 a	92.3 b	95.0 a	97.7 a
XTENDIMAX VAPORGRIP							
ROUNDUP POWER MAX							
COBRA							
LSD P=.05	1.57	.	.	.	3.53	.	3.26
Standard Deviation	0.91	0.00	0.00	0.00	2.06	0.00	1.90
CV	17.67	0.0	0.0	0.0	2.43	0.0	2.18
Levene's F		0.00	0.00	0.00	0.466	0.00	0.333
Levene's Prob(F)		0.00*	0.00*	0.00*	0.88	0.00*	0.953
Skewness	0.4326	0.2472	0.4808	0.4301	-2.7655*	-2.8091*	-2.787*
Kurtosis	-1.3328	-1.7599*	-1.3554	-1.95*	6.1563*	6.3081*	6.2306*
Replicate F	1.000	0.000	0.000	0.000	0.150	0.000	1.328
Replicate Prob(F)	0.3874	1.0000	1.0000	1.0000	0.8619	1.0000	0.2898
Treatment F	114.333	0.000	0.000	0.000	627.976	0.000	778.280
Treatment Prob(F)	0.0001	1.0000	1.0000	1.0000	0.0001	1.0000	0.0001

Target

- 1, AMBTR, W, BDIC, , , = Ambrosia trifida L.
- 2, IPOSS, W, BDIC, , , = Ipomoea spec.
- 3, SETFA, W, BGRM, , , = Setaria faberi HERRM.

Crop

- 1, GLXMA, C, BSOY, AG 43X0, RR2X = Glycine max (L.) MERR.

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Plant.-Ass.Interval

41 DP1 = 1 GLXMA 6-2-2020
44 DP1 = 1 GLXMA 6-2-2020
51 DP1 = 1 GLXMA 6-2-2020
58 DP1 = 1 GLXMA 6-2-2020

University of Kentucky

XtendFlex Soybean Herbicide Recommendations 2020-01-N8-08

Trial ID: HP20USAJU1TDC2 TD Number: LOCALCREATED Protocol Edition No.: 1.01
 Project ID: LOCAL_PROJ 20-17_SOY-CAL
 Project Number(s): 100 % LFAA0409 % %
 Protocol Developer: Pollard, Justin
 License User: Childs, Dan

Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 140.3 L/ha Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Entry No.	Entry/Trt. Description	Form. Type	AI Conc. Unit	Dose Unit	Dose Unit	Appl. Timing	Appl. Code	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	UNTREATED								101	404	603	707
2	XTENDIMAX	SL	515.31 GA/L	828 G	AE/HA	PREPRE	A	27.58 g/mx	102	304	604	803
	WARRANT	CS	359 GA/L	1259 G	A/HA	PREPRE	A	55.49 g/mx				
	MAULER	SL	480 GA/L	280.6 G	A/HA	PREPRE	A	9.667 g/mx				
	XTENDIMAX	SL	515.31 GA/L	828 G	AE/HA	EAPOCR	B	27.58 g/mx				
	ROUNDUP POWER MAX	SL	540 GA/L	1263 G	AE/HA	EAPOCR	B	45.24 g/mx				
	WARRANT	CS	359 GA/L	1259 G	A/HA	EAPOCR	B	55.49 g/mx				
	CLASS ACT RIDION	XL	100 %AW/W	1 %	V/V	EAPOCR	B	20.0 mL/mx				
	INTACT DRIFT (DFR)	XL	43.2 %AW/W	0.5 %	V/V	EAPOCR	B	10.6 g/mx				
3	XTENDIMAX	SL	515.31 GA/L	828 G	AE/HA	PREPRE	A	27.58 g/mx	103	408	504	702
	WARRANT	CS	359 GA/L	1259 G	A/HA	PREPRE	A	55.49 g/mx				
	MAULER	SL	480 GA/L	280.6 G	A/HA	PREPRE	A	9.667 g/mx				
	LIBERTY 280 SL	SL	280 GA/L	655 G	A/HA	EAPOCR	B	38.35 g/mx				
	ROUNDUP POWER MAX	SL	540 GA/L	1263 G	AE/HA	EAPOCR	B	45.24 g/mx				
	WARRANT	CS	359 GA/L	1259 G	A/HA	EAPOCR	B	55.49 g/mx				
	N-PAK AMS LIQUID	XL	34 %AW/W	2.5 %	V/V	EAPOCR	B	50.0 mL/mx				
4	XTENDIMAX	SL	515.31 GA/L	828 G	AE/HA	PREPRE	A	27.58 g/mx	104	308	501	801
	WARRANT	CS	359 GA/L	1259 G	A/HA	PREPRE	A	55.49 g/mx				
	MAULER	SL	480 GA/L	280.6 G	A/HA	PREPRE	A	9.667 g/mx				
	LIBERTY 280 SL	SL	280 GA/L	655 G	A/HA	EAPOCR	B	38.35 g/mx				
	WARRANT	CS	359 GA/L	1259 G	A/HA	EAPOCR	B	55.49 g/mx				
	N-PAK AMS LIQUID	XL	34 %AW/W	2.5 %	V/V	EAPOCR	B	50.0 mL/mx				
5	XTENDIMAX	SL	515.31 GA/L	828 G	AE/HA	PREPRE	A	27.58 g/mx	105	305	508	808
	WARRANT	CS	359 GA/L	1259 G	A/HA	PREPRE	A	55.49 g/mx				
	MAULER	SL	480 GA/L	280.6 G	A/HA	PREPRE	A	9.667 g/mx				
	LIBERTY 280 SL	SL	280 GA/L	655 G	A/HA	EAPOCR	B	38.35 g/mx				
	WARRANT	CS	359 GA/L	1259 G	A/HA	EAPOCR	B	55.49 g/mx				
	N-PAK AMS LIQUID	XL	34 %AW/W	2.5 %	V/V	EAPOCR	B	50.0 mL/mx				
	LIBERTY 280 SL	SL	280 GA/L	655 G	A/HA	POSPOS	C	38.35 g/mx				
	N-PAK AMS LIQUID	XL	34 %AW/W	2.5 %	V/V	POSPOS	C	50.0 mL/mx				

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Reps: 4 Plots: 10 by 30 feet
Appl. Amount: 140.3 L/ha Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Entry No.	Entry/Trt. Description	Form. Type	AI Conc.	Dose Unit	Dose Unit	Appl. Timing	Appl. Code	Amt Product to Measure	Rep 1	2	3	4
6	XTENDIMAX	SL	515.31	GA/L	828 G	AE/HA	PREPRE A	27.58 g/mx	106	406	607	701
	WARRANT MAULER	CS	359	GA/L	1259 G	A/HA	PREPRE A	55.49 g/mx				
	MAULER	SL	480	GA/L	280.6 G	A/HA	PREPRE A	9.667 g/mx				
	ROUNDUP POWER MAX	SL	540	GA/L	1263 G	AE/HA	EAPOCR B	45.24 g/mx				
	WARRANT ULTRA HERBICIDE	CS	413	GA/L	1449 G	A/HA	EAPOCR B	56.22 g/mx				
	N-PAK AMS LIQUID	XL	34	%AW/W	2.5 %	V/V	EAPOCR B	50.0 mL/mx				
	LIBERTY 280 SL	SL	280	GA/L	655 G	A/HA	POSPOS C	38.35 g/mx				
	N-PAK AMS LIQUID	XL	34	%AW/W	2.5 %	V/V	POSPOS C	50.0 mL/mx				
7	WARRANT MAULER	CS	359	GA/L	1259 G	A/HA	PREPRE A	55.49 g/mx	107	403	606	705
	MAULER	SL	480	GA/L	280.6 G	A/HA	PREPRE A	9.667 g/mx				
	XTENDIMAX	SL	515.31	GA/L	828 G	AE/HA	EAPOCR B	27.58 g/mx				
	ROUNDUP POWER MAX	SL	540	GA/L	1263 G	AE/HA	EAPOCR B	45.24 g/mx				
	WARRANT	CS	359	GA/L	1259 G	A/HA	EAPOCR B	55.49 g/mx				
	CLASS ACT RIDION	XL	100	%AW/W	1 %	V/V	EAPOCR B	20.0 mL/mx				
	INTACT DRIFT CONTROL	XL	43.2	%AW/W	0.5 %	V/V	EAPOCR B	10.6 g/mx				
8	WARRANT MAULER	CS	359	GA/L	1259 G	A/HA	PREPRE A	55.49 g/mx	108	402	602	806
	MAULER	SL	480	GA/L	280.6 G	A/HA	PREPRE A	9.667 g/mx				
	XTENDIMAX	SL	515.31	GA/L	828 G	AE/HA	EAPOCR B	27.58 g/mx				
	ROUNDUP POWER MAX	SL	540	GA/L	1263 G	AE/HA	EAPOCR B	45.24 g/mx				
	WARRANT	CS	359	GA/L	1259 G	A/HA	EAPOCR B	55.49 g/mx				
	CLASS ACT RIDION	XL	100	%AW/W	1 %	V/V	EAPOCR B	20.0 mL/mx				
	INTACT DRIFT CONTROL	XL	43.2	%AW/W	0.5 %	V/V	EAPOCR B	10.6 g/mx				
	LIBERTY 280 SL	SL	280	GA/L	655 G	A/HA	POSPOS C	38.35 g/mx				
N-PAK AMS LIQUID	XL	34	%AW/W	2.5 %	V/V	POSPOS C	50.0 mL/mx					
9	WARRANT MAULER	CS	359	GA/L	1259 G	A/HA	PREPRE A	55.49 g/mx	201	303	601	706
	MAULER	SL	480	GA/L	280.6 G	A/HA	PREPRE A	9.667 g/mx				
	XTENDIMAX	SL	515.31	GA/L	828 G	AE/HA	EAPOCR B	27.58 g/mx				
	WARRANT	CS	359	GA/L	1259 G	A/HA	EAPOCR B	55.49 g/mx				
	CLASS ACT RIDION	XL	100	%AW/W	1 %	V/V	EAPOCR B	20.0 mL/mx				
	ROUNDUP POWER MAX	SL	540	GA/L	1263 G	AE/HA	POSPOS C	45.24 g/mx				
	N-PAK AMS LIQUID	XL	34	%AW/W	2.5 %	V/V	POSPOS C	50.0 mL/mx				
10	WARRANT MAULER	CS	359	GA/L	1259 G	A/HA	PREPRE A	55.49 g/mx	202	301	605	805
	MAULER	SL	480	GA/L	280.6 G	A/HA	PREPRE A	9.667 g/mx				
	XTENDIMAX	SL	515.31	GA/L	828 G	AE/HA	EAPOCR B	27.58 g/mx				
	WARRANT	CS	359	GA/L	1259 G	A/HA	EAPOCR B	55.49 g/mx				
	CLASS ACT RIDION	XL	100	%AW/W	1 %	V/V	EAPOCR B	20.0 mL/mx				
	LIBERTY 280 SL	SL	280	GA/L	655 G	A/HA	POSPOS C	38.35 g/mx				
	ROUNDUP POWER MAX	SL	540	GA/L	1263 G	AE/HA	POSPOS C	45.24 g/mx				
	N-PAK AMS LIQUID	XL	34	%AW/W	2.5 %	V/V	POSPOS C	50.0 mL/mx				

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Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 140.3 L/ha Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Entry No.	Entry/Trt. Description	Form. Type	AI Conc.	AI Unit	Dose Unit	Dose Unit	Appl. Timing	Appl. Code	Amt to Measure	Rep 1	Rep 2	Rep 3	Rep 4
11	WARRANT	CS	359	GA/L	1259	G A/HA	PREPRE	A	55.49 g/mx	203	302	506	703
	MAULER	SL	480	GA/L	280.6	G A/HA	PREPRE	A	9.667 g/mx				
	XTENDIMAX	SL	515.31	GA/L	828	G AE/HA	EAPOCR	B	27.58 g/mx				
	WARRANT	CS	359	GA/L	1259	G A/HA	EAPOCR	B	55.49 g/mx				
	CLASS ACT RIDION	XL	100	%AW/W	1	% V/V	EAPOCR	B	20.0 mL/mx				
	LIBERTY 280 SL	SL	280	GA/L	655	G A/HA	POSPOS	C	38.35 g/mx				
	N-PAK AMS LIQUID	XL	34	%AW/W	2.5	% V/V	POSPOS	C	50.0 mL/mx				
12	WARRANT	CS	359	GA/L	1259	G A/HA	PREPRE	A	55.49 g/mx	204	405	503	807
	MAULER	SL	480	GA/L	280.6	G A/HA	PREPRE	A	9.667 g/mx				
	LIBERTY 280 SL	SL	280	GA/L	655	G A/HA	EAPOCR	B	38.35 g/mx				
	ROUNDUP POWER MAX	SL	540	GA/L	1263	G AE/HA	EAPOCR	B	45.24 g/mx				
	WARRANT	CS	359	GA/L	1259	G A/HA	EAPOCR	B	55.49 g/mx				
N-PAK AMS LIQUID	XL	34	%AW/W	2.5	% V/V	EAPOCR	B	50.0 mL/mx					
13	WARRANT	CS	359	GA/L	1259	G A/HA	PREPRE	A	55.49 g/mx	205	401	505	704
	MAULER	SL	480	GA/L	280.6	G A/HA	PREPRE	A	9.667 g/mx				
	LIBERTY 280 SL	SL	280	GA/L	655	G A/HA	EAPOCR	B	38.35 g/mx				
	WARRANT	CS	359	GA/L	1259	G A/HA	EAPOCR	B	55.49 g/mx				
	N-PAK AMS LIQUID	XL	34	%AW/W	2.5	% V/V	EAPOCR	B	50.0 mL/mx				
14	XTENDIMAX	SL	515.31	GA/L	828	G AE/HA	PREPRE	A	27.58 g/mx	206	407	502	708
	WARRANT ULTRA HERBICIDE	CS	413	GA/L	1449	G A/HA	PREPRE	A	56.22 g/mx				
	INTACT DRIFT CONTROL	XL	43.2	%AW/W	0.5	% V/V	PREPRE	A	10.6 g/mx				
	XTENDIMAX	SL	515.31	GA/L	828	G AE/HA	EAPOCR	B	27.58 g/mx				
	ROUNDUP POWER MAX	SL	540	GA/L	1263	G AE/HA	EAPOCR	B	45.24 g/mx				
	WARRANT	CS	359	GA/L	1259	G A/HA	EAPOCR	B	55.49 g/mx				
	CLASS ACT RIDION	XL	100	%AW/W	1	% V/V	EAPOCR	B	20.0 mL/mx				
INTACT DRIFT CONTROL	XL	43.2	%AW/W	0.5	% V/V	EAPOCR	B	10.6 g/mx					
15	XTENDIMAX	SL	515.31	GA/L	828	G AE/HA	PREPRE	A	27.58 g/mx	207	306	608	802
	WARRANT ULTRA HERBICIDE	CS	413	GA/L	1449	G A/HA	PREPRE	A	56.22 g/mx				
	INTACT DRIFT CONTROL	XL	43.2	%AW/W	0.5	% V/V	PREPRE	A	10.6 g/mx				
	LIBERTY 280 SL	SL	280	GA/L	655	G A/HA	EAPOCR	B	38.35 g/mx				
	ROUNDUP POWER MAX	SL	540	GA/L	1263	G AE/HA	EAPOCR	B	45.24 g/mx				
	WARRANT	CS	359	GA/L	1259	G A/HA	EAPOCR	B	55.49 g/mx				
N-PAK AMS LIQUID	XL	34	%AW/W	2.5	% V/V	EAPOCR	B	50.0 mL/mx					
16	UNTREATED								208	307	507	804	

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Entry/Trt. Description	Identification Code	AI Conc.	AI Conc. Unit	Form. Type	Lot Batch Number
400.841	mL	XTENDIMAX	BCMASJ_15040101	515.31	GA/L	SL	
1,562.261	mL	WARRANT	BCORKA_WARRANT	359	GA/L	CS	
125.000	mL	MAULER	BCMOSI_20020401	480	GA/L	SL	

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Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Entry/Trt. Description	Identification Code	AI Conc.	AI Conc. Unit	Form. Type	Lot Batch Number
416.766	mL	ROUNDUP POWER MAX	BCADDM_03120101	540	GA/L	SL	
175.000	mL	CLASS ACT RIDION	BCMOSI_19022501	100	%AW/W	XL	
12.500	mL	INTACT DRIFT (DFR)	BCSCMA_19022701	43.2	%AW/W	XL	
458.520	mL	LIBERTY 280 SL	SP102000031468	280	GA/L	SL	
812.500	mL	N-PAK AMS LIQUID	BCOWCL_N-PAK AMS LIQUID	34	%AW/W	XL	
187.552	mL	WARRANT ULTRA HERBICIDE	BCMOSI_16111501	413	GA/L	CS	
62.500	mL	INTACT DRIFT CONTROL	BCSCMA_19022701	43.2	%AW/W	XL	

- * 'Per area' calculations based on application amount= 140.3 L/HA, mix size= 2 L (mix size basis).
- * Product amount calculations increased 25 % for overage adjustment.
- * 'Per volume' calculations use spray volume= 140.3 L/HA, mix size= 2 L.

General Trial Information

Trial Initiation Date: 6-12-2020
Trial Status: A
Last change done by: Travis Legleiter
GEP level: Conducted under GEP
External Trial: X

Protocol Edition No.: 1.01
Trial Status Date: 3-27-2020
Date of last export: 11-20-2020 7:52 AM

	1
TD Number(s):	LOCALCREATED

	1	2	3
TD Keyword(s):	PHYTOTOX	EFFICACY	YIELD

License User: Childs, Dan
Department: Bayer CropScience LP

Protocol Developer: Pollard, Justin
Department: Bayer CropScience LP

Trial Officer: Childs, Dan

Cooperator (Outside service): Cooperator
Affiliation: Affiliation
Street: Street
City: City
Postal Code: PostalCode
Telephone: Telephon
Fax: Fax
Mobile Tel.: Mobile Telephone
E-Mail: E-Mail

Previous Crops and Agricultural Chemicals

Previous Crops		Year
GLXMA	C BSOY	2019

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Soil Description

Soil Name: Sadler Silt loam
Texture: SIL **% Sand:** 8 **% Silt:** 76
 % Clay: 16
% Organic Matter: 2.5
pH: 6.5 **Cation Exchange Capacity:** 14
Fertility Level: F
Soil Drainage: G

Crop Description

Crop 1: GLXMA **Discipline:** C **Crop Scale:** BSOY **Use Group:** P
 Glycine max (L.) MERR.
 Soybean
Variety: AG40XF0

% Germination: 90 **Seed Lot No.:** ST9SE612
Seed Treatment Products: Standard-FI/ILEVO
Seed/Planting Date: 6-12-2020
Depth: 3.81 CM
Planted/Harvested Width: 5 FT **Seed/Plant Count:** 346000 S/HA
Planted/Harvested Length: 30 FT **Rows Per Plot:** 7

Planting Method: PLANTD **Row Spacing:** 38.1 CM
Planting Implement: FE

Soil Temperature: 21.1 C
Soil Moisture (at Planting): SLIWET

Harvest Date: 11-5-2020

Target Description

Target 1: AMATA **Discipline:** W **Target Scale:** BDIC
 Amaranthus rudis
 Common waterhemp
Target 2: SIDSP **Discipline:** W **Target Scale:** BDIC
 Sida spinosa L.
 Prickly sida / Teaweed

Application Description

	A	B	C
Application Date	6-12-2020	7-9-2020	7-21-2020
Interval to prev. Appl.		27 DAY	12 DAY
Application Timing	PREPRE	EAPOCR	POSPOS
Appl.Start - Time of Day	11:03 AM	4:55 PM	2:30 PM
Appl. Stop	11:45 AM	5:57 PM	2:50 PM
% Relative Humidity	41	57	65
Air Temperature	28.33 C	32.78 C	35.56 C
% Cloud Cover	0	10	50
Wind Velocity	7.24 KPH	6.76 KPH	7.24 KPH
Wind Direction/Degrees	N	SW	SW
Soil Temperature	21.1 C	30 C	25.56 C
Soil Moisture	DAMP	DRY	WET
Problems with Application?	No	No	No

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Crop Stage at Application

	A	B	C
Crop 1/Disc./Scale	GLXMA C BSOY	GLXMA C BSOY	GLXMA C BSOY
Application Plant Condition		NORMAL	NORMAL
Stage Majority/Percent		13	17
Stage Minimum/Percent		13	17
Stage Maximum/Percent		14	18
Majority Height/Unit		22.86 CM	34.3 CM
Min/Max (Unit=Height Unit)		17.75 28	20.32 41.9

Target Stage at Application

	A	B	C
Target 1/Disc./Scale	AMATA W BDIC	AMATA W BDIC	AMATA W BDIC
Stage Majority/Percent		11	
Stage Minimum/Percent		11	
Stage Maximum/Percent		11	
Majority Height/Unit		1.905 CM	
Min/Max (Unit=Height Unit)		0.635 1.905	
Density		0.743 M2	
Target 2/Disc./Scale	SIDSP W BDIC	SIDSP W BDIC	SIDSP W BDIC
Stage Majority/Percent		12	11
Stage Minimum/Percent		11	
Stage Maximum/Percent		12	
Majority Height/Unit		4.45 CM	1.905 CM
Min/Max (Unit=Height Unit)		3.175 5.7	
Density		.02323 M2	.01161 M2

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Application Equipment

	A	B	C
Application Method	SPRAY	SPRAY	SPRAY
Application Placement	SOIL	FOLIAR	FOLIAR
Application Equipment	BACCAI	BACCAI	BACCAI
Equipment ID	White Tape	Blue Tpe	White Tape
Ground Speed	4.82999992 KPH	4.82999992 KPH	4.82999992 KPH
Propellant Type	COMCO2	COMCO2	COMCO2
Carrier	WATER	WATER	WATER
Appl./Slurry Volume	140.3	140.3	140.3
Appl./Slurry Volume Unit	L/HA	L/HA	L/HA
Minimum Mix/Treatment	1.564 L	1.564 L	1.564 L
Mix Overage	436 ML	436 ML	436 ML
Mix Size	2 L	2 L	2 L
Operating Pressure	3.447 BAR	3.447 BAR	2.206 BAR
Spray Swath Width	3.0480001 M	3.0480001 M	3.0480001 M
Nozzle Type	TEEJTA	TEEJTA	FLAFAN
Nozzle Size	015	015	02
Nozzle Spacing	50.8 CM	50.8 CM	50.8 CM
Boom Height	45.7000008 CM	45.7000008 CM	45.7000008 CM

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Unique Col. ID	3	5	6	8	9	10	11	12					
Orig./Calc. Flag	O	O	O	O	O	O	O	C					
SE Group	1	3	4	4	4	5	5	5					
SE ID	PE12AD1	EE22AD3	PE12AD1	HM41NA3	HM41NA3	HM41NA3	HM41NA3	HM41NA3					
SE Label	Estimat	AMATA	Estimat	harvest	harvest	harvest	harvest	harvest					
Target													
-Disc./Scale													
-Characteristic													
-Stage Majority													
-Stage Minimum													
-Stage Maximum													
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA					
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY					
Variety	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0					
-Stage Maj/Min/Max	17 17 18												
Part Rated								YIELD					
-Part Rated Detail													
Assessment Class													
Assessment Type	PHYGEN	CONTRO	PHYGEN	LENGTH	WEIGHT	MOICON	WEITES	WEIGHT					
Assessment Unit	%	%	%	FT	LB	%	LB	BU60LB					
Sample Size	1	1	1	1	1	1	1	1					
Sample Size Unit	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	_ACRE					
Sample Size (total)	1	1	1	1	1	1	1	1					
Assessment Date	7-21-2020	7-29-2020	8-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020					
Assessment Time													
Assessment Code	B1	E1	C1	H2	H2	H2	H2	H2					
Appl.-Ass.Interval													
Days after first Appl.	39 DAA	47 DAA	54 DAA	146 DAA	146 DAA	146 DAA	146 DAA	146 DAA					
Days after last Appl.	12 DAB	8 DAC	15 DAC	107 DAC	107 DAC	107 DAC	107 DAC	107 DAC					
Plant.-Ass.Interval	39 DP1	47 DP1	54 DP1	146 DP1	146 DP1	146 DP1	146 DP1	146 DP1					
Days after Emergence													
Decimals Printed								1					
ARM Action Codes			AA	ER1				ER4 TY1					
Entry Entry/Trt.		Dose	Dose	Appl.									
No. Description		Unit	Code	Plot	1	2	3	4	5	6	7	8	
1 UNTREATED					101	0.0	0.0	0.0		6.630	13.10	55.40	35.0
					404	0.0	0.0	0.0	25.30	9.860	12.90	54.90	58.3
					603	0.0	0.0	0.0	26.30	5.750	12.40	55.20	32.9
					707	0.0	0.0	0.0	25.60	4.920	12.90	53.60	
					Mean =	0.0	0.0	0.0d	25.73	6.790	12.83	54.78	42.1
2 XTENDIMAX	828 G AE/HA	A	102		5.0	100.0	5.0		9.700	12.40	54.60	52.3	
WARRANT	1259 G A/HA	A	304		7.0	100.0	0.0	27.50	10.260	12.80	55.40	55.9	
MAULER	280.6 G A/HA	A	604		5.0	100.0	0.0	26.10	6.720	12.00	53.80	38.9	
XTENDIMAX	828 G AE/HA	B	803		7.0	100.0	2.0	26.30	5.560	12.50	54.00		
ROUNDUP POWER MAX	1263 G AE/HA	B											
WARRANT	1259 G A/HA	B											
CLASS ACT RIDION	1 % V/V	B											
INTACT DRIFT (DFR)	0.5 % V/V	B											
					Mean =	6.0	100.0	0.8d	26.63	8.060	12.43	54.45	49.1

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	3	5	6	8	9	10	11	12				
Unique Col. ID	O	O	O	O	O	O	O	C				
Orig./Calc. Flag	1	3	4	4	4	5	5	5				
SE Group	PE12AD1	EE22AD3	PE12AD1	HM41NA3	HM41NA3	HM41NA3	HM41NA3	HM41NA3				
SE ID	Estimat	AMATA	Estimat	harvest	harvest	harvest	harvest	harvest				
SE Label												
Target												
-Disc./Scale												
-Characteristic												
-Stage Majority												
-Stage Minimum												
-Stage Maximum												
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA				
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY				
Variety	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0				
-Stage Maj/Min/Max	17 17 18											
Part Rated								YIELD				
-Part Rated Detail												
Assessment Class												
Assessment Type	PHYGEN	CONTRO	PHYGEN	LENGTH	WEIGHT	MOICON	WEITES	WEIGHT				
Assessment Unit	%	%	%	FT	LB	%	LB	BU60LB				
Sample Size	1	1	1	1	1	1	1	1				
Sample Size Unit	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	_ACRE				
Sample Size (total)	1	1	1	1	1	1	1	1				
Assessment Date	7-21-2020	7-29-2020	8-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020				
Assessment Time												
Assessment Code	B1	E1	C1	H2	H2	H2	H2	H2				
Appl.-Ass.Interval												
Days after first Appl.	39 DAA	47 DAA	54 DAA	146 DAA	146 DAA	146 DAA	146 DAA	146 DAA				
Days after last Appl.	12 DAB	8 DAC	15 DAC	107 DAC	107 DAC	107 DAC	107 DAC	107 DAC				
Plant.-Ass.Interval	39 DP1	47 DP1	54 DP1	146 DP1	146 DP1	146 DP1	146 DP1	146 DP1				
Days after Emergence												
Decimals Printed								1				
ARM Action Codes			AA	ER1				ER4 TY1				
Entry Entry/Trt.												
No. Description	Dose Unit	Dose Unit	Appl. Code	Plot	1	2	3	4	5	6	7	8
3 XTENDIMAX	828 G AE/HA	A	A	103	7.0	100.0	2.0		9.100	12.30	53.80	49.0
WARRANT	1259 G A/HA	A	A	408	7.0	100.0	0.0	27.40	9.510	12.40	54.80	52.2
MAULER	280.6 G A/HA	A	A	504	10.0	100.0	0.0	26.70	10.400	12.70	54.60	58.4
LIBERTY 280 SL	655 G A/HA	B	B	702	7.0	100.0	2.0	26.10	5.990	12.60	55.20	
ROUNDUP POWER MAX	1263 G AE/HA	B	B									
WARRANT	1259 G A/HA	B	B									
N-PAK AMS LIQUID	2.5 % V/V	B	B									
	Mean =				7.8	100.0	0.5d	26.73	8.750	12.50	54.60	53.2
4 XTENDIMAX	828 G AE/HA	A	A	104	10.0	100.0	2.0		8.830	12.10	53.90	47.6
WARRANT	1259 G A/HA	A	A	308	10.0	100.0	2.0	26.30	9.010	12.60	55.20	51.5
MAULER	280.6 G A/HA	A	A	501	7.0	100.0	0.0	26.60	11.790	13.30	55.00	66.0
LIBERTY 280 SL	655 G A/HA	B	B	801	10.0	100.0	0.0	26.30	5.850	13.00	55.20	
WARRANT	1259 G A/HA	B	B									
N-PAK AMS LIQUID	2.5 % V/V	B	B									
	Mean =				9.3	100.0	0.5d	26.40	8.870	12.75	54.83	55.0

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Unique Col. ID	3	5	6	8	9	10	11	12			
Orig./Calc. Flag	O	O	O	O	O	O	O	C			
SE Group	1	3	4	4	4	5	5	5			
SE ID	PE12AD1	EE22AD3	PE12AD1	HM41NA3	HM41NA3	HM41NA3	HM41NA3	HM41NA3			
SE Label	Estimat	AMATA	Estimat	harvest	harvest	harvest	harvest	harvest			
Target											
-Disc./Scale											
-Characteristic											
-Stage Majority											
-Stage Minimum											
-Stage Maximum											
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA			
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY			
Variety	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0			
-Stage Maj/Min/Max	17 17 18										
Part Rated								YIELD			
-Part Rated Detail											
Assessment Class											
Assessment Type	PHYGEN	CONTRO	PHYGEN	LENGTH	WEIGHT	MOICON	WEITES	WEIGHT			
Assessment Unit	%	%	%	FT	LB	%	LB	BU60LB			
Sample Size	1	1	1	1	1	1	1	1			
Sample Size Unit	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	_ACRE			
Sample Size (total)	1	1	1	1	1	1	1	1			
Assessment Date	7-21-2020	7-29-2020	8-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020			
Assessment Time											
Assessment Code	B1	E1	C1	H2	H2	H2	H2	H2			
Appl.-Ass.Interval											
Days after first Appl.	39 DAA	47 DAA	54 DAA	146 DAA	146 DAA	146 DAA	146 DAA	146 DAA			
Days after last Appl.	12 DAB	8 DAC	15 DAC	107 DAC	107 DAC	107 DAC	107 DAC	107 DAC			
Plant.-Ass.Interval	39 DP1	47 DP1	54 DP1	146 DP1	146 DP1	146 DP1	146 DP1	146 DP1			
Days after Emergence											
Decimals Printed								1			
ARM Action Codes			AA	ER1				ER4 TY1			
Entry Entry/Trt.	Dose	Dose	Appl.								
No. Description	Unit	Code	Plot	1	2	3	4	5	6	7	8
5 XTENDIMAX	828 G AE/HA	A	105	10.0	100.0	2.0		9.320	12.10	53.60	51.2
WARRANT	1259 G A/HA	A	305	10.0	100.0	2.0	27.20	9.910	12.50	54.50	54.8
MAULER	280.6 G A/HA	A	508	7.0	100.0	0.0	26.10	8.900	12.20	54.40	51.4
LIBERTY 280 SL	655 G A/HA	B	808	10.0	100.0	5.0	25.70	5.390	12.60	54.10	
WARRANT	1259 G A/HA	B									
N-PAK AMS LIQUID	2.5 % V/V	B									
LIBERTY 280 SL	655 G A/HA	C									
N-PAK AMS LIQUID	2.5 % V/V	C									
Mean =				9.3	100.0	1.6d	26.33	8.380	12.35	54.15	52.5
6 XTENDIMAX	828 G AE/HA	A	106	7.0	100.0	2.0		9.950	12.20	53.80	53.4
WARRANT	1259 G A/HA	A	406	7.0	100.0	0.0	26.80	11.170	12.60	54.60	62.6
MAULER	280.6 G A/HA	A	607	7.0	100.0	5.0	26.40	6.880	12.00	54.20	39.4
ROUNDUP POWER MAX	1263 G AE/HA	B	701	5.0	100.0	5.0	26.30	6.860	12.80	55.00	
WARRANT ULTRA HERBICIDE	1449 G A/HA	B									
N-PAK AMS LIQUID	2.5 % V/V	B									
LIBERTY 280 SL	655 G A/HA	C									
N-PAK AMS LIQUID	2.5 % V/V	C									
Mean =				6.5	100.0	2.2d	26.50	8.715	12.40	54.40	51.8

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	3	5	6	8	9	10	11	12			
Unique Col. ID	O	O	O	O	O	O	O	C			
Orig./Calc. Flag	1	3	4	4	4	5	5	5			
SE Group	PE12AD1	EE22AD3	PE12AD1	HM41NA3	HM41NA3	HM41NA3	HM41NA3	HM41NA3			
SE ID	Estimat	AMATA	Estimat	harvest	harvest	harvest	harvest	harvest			
SE Label											
Target											
-Disc./Scale											
-Characteristic											
-Stage Majority											
-Stage Minimum											
-Stage Maximum											
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA			
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY			
Variety	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0			
-Stage Maj/Min/Max	17 17 18										
Part Rated								YIELD			
-Part Rated Detail											
Assessment Class											
Assessment Type	PHYGEN	CONTRO	PHYGEN	LENGTH	WEIGHT	MOICON	WEITES	WEIGHT			
Assessment Unit	%	%	%	FT	LB	%	LB	BU60LB			
Sample Size	1	1	1	1	1	1	1	1			
Sample Size Unit	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	_ACRE			
Sample Size (total)	1	1	1	1	1	1	1	1			
Assessment Date	7-21-2020	7-29-2020	8-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020			
Assessment Time											
Assessment Code	B1	E1	C1	H2	H2	H2	H2	H2			
Appl.-Ass.Interval											
Days after first Appl.	39 DAA	47 DAA	54 DAA	146 DAA	146 DAA	146 DAA	146 DAA	146 DAA			
Days after last Appl.	12 DAB	8 DAC	15 DAC	107 DAC	107 DAC	107 DAC	107 DAC	107 DAC			
Plant.-Ass.Interval	39 DP1	47 DP1	54 DP1	146 DP1	146 DP1	146 DP1	146 DP1	146 DP1			
Days after Emergence											
Decimals Printed								1			
ARM Action Codes			AA	ER1				ER4 TY1			
Entry Entry/Trt.	Dose	Dose	Appl.								
No. Description	Unit	Code	Plot	1	2	3	4	5	6	7	8
7 WARRANT	1259 G A/HA	A	107	5.0	100.0	2.0		9.200	12.10	53.80	49.8
MAULER	280.6 G A/HA	A	403	2.0	100.0	0.0	25.90	10.430	12.90	54.90	60.3
XTENDIMAX	828 G AE/HA	B	606	5.0	100.0	2.0	26.10	5.900	11.90	53.50	34.2
ROUNDUP POWER MAX	1263 G AE/HA	B	705	10.0	100.0	5.0	25.70	5.340	11.90	53.20	
WARRANT	1259 G A/HA	B									
CLASS ACT RIDION	1 % V/V	B									
INTACT DRIFT CONTROL	0.5 % V/V	B									
	Mean =			5.5	100.0	1.6d	25.90	7.718	12.20	53.85	48.1
8 WARRANT	1259 G A/HA	A	108	7.0	100.0	2.0		8.770	12.40	55.20	47.1
MAULER	280.6 G A/HA	A	402	2.0	100.0	0.0	26.20	10.680	13.00	55.00	60.9
XTENDIMAX	828 G AE/HA	B	602	2.0	100.0	2.0	26.10	6.370	12.30	54.50	36.8
ROUNDUP POWER MAX	1263 G AE/HA	B	806	7.0	100.0	5.0	26.00	5.010	12.50	53.40	
WARRANT	1259 G A/HA	B									
CLASS ACT RIDION	1 % V/V	B									
INTACT DRIFT CONTROL	0.5 % V/V	B									
LIBERTY 280 SL	655 G A/HA	C									
N-PAK AMS LIQUID	2.5 % V/V	C									
	Mean =			4.5	100.0	1.6d	26.10	7.708	12.55	54.53	48.3

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	3	5	6	8	9	10	11	12			
Unique Col. ID	O	O	O	O	O	O	O	C			
Orig./Calc. Flag	1	3	4	4	4	5	5	5			
SE Group	PE12AD1	EE22AD3	PE12AD1	HM41NA3	HM41NA3	HM41NA3	HM41NA3	HM41NA3			
SE ID	Estimat	AMATA	Estimat	harvest	harvest	harvest	harvest	harvest			
SE Label											
Target											
-Disc./Scale											
-Characteristic											
-Stage Majority											
-Stage Minimum											
-Stage Maximum											
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA			
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY			
Variety	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0			
-Stage Maj/Min/Max	17 17 18										
Part Rated								YIELD			
-Part Rated Detail											
Assessment Class											
Assessment Type	PHYGEN	CONTRO	PHYGEN	LENGTH	WEIGHT	MOICON	WEITES	WEIGHT			
Assessment Unit	%	%	%	FT	LB	%	LB	BU60LB			
Sample Size	1	1	1	1	1	1	1	1			
Sample Size Unit	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	_ACRE			
Sample Size (total)	1	1	1	1	1	1	1	1			
Assessment Date	7-21-2020	7-29-2020	8-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020			
Assessment Time											
Assessment Code	B1	E1	C1	H2	H2	H2	H2	H2			
Appl.-Ass.Interval											
Days after first Appl.	39 DAA	47 DAA	54 DAA	146 DAA	146 DAA	146 DAA	146 DAA	146 DAA			
Days after last Appl.	12 DAB	8 DAC	15 DAC	107 DAC	107 DAC	107 DAC	107 DAC	107 DAC			
Plant.-Ass.Interval	39 DP1	47 DP1	54 DP1	146 DP1	146 DP1	146 DP1	146 DP1	146 DP1			
Days after Emergence											
Decimals Printed								1			
ARM Action Codes			AA	ER1				ER4 TY1			
Entry Entry/Trt.	Dose	Dose	Appl.								
No. Description	Unit	Code	Plot	1	2	3	4	5			
				6	7	8					
9 WARRANT	1259 G A/HA	A	201	10.0	100.0	2.0		7.650	13.00	55.80	44.3
MAULER	280.6 G A/HA	A	303	5.0	100.0	0.0	26.40	9.510	12.60	54.80	54.1
XTENDIMAX	828 G AE/HA	B	601	5.0	100.0	0.0	26.20	7.280	12.60	54.70	41.7
WARRANT	1259 G A/HA	B	706	7.0	100.0	5.0	25.70	6.020	12.00	53.20	
CLASS ACT RIDION	1 % V/V	B									
ROUNDUP POWER MAX	1263 G AE/HA	C									
N-PAK AMS LIQUID	2.5 % V/V	C									
	Mean =			6.8	100.0	0.8d	26.10	7.615	12.55	54.63	46.7
10 WARRANT	1259 G A/HA	A	202	5.0	100.0	0.0		9.050	12.30	54.30	51.5
MAULER	280.6 G A/HA	A	301	5.0	100.0	2.0	26.20	8.950	13.20	56.20	51.0
XTENDIMAX	828 G AE/HA	B	605	7.0	100.0	2.0	26.10	5.740	11.80	53.90	33.3
WARRANT	1259 G A/HA	B	805	5.0	100.0	2.0	26.50	5.390	12.20	53.50	
CLASS ACT RIDION	1 % V/V	B									
LIBERTY 280 SL	655 G A/HA	C									
ROUNDUP POWER MAX	1263 G AE/HA	C									
N-PAK AMS LIQUID	2.5 % V/V	C									
	Mean =			5.5	100.0	1.1d	26.27	7.283	12.38	54.48	45.2

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	3	5	6	8	9	10	11	12			
Unique Col. ID	O	O	O	O	O	O	O	C			
Orig./Calc. Flag	1	3	4	4	4	5	5	5			
SE Group	PE12AD1	EE22AD3	PE12AD1	HM41NA3	HM41NA3	HM41NA3	HM41NA3	HM41NA3			
SE ID	Estimat	AMATA	Estimat	harvest	harvest	harvest	harvest	harvest			
SE Label											
Target											
-Disc./Scale											
-Characteristic											
-Stage Majority											
-Stage Minimum											
-Stage Maximum											
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA			
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY			
Variety	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0			
-Stage Maj/Min/Max	17 17 18										
Part Rated								YIELD			
-Part Rated Detail											
Assessment Class											
Assessment Type	PHYGEN	CONTRO	PHYGEN	LENGTH	WEIGHT	MOICON	WEITES	WEIGHT			
Assessment Unit	%	%	%	FT	LB	%	LB	BU60LB			
Sample Size	1	1	1	1	1	1	1	1			
Sample Size Unit	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	_ACRE			
Sample Size (total)	1	1	1	1	1	1	1	1			
Assessment Date	7-21-2020	7-29-2020	8-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020			
Assessment Time											
Assessment Code	B1	E1	C1	H2	H2	H2	H2	H2			
Appl.-Ass.Interval											
Days after first Appl.	39 DAA	47 DAA	54 DAA	146 DAA	146 DAA	146 DAA	146 DAA	146 DAA			
Days after last Appl.	12 DAB	8 DAC	15 DAC	107 DAC	107 DAC	107 DAC	107 DAC	107 DAC			
Plant.-Ass.Interval	39 DP1	47 DP1	54 DP1	146 DP1	146 DP1	146 DP1	146 DP1	146 DP1			
Days after Emergence											
Decimals Printed								1			
ARM Action Codes			AA	ER1				ER4 TY1			
Entry Entry/Trt.	Dose	Dose	Appl.								
No. Description	Unit	Code	Plot	1	2	3	4	5			
11 WARRANT	1259 G A/HA	A	203	5.0	100.0	0.0		8.560	12.30	54.60	49.0
MAULER	280.6 G A/HA	A	302	10.0	100.0	5.0	26.40	8.950	12.80	56.00	50.8
XTENDIMAX	828 G AE/HA	B	506	2.0	100.0	2.0	27.20	9.920	12.40	54.20	54.9
WARRANT	1259 G A/HA	B	703	7.0	100.0	5.0	25.90	5.500	12.30	53.90	
CLASS ACT RIDION	1 % V/V	B									
LIBERTY 280 SL	655 G A/HA	C									
N-PAK AMS LIQUID	2.5 % V/V	C									
	Mean =			6.0	100.0	2.2d	26.50	8.233	12.45	54.68	51.6
12 WARRANT	1259 G A/HA	A	204	7.0	100.0	2.0		8.500	12.10	54.70	48.4
MAULER	280.6 G A/HA	A	405	10.0	100.0	0.0	26.40	10.170	12.60	54.20	57.9
LIBERTY 280 SL	655 G A/HA	B	503	10.0	100.0	0.0	26.50	10.360	12.90	55.20	58.5
ROUNDUP POWER MAX	1263 G AE/HA	B	807	10.0	100.0	5.0	26.00	6.060	12.00	52.70	
WARRANT	1259 G A/HA	B									
N-PAK AMS LIQUID	2.5 % V/V	B									
	Mean =			9.3	100.0	0.8d	26.30	8.773	12.40	54.20	54.9

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	3	5	6	8	9	10	11	12			
Unique Col. ID	O	O	O	O	O	O	O	C			
Orig./Calc. Flag	1	3	4	4	4	5	5	5			
SE Group	PE12AD1	EE22AD3	PE12AD1	HM41NA3	HM41NA3	HM41NA3	HM41NA3	HM41NA3			
SE ID	Estimat	AMATA	Estimat	harvest	harvest	harvest	harvest	harvest			
SE Label											
Target											
-Disc./Scale											
-Characteristic											
-Stage Majority											
-Stage Minimum											
-Stage Maximum											
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA			
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY			
Variety	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0			
-Stage Maj/Min/Max	17 17 18										
Part Rated								YIELD			
-Part Rated Detail											
Assessment Class											
Assessment Type	PHYGEN	CONTRO	PHYGEN	LENGTH	WEIGHT	MOICON	WEITES	WEIGHT			
Assessment Unit	%	%	%	FT	LB	%	LB	BU60LB			
Sample Size	1	1	1	1	1	1	1	1			
Sample Size Unit	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	_ACRE			
Sample Size (total)	1	1	1	1	1	1	1	1			
Assessment Date	7-21-2020	7-29-2020	8-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020			
Assessment Time											
Assessment Code	B1	E1	C1	H2	H2	H2	H2	H2			
Appl.-Ass.Interval											
Days after first Appl.	39 DAA	47 DAA	54 DAA	146 DAA	146 DAA	146 DAA	146 DAA	146 DAA			
Days after last Appl.	12 DAB	8 DAC	15 DAC	107 DAC	107 DAC	107 DAC	107 DAC	107 DAC			
Plant.-Ass.Interval	39 DP1	47 DP1	54 DP1	146 DP1	146 DP1	146 DP1	146 DP1	146 DP1			
Days after Emergence											
Decimals Printed								1			
ARM Action Codes			AA	ER1				ER4 TY1			
Entry Entry/Trt.	Dose	Dose	Appl.								
No. Description	Unit	Code	Plot	1	2	3	4	5			
13 WARRANT	1259 G A/HA	A	205	10.0	100.0	0.0		9.140	12.30	53.90	52.2
MAULER	280.6 G A/HA	A	401	7.0	100.0	0.0	26.40	9.760	13.20	55.60	55.1
LIBERTY 280 SL	655 G A/HA	B	505	10.0	100.0	0.0	26.40	10.570	12.60	54.40	60.1
WARRANT	1259 G A/HA	B	704	7.0	100.0	5.0	25.90	6.410	12.00	53.50	
N-PAK AMS LIQUID	2.5 % V/V	B									
			Mean =	8.5	100.0	0.3d	26.23	8.970	12.53	54.35	55.8
14 XTENDIMAX	828 G AE/HA	A	206	5.0	100.0	0.0		9.840	12.30	54.30	56.6
WARRANT ULTRA HERBICIDE	1449 G A/HA	A	407	5.0	100.0	2.0	26.80	9.530	12.60	54.80	53.4
INTACT DRIFT CONTROL	0.5 % V/V	A	502	7.0	100.0	2.0	26.50	11.060	13.00	55.10	62.4
XTENDIMAX	828 G AE/HA	B	708	7.0	100.0	3.0	25.70	5.610	12.00	53.30	
ROUNDUP POWER MAX	1263 G AE/HA	B									
WARRANT	1259 G A/HA	B									
CLASS ACT RIDION	1 % V/V	B									
INTACT DRIFT CONTROL	0.5 % V/V	B									
			Mean =	6.0	100.0	1.3d	26.33	9.010	12.48	54.38	57.5

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	3	5	6	8	9	10	11	12				
Unique Col. ID	O	O	O	O	O	O	O	C				
Orig./Calc. Flag	1	3	4	4	4	5	5	5				
SE Group	PE12AD1	EE22AD3	PE12AD1	HM41NA3	HM41NA3	HM41NA3	HM41NA3	HM41NA3				
SE ID	Estimat	AMATA	Estimat	harvest	harvest	harvest	harvest	harvest				
SE Label												
Target												
-Disc./Scale												
-Characteristic												
-Stage Majority												
-Stage Minimum												
-Stage Maximum												
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA				
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY				
Variety	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0				
-Stage Maj/Min/Max	17 17 18											
Part Rated								YIELD				
-Part Rated Detail												
Assessment Class												
Assessment Type	PHYGEN	CONTRO	PHYGEN	LENGTH	WEIGHT	MOICON	WEITES	WEIGHT				
Assessment Unit	%	%	%	FT	LB	%	LB	BU60LB				
Sample Size	1	1	1	1	1	1	1	1				
Sample Size Unit	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	_ACRE				
Sample Size (total)	1	1	1	1	1	1	1	1				
Assessment Date	7-21-2020	7-29-2020	8-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020				
Assessment Time												
Assessment Code	B1	E1	C1	H2	H2	H2	H2	H2				
Appl.-Ass.Interval												
Days after first Appl.	39 DAA	47 DAA	54 DAA	146 DAA	146 DAA	146 DAA	146 DAA	146 DAA				
Days after last Appl.	12 DAB	8 DAC	15 DAC	107 DAC	107 DAC	107 DAC	107 DAC	107 DAC				
Plant.-Ass.Interval	39 DP1	47 DP1	54 DP1	146 DP1	146 DP1	146 DP1	146 DP1	146 DP1				
Days after Emergence												
Decimals Printed								1				
ARM Action Codes			AA	ER1				ER4 TY1				
Entry No.	Dose			Dose			Appl.					
Entry Description	Unit	Code	Plot	1	2	3	4	5	6	7	8	
15 XTENDIMAX	828 G	AE/HA	A	207	5.0	100.0	2.0	8.800	12.40	53.80	50.4	
WARRANT ULTRA HERBICIDE	1449 G	A/HA	A	306	7.0	100.0	0.0	9.550	12.70	55.20	53.5	
INTACT DRIFT CONTROL	0.5 %	V/V	A	608	10.0	100.0	5.0	26.70	5.600	12.10	53.80	
LIBERTY 280 SL	655 G	A/HA	B	802	10.0	100.0	0.0	26.50	5.690	13.30	54.80	
ROUNDUP POWER MAX	1263 G	AE/HA	B									
WARRANT	1259 G	A/HA	B									
N-PAK AMS LIQUID	2.5 %	V/V	B									
				Mean =	8.0	100.0	0.8d	26.67	7.410	12.63	54.40	45.2
16 UNTREATED				208	0.0	0.0	0.0	5.640	12.50	54.80	32.2	
				307	0.0	0.0	0.0	26.70	8.280	12.50	54.60	46.6
				507	0.0	0.0	0.0	25.90	8.870	12.40	54.40	51.6
				804	0.0	0.0	0.0	26.30	4.220	13.60	55.70	
				Mean =	0.0	0.0	0.0d	26.30	6.753	12.75	54.88	43.5

SE ID
 PE12AD1 = Estimation % phytotoxicity (PHYGEN) (symptoms describe in co
 EE22AD3 = 1 weed, % efficacy, in untreated % coverage
 HM41NA3 = harvest, measurement BU/Acre, weight-standard moisture KG/HA
 Crop
 1, GLXMA, C, BSOY, AG40XF0, = Glycine max (L.) MERR.
 -Stage Maj/Min/Max
 17 (BSOY) = Trifoliolate leaf on the 7th node unfolded
 18 (BSOY) = Trifoliolate leaf on the 8th node unfolded

University of Kentucky

Part Rated

YIELD = Yield

Assessment Type

PHYGEN = Phytotoxicity - General, Injury

CONTRO = Control

LENGTH = Length

WEIGHT = Weight

MOICON = Moisture Content

WEITES = Weight Test

Assessment Unit

% = Percent

FT = Foot

LB = Pound

BU60LB = Bushel 60 lb - soybeans, wheat, lentils, dry beans, mustard seed

Sample Size Unit

PLOT = Plot

ACRE = Acre

Plant.-Ass.Interval

39 DP1 = 1 GLXMA 6-12-2020

47 DP1 = 1 GLXMA 6-12-2020

54 DP1 = 1 GLXMA 6-12-2020

146 DP1 = 1 GLXMA 6-12-2020

ARM Action Codes

AA = Automatic arcsin square root % transformation

ER1 = Excluded replicate 1

ER4 = Excluded replicate 4

TY1 = $(726/(5*[C4]))*[C5]*(100-[C6])/84.5$

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Unique Col. ID	3	5	6	8	9	10	11	12
Orig./Calc. Flag	O	O	O	O	O	O	O	C
SE Group	1	3	4	4	4	5	5	5
SE ID	PE12AD1	EE22AD3	PE12AD1	HM41NA3	HM41NA3	HM41NA3	HM41NA3	HM41NA3
SE Label	Estimat	AMATA	Estimat	harvest	harvest	harvest	harvest	harvest
Target								
-Disc./Scale								
-Characteristic								
-Stage Majority								
-Stage Minimum								
-Stage Maximum								
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY
Variety	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0
-Stage Maj/Min/Max	17 17 18							
Part Rated								YIELD
-Part Rated Detail								
Assessment Class								
Assessment Type	PHYGEN	CONTRO	PHYGEN	LENGTH	WEIGHT	MOICON	WEITES	WEIGHT
Assessment Unit	%	%	%	FT	LB	%	LB	BU60LB
Sample Size	1	1	1	1	1	1	1	1
Sample Size Unit	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	_ACRE
Sample Size (total)	1	1	1	1	1	1	1	1
Assessment Date	7-21-2020	7-29-2020	8-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020
Assessment Time								
Assessment Code	B1	E1	C1	H2	H2	H2	H2	H2
Appl.-Ass.Interval								
Days after first Appl.	39 DAA	47 DAA	54 DAA	146 DAA	146 DAA	146 DAA	146 DAA	146 DAA
Days after last Appl.	12 DAB	8 DAC	15 DAC	107 DAC	107 DAC	107 DAC	107 DAC	107 DAC
Plant.-Ass.Interval	39 DP1	47 DP1	54 DP1	146 DP1	146 DP1	146 DP1	146 DP1	146 DP1
Days after Emergence								
Decimals Printed								1
ARM Action Codes			AA	ER1				ER4 TY1
Entry No.	1	2	3	4	5	6	7	8
Entry/Trt. Description								
Dose	9.3 a	100.0 a	0.5 a	26.40 a	8.870 a	12.75 a	54.83 a	55.0 a
Dose Unit								
Appl. Code								
4 XTENDIMAX	828 G AE/HA							
WARRANT	1259 G A/HA							
MAULER	280.6 G A/HA							
LIBERTY 280 SL	655 G A/HA							
WARRANT	1259 G A/HA							
N-PAK AMS LIQUID	2.5 % V/V							
5 XTENDIMAX	828 G AE/HA		1.6 a	26.33 a	8.380 a	12.35 a	54.15 a	52.5 a
WARRANT	1259 G A/HA							
MAULER	280.6 G A/HA							
LIBERTY 280 SL	655 G A/HA							
WARRANT	1259 G A/HA							
N-PAK AMS LIQUID	2.5 % V/V							
LIBERTY 280 SL	655 G A/HA							
N-PAK AMS LIQUID	2.5 % V/V							

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Unique Col. ID	3	5	6	8	9	10	11	12
Orig./Calc. Flag	O	O	O	O	O	O	O	C
SE Group	1	3	4	4	4	5	5	5
SE ID	PE12AD1	EE22AD3	PE12AD1	HM41NA3	HM41NA3	HM41NA3	HM41NA3	HM41NA3
SE Label	Estimat	AMATA	Estimat	harvest	harvest	harvest	harvest	harvest
Target								
-Disc./Scale								
-Characteristic								
-Stage Majority								
-Stage Minimum								
-Stage Maximum								
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY
Variety	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0
-Stage Maj/Min/Max	17 17 18							
Part Rated								YIELD
-Part Rated Detail								
Assessment Class								
Assessment Type	PHYGEN	CONTRO	PHYGEN	LENGTH	WEIGHT	MOICON	WEITES	WEIGHT
Assessment Unit	%	%	%	FT	LB	%	LB	BU60LB
Sample Size	1	1	1	1	1	1	1	1
Sample Size Unit	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	_ACRE
Sample Size (total)	1	1	1	1	1	1	1	1
Assessment Date	7-21-2020	7-29-2020	8-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020
Assessment Time								
Assessment Code	B1	E1	C1	H2	H2	H2	H2	H2
Appl.-Ass.Interval								
Days after first Appl.	39 DAA	47 DAA	54 DAA	146 DAA	146 DAA	146 DAA	146 DAA	146 DAA
Days after last Appl.	12 DAB	8 DAC	15 DAC	107 DAC	107 DAC	107 DAC	107 DAC	107 DAC
Plant.-Ass.Interval	39 DP1	47 DP1	54 DP1	146 DP1	146 DP1	146 DP1	146 DP1	146 DP1
Days after Emergence								
Decimals Printed								1
ARM Action Codes			AA	ER1				ER4 TY1
Entry No.	1	2	3	4	5	6	7	8
Entry/Trt. Description								
Dose	6.5 a	100.0 a	2.2 a	26.50 a	8.715 a	12.40 a	54.40 a	51.8 a
Dose Unit								
Appl. Code								
6 XTENDIMAX	828 G AE/HA							
WARRANT	1259 G A/HA							
MAULER	280.6 G A/HA							
ROUNDUP POWER MAX	1263 G AE/HA							
WARRANT ULTRA HERBICIDE	1449 G A/HA							
N-PAK AMS LIQUID	2.5 % V/V							
LIBERTY 280 SL	655 G A/HA							
N-PAK AMS LIQUID	2.5 % V/V							
7 WARRANT	1259 G A/HA	100.0 a	1.6 a	25.90 a	7.718 a	12.20 a	53.85 a	48.1 a
MAULER	280.6 G A/HA							
XTENDIMAX	828 G AE/HA							
ROUNDUP POWER MAX	1263 G AE/HA							
WARRANT	1259 G A/HA							
CLASS ACT RIDION	1 % V/V							
INTACT DRIFT CONTROL	0.5 % V/V							

University of Kentucky

Unique Col. ID	3	5	6	8	9	10	11	12
Orig./Calc. Flag	O	O	O	O	O	O	O	C
SE Group	1	3	4	4	4	5	5	5
SE ID	PE12AD1	EE22AD3	PE12AD1	HM41NA3	HM41NA3	HM41NA3	HM41NA3	HM41NA3
SE Label	Estimat	AMATA	Estimat	harvest	harvest	harvest	harvest	harvest
Target								
-Disc./Scale								
-Characteristic								
-Stage Majority								
-Stage Minimum								
-Stage Maximum								
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY
Variety	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0
-Stage Maj/Min/Max	17 17 18							
Part Rated								YIELD
-Part Rated Detail								
Assessment Class								
Assessment Type	PHYGEN	CONTRO	PHYGEN	LENGTH	WEIGHT	MOICON	WEITES	WEIGHT
Assessment Unit	%	%	%	FT	LB	%	LB	BU60LB
Sample Size	1	1	1	1	1	1	1	1
Sample Size Unit	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	_ACRE
Sample Size (total)	1	1	1	1	1	1	1	1
Assessment Date	7-21-2020	7-29-2020	8-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020
Assessment Time								
Assessment Code	B1	E1	C1	H2	H2	H2	H2	H2
Appl.-Ass.Interval								
Days after first Appl.	39 DAA	47 DAA	54 DAA	146 DAA	146 DAA	146 DAA	146 DAA	146 DAA
Days after last Appl.	12 DAB	8 DAC	15 DAC	107 DAC	107 DAC	107 DAC	107 DAC	107 DAC
Plant.-Ass.Interval	39 DP1	47 DP1	54 DP1	146 DP1	146 DP1	146 DP1	146 DP1	146 DP1
Days after Emergence								
Decimals Printed								1
ARM Action Codes			AA	ER1				ER4 TY1
Entry No.	1	2	3	4	5	6	7	8
Entry/Trt. Description								
Dose	4.5 a	100.0 a	1.6 a	26.10 a	7.708 a	12.55 a	54.53 a	48.3 a
Dose Unit								
Appl. Code								
8 WARRANT	1259 G A/HA							
MAULER	280.6 G A/HA							
XTENDIMAX	828 G AE/HA							
ROUNDUP POWER MAX	1263 G AE/HA							
WARRANT	1259 G A/HA							
CLASS ACT RIDION	1 % V/V							
INTACT DRIFT CONTROL	0.5 % V/V							
LIBERTY 280 SL	655 G A/HA							
N-PAK AMS LIQUID	2.5 % V/V							
9 WARRANT	1259 G A/HA							
MAULER	280.6 G A/HA							
XTENDIMAX	828 G AE/HA							
WARRANT	1259 G A/HA							
CLASS ACT RIDION	1 % V/V							
ROUNDUP POWER MAX	1263 G AE/HA							
N-PAK AMS LIQUID	2.5 % V/V							

University of Kentucky

Unique Col. ID	3	5	6	8	9	10	11	12				
Orig./Calc. Flag	O	O	O	O	O	O	O	C				
SE Group	1	3	4	4	4	5	5	5				
SE ID	PE12AD1	EE22AD3	PE12AD1	HM41NA3	HM41NA3	HM41NA3	HM41NA3	HM41NA3				
SE Label	Estimat	AMATA	Estimat	harvest	harvest	harvest	harvest	harvest				
Target												
-Disc./Scale												
-Characteristic												
-Stage Majority												
-Stage Minimum												
-Stage Maximum												
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA				
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY				
Variety	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0				
-Stage Maj/Min/Max	17 17 18											
Part Rated								YIELD				
-Part Rated Detail												
Assessment Class												
Assessment Type	PHYGEN	CONTRO	PHYGEN	LENGTH	WEIGHT	MOICON	WEITES	WEIGHT				
Assessment Unit	%	%	%	FT	LB	%	LB	BU60LB				
Sample Size	1	1	1	1	1	1	1	1				
Sample Size Unit	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	_ACRE				
Sample Size (total)	1	1	1	1	1	1	1	1				
Assessment Date	7-21-2020	7-29-2020	8-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020				
Assessment Time												
Assessment Code	B1	E1	C1	H2	H2	H2	H2	H2				
Appl.-Ass.Interval												
Days after first Appl.	39 DAA	47 DAA	54 DAA	146 DAA	146 DAA	146 DAA	146 DAA	146 DAA				
Days after last Appl.	12 DAB	8 DAC	15 DAC	107 DAC	107 DAC	107 DAC	107 DAC	107 DAC				
Plant.-Ass.Interval	39 DP1	47 DP1	54 DP1	146 DP1	146 DP1	146 DP1	146 DP1	146 DP1				
Days after Emergence												
Decimals Printed								1				
ARM Action Codes			AA	ER1				ER4 TY1				
Entry No.	Entry/Trt. Description	Dose	Dose Unit	Appl. Code	1	2	3	4	5	6	7	8
10	WARRANT MAULER XTENDIMAX WARRANT CLASS ACT RIDION LIBERTY 280 SL ROUNDUP POWER MAX N-PAK AMS LIQUID	1259 G 280.6 G 828 G 1259 G 1 % 655 G 1263 G 2.5 %	A/HA A/HA AE/HA A/HA V/V A/HA AE/HA V/V	A A B B B C C C	5.5 a	100.0 a	1.1 a	26.27 a	7.283 a	12.38 a	54.48 a	45.2 a
11	WARRANT MAULER XTENDIMAX WARRANT CLASS ACT RIDION LIBERTY 280 SL N-PAK AMS LIQUID	1259 G 280.6 G 828 G 1259 G 1 % 655 G 2.5 %	A/HA A/HA AE/HA A/HA V/V A/HA V/V	A A B B B C C	6.0 a	100.0 a	2.2 a	26.50 a	8.233 a	12.45 a	54.68 a	51.6 a
12	WARRANT MAULER LIBERTY 280 SL ROUNDUP POWER MAX WARRANT N-PAK AMS LIQUID	1259 G 280.6 G 655 G 1263 G 1259 G 2.5 %	A/HA A/HA A/HA AE/HA A/HA V/V	A A B B B B	9.3 a	100.0 a	0.8 a	26.30 a	8.773 a	12.40 a	54.20 a	54.9 a

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Unique Col. ID	3	5	6	8	9	10	11	12
Orig./Calc. Flag	O	O	O	O	O	O	O	C
SE Group	1	3	4	4	4	5	5	5
SE ID	PE12AD1	EE22AD3	PE12AD1	HM41NA3	HM41NA3	HM41NA3	HM41NA3	HM41NA3
SE Label	Estimat	AMATA	Estimat	harvest	harvest	harvest	harvest	harvest
Target								
-Disc./Scale								
-Characteristic								
-Stage Majority								
-Stage Minimum								
-Stage Maximum								
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY
Variety	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0
-Stage Maj/Min/Max	17 17 18							
Part Rated								YIELD
-Part Rated Detail								
Assessment Class								
Assessment Type	PHYGEN	CONTRO	PHYGEN	LENGTH	WEIGHT	MOICON	WEITES	WEIGHT
Assessment Unit	%	%	%	FT	LB	%	LB	BU60LB
Sample Size	1	1	1	1	1	1	1	1
Sample Size Unit	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	_ACRE
Sample Size (total)	1	1	1	1	1	1	1	1
Assessment Date	7-21-2020	7-29-2020	8-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020
Assessment Time								
Assessment Code	B1	E1	C1	H2	H2	H2	H2	H2
Appl.-Ass.Interval								
Days after first Appl.	39 DAA	47 DAA	54 DAA	146 DAA	146 DAA	146 DAA	146 DAA	146 DAA
Days after last Appl.	12 DAB	8 DAC	15 DAC	107 DAC	107 DAC	107 DAC	107 DAC	107 DAC
Plant.-Ass.Interval	39 DP1	47 DP1	54 DP1	146 DP1	146 DP1	146 DP1	146 DP1	146 DP1
Days after Emergence								
Decimals Printed								1
ARM Action Codes			AA	ER1				ER4 TY1
Entry No.	1	2	3	4	5	6	7	8
Entry/Trt. Description								
Dose	8.5 a	100.0 a	0.3 a	26.23 a	8.970 a	12.53 a	54.35 a	55.8 a
Dose Unit								
Appl. Code	A	A	B	A	A	A	A	A
13 WARRANT MAULER	1259 G A/HA							
LIBERTY 280 SL	280.6 G A/HA							
WARRANT	655 G A/HA							
N-PAK AMS LIQUID	1259 G A/HA							
	2.5 % V/V							
14 XTENDIMAX	828 G AE/HA							
WARRANT ULTRA HERBICIDE	1449 G A/HA							
INTACT DRIFT CONTROL	0.5 % V/V							
XTENDIMAX	828 G AE/HA							
ROUNDUP POWER MAX	1263 G AE/HA							
WARRANT	1259 G A/HA							
CLASS ACT RIDION	1 % V/V							
INTACT DRIFT CONTROL	0.5 % V/V							
15 XTENDIMAX	828 G AE/HA							
WARRANT ULTRA HERBICIDE	1449 G A/HA							
INTACT DRIFT CONTROL	0.5 % V/V							
LIBERTY 280 SL	655 G A/HA							
ROUNDUP POWER MAX	1263 G AE/HA							
WARRANT	1259 G A/HA							
N-PAK AMS LIQUID	2.5 % V/V							

University of Kentucky

Unique Col. ID	3	5	6	8	9	10	11	12
Orig./Calc. Flag	O	O	O	O	O	O	O	C
SE Group	1	3	4	4	4	5	5	5
SE ID	PE12AD1	EE22AD3	PE12AD1	HM41NA3	HM41NA3	HM41NA3	HM41NA3	HM41NA3
SE Label	Estimat	AMATA	Estimat	harvest	harvest	harvest	harvest	harvest
Target								
-Disc./Scale								
-Characteristic								
-Stage Majority								
-Stage Minimum								
-Stage Maximum								
Crop	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA	1 GLXMA
-Disc./Scale	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY	C BSOY
Variety	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0	AG40XF0
-Stage Maj/Min/Max	17 17 18							
Part Rated								YIELD
-Part Rated Detail								
Assessment Class								
Assessment Type	PHYGEN	CONTRO	PHYGEN	LENGTH	WEIGHT	MOICON	WEITES	WEIGHT
Assessment Unit	%	%	%	FT	LB	%	LB	BU60LB
Sample Size	1	1	1	1	1	1	1	1
Sample Size Unit	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	PLOT	_ACRE
Sample Size (total)	1	1	1	1	1	1	1	1
Assessment Date	7-21-2020	7-29-2020	8-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020	11-5-2020
Assessment Time								
Assessment Code	B1	E1	C1	H2	H2	H2	H2	H2
Appl.-Ass.Interval								
Days after first Appl.	39 DAA	47 DAA	54 DAA	146 DAA	146 DAA	146 DAA	146 DAA	146 DAA
Days after last Appl.	12 DAB	8 DAC	15 DAC	107 DAC	107 DAC	107 DAC	107 DAC	107 DAC
Plant.-Ass.Interval	39 DP1	47 DP1	54 DP1	146 DP1	146 DP1	146 DP1	146 DP1	146 DP1
Days after Emergence								
Decimals Printed								1
ARM Action Codes			AA	ER1				ER4 TY1
Entry Entry/Trt.								
No. Description	1	2	3	4	5	6	7	8
16 UNTREATED	0.0 b	0.0 b	0.0 a	26.30 a	6.753 a	12.75 a	54.88 a	43.5 a
LSD P=.05	2.75		2.10 - 2.75	0.637	1.7878	0.564	1.011	13.81
Standard Deviation	1.93	0.00	4.82t	0.382	1.2553	0.396	0.710	8.28
CV	31.24	0.0	91.84t	1.45	15.57	3.17	1.3	16.56
Levene's F	1.789	0.00	1.033	2.703	0.333	0.388	0.267	1.089
Levene's Prob(F)	0.065	0.00*	0.44	0.009*	0.989	0.976	0.996	0.404
Skewness	-0.5974	-2.3226*	0.1939	0.5001	-0.1864	0.4763	0.0126	-0.6475
Kurtosis	-0.4992	3.5029*	-1.6121*	0.6078	-1.348*	-0.2318	-0.4496	-0.2579
Replicate F	0.845	0.000	4.204	7.434	30.965	2.859	5.721	4.269
Replicate Prob(F)	0.4767	1.0000	0.0105	0.0024	0.0001	0.0473	0.0021	0.0234
Treatment F	8.612	0.000	1.126	1.491	1.476	0.692	0.563	0.965
Treatment Prob(F)	0.0001	1.0000	0.3623	0.1711	0.1556	0.7780	0.8875	0.5113

SE ID
 PE12AD1 = Estimation % phytotoxicity (PHYGEN) (symptoms describe in co
 EE22AD3 = 1 weed, % efficacy, in untreated % coverage
 HM41NA3 = harvest, measurement BU/Acre, weight-standard moisture KG/HA
 Crop
 1, GLXMA, C, BSOY, AG40XF0, = Glycine max (L.) MERR.
 -Stage Maj/Min/Max
 17 (BSOY) = Trifoliolate leaf on the 7th node unfolded
 18 (BSOY) = Trifoliolate leaf on the 8th node unfolded

University of Kentucky

Part Rated

YIELD = Yield

Assessment Type

PHYGEN = Phytotoxicity - General, Injury

CONTRO = Control

LENGTH = Length

WEIGHT = Weight

MOICON = Moisture Content

WEITES = Weight Test

Assessment Unit

% = Percent

FT = Foot

LB = Pound

BU60LB = Bushel 60 lb - soybeans, wheat, lentils, dry beans, mustard seed

Sample Size Unit

PLOT = Plot

ACRE = Acre

Plant.-Ass.Interval

39 DP1 = 1 GLXMA 6-12-2020

47 DP1 = 1 GLXMA 6-12-2020

54 DP1 = 1 GLXMA 6-12-2020

146 DP1 = 1 GLXMA 6-12-2020

ARM Action Codes

AA = Automatic arcsin square root % transformation

ER1 = Excluded replicate 1

ER4 = Excluded replicate 4

TY1 = $(726/(5*[C4]))*[C5]*(100-[C6])/84.5$

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ENGENIA PRIME VS. COMPETITORS / PRE / ALL SOILS/ NT

Trial ID: 20-19_SOY-CAL Location: Caldwell County KY Trial Year: 2020
 Protocol ID: MKD-H-2020-US-D0G-B-00.1 Investigator (Creator): Travis Legleiter
 Project ID: Study Director: Tracy Rowlandson
 Sponsor Contact:

Reps: 4 Plots: 6.67 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2.0003 L (total for 4 plots; minimum=1.0433 L, overage=957 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	Amt to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	CHECK						VS	A		101	402	503	701
2	ENGENIA PRIME	627.9	GA/L	SC	16.0	FL OZ/A	VS	A	16.67 mL/mx	102	304	603	702
	ROUNDUP POWERMAX	540	GA/L	SL	32.0	FL OZ/A	VS	A	33.34 mL/mx				
	INDUCE	998	GA/L	TK	0.25	% V/V	VS	A	5.0 mL/mx				
3	ENGENIA PRO	544.3	GA/L	SC	16.0	FL OZ/A	VS	A	16.67 mL/mx	103	403	504	803
	ROUNDUP POWERMAX	540	GA/L	SL	32.0	FL OZ/A	VS	A	33.34 mL/mx				
	INDUCE	998	GA/L	TK	0.25	% V/V	VS	A	5.0 mL/mx				
4	TAVIUM PLUS VAPORGRIP	405	GA/L	CS	56.5	FL OZ/A	VS	A	58.86 mL/mx	104	302	602	703
	ROUNDUP POWERMAX	540	GA/L	SL	32.0	FL OZ/A	VS	A	33.34 mL/mx				
	INDUCE	998	GA/L	TK	0.25	% V/V	VS	A	5.0 mL/mx				
5	PREFIX	634.8	GA/L	ME	32.0	FL OZ/A	VS	A	33.34 mL/mx	201	303	604	801
	ROUNDUP POWERMAX	540.0	GA/L	SL	32.0	FL OZ/A	VS	A	33.34 mL/mx				
	2,4-D LV6	672	GA/L	EC	12.0	FL OZ/A	VS	A	12.5 mL/mx				
	ADJUVANT-COC			OL	1.0	% V/V	VS	A	20.0 mL/mx				
6	ANTHEM MAXX	516	GA/L	SC	3.25	FL OZ/A	VS	A	3.386 mL/mx	202	404	502	704
	ROUNDUP POWERMAX	540.0	GA/L	SL	32.0	FL OZ/A	VS	A	33.34 mL/mx				
	2,4-D LV6	672.0	GA/L	EC	12.0	FL OZ/A	VS	A	12.5 mL/mx				
	INDUCE	998.0	GA/L	TK	0.25	% V/V	VS	A	5.0 mL/mx				
7	Fierce EZ	3.04	LBA/GAL	SC	6	FL OZ/A	PRE	A	6.251 mL/mx	203	401	601	802
	Roundup PowerMax	4.5	LBAE/GAL	SL	32	FL OZ/A	PRE	A	33.34 mL/mx				
	2,4-D LV6	6	LBAE/GAL	EC	12	FL OZ/A	PRE	A	12.5 mL/mx				
	INDUCE	998	GA/L	TK	0.25	% V/V	PRE	A	5.0 mL/mx				
8	Boundary	6.5	LBA/GAL	EC	2.1	PT/A	PRE	A	35.01 mL/mx	204	301	501	804
	Roundup PowerMax	4.5	LBAE/GAL	SL	32	FL OZ/A	PRE	A	33.34 mL/mx				
	2,4-D LV6	6	LBAE/GAL	EC	12	FL OZ/A	PRE	A	12.5 mL/mx				
	INDUCE	998	GA/L	TK	0.25	% V/V	PRE	A	5.0 mL/mx				

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
20.836	mL	ENGENIA PRIME	627.9	GA/L	SC	
208.364	mL	ROUNDUP POWERMAX	540	GA/L	SL	
37.502	mL	INDUCE	998	GA/L	TK	
20.836	mL	ENGENIA PRO	544.3	GA/L	SC	
73.579	mL	TAVIUM PLUS VAPORGRIP	405	GA/L	CS	
41.673	mL	PREFIX	634.8	GA/L	ME	

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Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
31.255	mL	2,4-D LV6	672	GA/L	EC	
25.001	mL	ADJUVANT-COC			OL	
4.232	mL	ANTHEM MAXX	516	GA/L	SC	
7.814	mL	Fierce EZ	3.04	LBA/GAL	SC	
83.346	mL	Roundup PowerMax	4.5	LBAE/GAL	SL	
31.255	mL	2,4-D LV6	6	LBAE/GAL	EC	
43.757	mL	Boundary	6.5	LBA/GAL	EC	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2.0003 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2.0003 L.

General Trial Information

Study Director: Tracy Rowlandson

Investigator: Travis Legleiter **Title:** Assistant Extension Professor

Trial Status: E established

ARM Trial Created On: 4-8-2020 **Trial Usage/Type:** 8

Initiation Date: 5-28-2020

Completion Date: 7-15-2020

Trial Location

City: Princeton **Country:** USA United States

State/Prov.: Kentucky

Postal Code: 42445

Latitude of LL Corner °: 37.065337 N

Longitude of LL Corner °: -87.795635 W

Conducted Under GLP: No

Conducted Under GEP: No

Contacts

Role: STYDIR study director

Study Director: Tracy Rowlandson

Role: INVEST investigator

Investigator: Travis Legleiter

Title: Assistant Extension Professor

Organization: University of Kentucky

Address 1: 348 University Drive

Phone No.: 859-562-1323

Country: USA United States

E-mail: Travis.Legleiter@uky.edu

City: Princeton, KY

Postal Code: 42445

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Crop Description	
Crop 1: C GLXMA Glycine max	Soybean
Variety: Asgrow 42X6	Stage Scale: BBCH
Attributes: Glyphosate and Dicamba Resistant(RR2Xtend)	
Planting Date: 6-12-2020	
Depth: 1 IN	Planting Density: 140000 S/A
Rows per Plot: 7	Planting Method: PLANTD planted
Row Spacing: 15 IN	Planting Equipment: VP vacuum planter
Emergence Date: 6-16-2020	

Pest Description	
Pest 1 Type: W Code: AMATA Common Name: Amaranthus x tamariscinus Common Name: Common waterhemp	Stage Scale: BBCH
Pest 2 Type: W Code: CERVU Common Name: Cerastium fontanum vulgare Common Name: Mouse-ear chickweed	Stage Scale: BBCH
Pest 3 Type: W Code: VERAR Common Name: Veronica arvensis Common Name: Corn speedwell	Stage Scale: BBCH
Pest 4 Type: W Code: CYPES Common Name: Cyperus esculentus Common Name: Yellow nutsedge	Stage Scale: BBCH
Pest 5 Type: W Code: OXAST Common Name: Oxalis stricta Common Name: European wood sorrel	Stage Scale: BBCH
Pest 6 Type: W Code: TAROF Common Name: Taraxacum officinale Common Name: Blowball	Stage Scale: BBCH
Pest 7 Type: W Code: STEME Common Name: Stellaria media Common Name: Common chickweed	Stage Scale: BBCH
Pest 8 Type: W Code: SIDSP Common Name: Sida spinosa Common Name: Prickly sida	Stage Scale: BBCH

Site and Design	
Treated Plot Width: 6.67 FT	Site Type: FIELD field
Treated Plot Length: 30 FT	Experimental Unit: 1 PLOT plot
Treated Plot Area: 200.1 FT ²	Tillage Type: NOTILL no-till
Treatments: 8	Study Design: RAOBL Randomized Complete Block (RCB)
Replications: 4	

Soil Description	
Description Name: Caldwell County Waterhemp	
% Sand: 8	% OM: 2.5 Texture: SIL silt loam
% Silt: 76	pH: 6.5 Soil Name: Sadler silt loam
% Clay: 16	CEC: 14 Fert. Level: G good

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Application Description	
	A
Application Date	5-28-2020
Appl. Start Time	12:10 PM
Appl. Stop Time	12:28 PM
Application Method	BROADC
Application Timing	PREPLA
Application Placement	FOLIAR
Applied By	JG
Air Temperature Start, Stop	84 94 F
% Relative Humidity Start, Stop	64 54
Wind Velocity+Dir. Start	3 MPH S
Wind Velocity+Dir. Stop	3 MPH S
Wind Velocity+Dir. Max	6.1 MPH E
Wet Leaves (Y/N)	N no
Soil Temperature	81 F
Soil Moisture	wet
% Cloud Cover	65

Crop Stage At Each Application	
	A
Crop 1 Code, BBCH Scale	GLXMA BSOY
Days after Emergence	-19

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Pest Stage At Each Application	
	A
Pest 1 Code, Type, Scale	AMATA W BBCH
Height Average	2 in
Height Minimum, Maximum	0.25 4.5
Density Average	29 FT2
Density Minimum, Maximum	3 158
Pest 2 Code, Type, Scale	CERVU W BBCH
Height Average	0.5 IN
Height Minimum, Maximum	0.5 0.5
Density Average	0.125 FT2
Density Minimum, Maximum	1 1
Pest 3 Code, Type, Scale	VERAR W BBCH
Height Average	2.25 IN
Height Minimum, Maximum	2.25 2.25
Density Average	0.125 FT2
Density Minimum, Maximum	1 1
Pest 4 Code, Type, Scale	CYPES W BBCH
Height Average	2 IN
Height Minimum, Maximum	1 3.5
Density Average	3.5 FT2
Density Minimum, Maximum	2 13
Pest 5 Code, Type, Scale	OXAST W BBCH
Height Average	0.8 IN
Height Minimum, Maximum	0.75 1
Density Average	0.25 FT2
Density Minimum, Maximum	1 1
Pest 6 Code, Type, Scale	TAROF W BBCH
Height Average	1 IN
Height Minimum, Maximum	1 1
Density Average	0.25 FT2
Density Minimum, Maximum	1 1
Pest 7 Code, Type, Scale	STEME W BBCH
Height Average	1.5 IN
Height Minimum, Maximum	1 2.25
Density Average	4 FT2
Density Minimum, Maximum	2 30
Pest 8 Code, Type, Scale	SIDSP W BBCH
Height Average	1 IN
Height Minimum, Maximum	0.5 1.5
Density Average	0.25 FT2
Density Minimum, Maximum	1 1

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Application Equipment

	A
Equipment Type	BACCAI
Nozzle Spacing	20 IN
Boom ID	RED TAPE
Boom Length	6.7 FT
Boom Height	18 IN
Ground Speed	3 MPH
Carrier	WATER
Application Amount	15 GAL/AC
Mix Overage	957 mL
Mix Size	2.0003 L
Propellant	COMCO2

Equipment Comment: Trt 5,6,7,&8: XR11002 @ 31 PSI
 Trt 2,3&4: TTI 11015 @ 50 PSI

Pest Type	W Weed	W Weed	W Weed		W Weed	W Weed		
Pest Code	AMATA	AMATA	AMATA		AMATA	AMATA		
Pest Name	Common waterhemp	Common waterhemp	Common waterhemp		Common waterhemp	Common waterhemp		
Crop Type, Code				C GLXMA				
Crop Scientific Name				Glycine max				
Crop Name				Soybean				
Rating Date	6-3-2020	6-10-2020	6-17-2020	6-25-2020	6-25-2020	7-2-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P		
Rating Type	CONTO	CONTO	CONTRO	PHYGEN	CONTO	CONTO		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Data Entry Date	6-10-2020	8-27-2020	8-27-2020	8-27-2020	8-27-2020	8-27-2020		
Rating Timing								
Days After First/Last Applic.	6 6	13 13	20 20	28 28	28 28	35 35		
Trt-Eval Interval	6 DA-A	13 DA-A	20 DA-A	28 DA-A	28 DA-A	35 DA-A		
Days After Emergence	-13 DE-1	-6 DE-1	1 DE-1	9 DE-1	9 DE-1	16 DE-1		
ARM Action Codes					EC			
Number of Decimals								
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6
1 CHECK		A 101	0.0	0.0	0.0	0.0	0.0	0.0
		402	0.0	0.0	0.0	0.0	0.0	0.0
		503	0.0	0.0	0.0	0.0	0.0	0.0
		701	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0	0.0	0.0
2 ENGENIA PRIME	16.0 FL OZ/A	A 102	50.0	95.0	97.0	0.0	95.0	90.0
ROUNDUP POWERMAX	32.0 FL OZ/A	A 304	100.0	100.0	100.0	0.0	90.0	80.0
INDUCE	0.25 % V/V	A 603	100.0	100.0	100.0	0.0	100.0	93.0
		702	100.0	100.0	100.0	0.0	90.0	90.0
		Mean =	87.5	98.8	99.3	0.0	93.8	88.3

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Pest Type	W Weed AMATA	W Weed AMATA	W Weed AMATA	W Weed AMATA	W Weed AMATA	W Weed AMATA		
Pest Code	Common waterhemp	Common waterhemp	Common waterhemp		Common waterhemp	Common waterhemp		
Pest Name				C GLXMA Glycine max Soybean				
Crop Type, Code								
Crop Scientific Name								
Crop Name								
Rating Date	6-3-2020	6-10-2020	6-17-2020	6-25-2020	6-25-2020	7-2-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P		
Rating Type	CONTO	CONTO	CONTO	PHYGEN	CONTO	CONTO		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Data Entry Date	6-10-2020	8-27-2020	8-27-2020	8-27-2020	8-27-2020	8-27-2020		
Rating Timing								
Days After First/Last Applic.	6 6	13 13	20 20	28 28	28 28	35 35		
Trt-Eval Interval	6 DA-A	13 DA-A	20 DA-A	28 DA-A	28 DA-A	35 DA-A		
Days After Emergence	-13 DE-1	-6 DE-1	1 DE-1	9 DE-1	9 DE-1	16 DE-1		
ARM Action Codes					EC			
Number of Decimals								
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6
3 ENGENIA PRO	16.0 FL OZ/A	A 103	50.0	97.0	97.0	0.0	92.0	85.0
ROUNDUP POWERMAX	32.0 FL OZ/A	A 403	50.0	70.0	70.0	0.0	70.0	75.0
INDUCE	0.25 % V/V	A 504	70.0	97.0	100.0	0.0	95.0	90.0
		803	100.0	100.0	100.0	0.0	90.0	90.0
		Mean =	67.5	91.0	91.8	0.0	86.8	85.0
4 TAVIUM PLUS VAPORGRIP	56.5 FL OZ/A	A 104	60.0	98.0	95.0	0.0	90.0	80.0
ROUNDUP POWERMAX	32.0 FL OZ/A	A 302	100.0	100.0	100.0	0.0	90.0	85.0
INDUCE	0.25 % V/V	A 602	100.0	100.0	100.0	0.0	70.0	70.0
		703	100.0	100.0	100.0	0.0	85.0	90.0
		Mean =	90.0	99.5	98.8	0.0	83.8	81.3
5 PREFIX	32.0 FL OZ/A	A 201	100.0	100.0	100.0	0.0	100.0	95.0
ROUNDUP POWERMAX	32.0 FL OZ/A	A 303	50.0	97.0	95.0	0.0	80.0	70.0
2,4-D LV6	12.0 FL OZ/A	A 604	100.0	100.0	100.0	0.0	97.0	90.0
ADJUVANT-COC	1.0 % V/V	A 801	100.0	100.0	100.0	0.0	90.0	90.0
		Mean =	87.5	99.3	98.8	0.0	91.8	86.3
6 ANTHEM MAXX	3.25 FL OZ/A	A 202	80.0	100.0	99.0	0.0	97.0	90.0
ROUNDUP POWERMAX	32.0 FL OZ/A	A 404	100.0	100.0	100.0	0.0	90.0	90.0
2,4-D LV6	12.0 FL OZ/A	A 502	100.0	100.0	100.0	0.0	90.0	75.0
INDUCE	0.25 % V/V	A 704	100.0	100.0	100.0	0.0	85.0	85.0
		Mean =	95.0	100.0	99.8	0.0	90.5	85.0
7 Fierce EZ	6 FL OZ/A	A 203	100.0	100.0	97.0	0.0	100.0	95.0
Roundup PowerMax	32 FL OZ/A	A 401	100.0	100.0	100.0	0.0	75.0	70.0
2,4-D LV6	12 FL OZ/A	A 601	100.0	100.0	100.0	0.0	85.0	75.0
INDUCE	0.25 % V/V	A 802	100.0	100.0	100.0	0.0	95.0	92.0
		Mean =	100.0	100.0	99.3	0.0	88.8	83.0
8 Boundary	2.1 PT/A	A 204	90.0	100.0	97.0	0.0	90.0	80.0
Roundup PowerMax	32 FL OZ/A	A 301	100.0	100.0	100.0	0.0	100.0	93.0
2,4-D LV6	12 FL OZ/A	A 501	100.0	100.0	100.0	0.0	80.0	60.0
INDUCE	0.25 % V/V	A 804	100.0	100.0	100.0	0.0	85.0	85.0
		Mean =	97.5	100.0	99.3	0.0	88.8	79.5

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Pest Type			W Weed	W Weed
Pest Code			AMATA	AMATA
Pest Name			Common waterhemp	Common waterhemp
Crop Type, Code				
Crop Scientific Name				
Crop Name				
Rating Date			7-9-2020	7-15-2020
Part Rated			PLANT P	PLANT P
Rating Type			CONTRO	CONTRO
Rating Unit			%	%
Number of Subsamples			1	1
Data Entry Date			8-27-2020	8-27-2020
Rating Timing				
Days After First/Last Applic.			42 42	48 48
Trt-Eval Interval			42 DA-A	48 DA-A
Days After Emergence			23 DE-1	29 DE-1
ARM Action Codes			AS	
Number of Decimals				
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	7	8
1 CHECK		A 101	0.0	0.0
		402	0.0	0.0
		503	0.0	0.0
		701	0.0	0.0
		Mean =	0.0d	0.0
2 ENGENIA PRIME	16.0 FL OZ/A	A 102	70.0	70.0
ROUNDUP POWERMAX	32.0 FL OZ/A	A 304	70.0	65.0
INDUCE	0.25 % V/V	A 603	65.0	60.0
		702	80.0	70.0
		Mean =	71.1d	66.3

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			W Weed AMATA	W Weed AMATA	
Pest Type			Common waterhemp	Common waterhemp	
Pest Code					
Pest Name					
Crop Type, Code					
Crop Scientific Name					
Crop Name					
Rating Date			7-9-2020	7-15-2020	
Part Rated			PLANT P	PLANT P	
Rating Type			CONTRO	CONTRO	
Rating Unit			%	%	
Number of Subsamples			1	1	
Data Entry Date			8-27-2020	8-27-2020	
Rating Timing					
Days After First/Last Applic.			42 42	48 48	
Trt-Eval Interval			42 DA-A	48 DA-A	
Days After Emergence			23 DE-1	29 DE-1	
ARM Action Codes			AS		
Number of Decimals					
Trt No.	Treatment Name	Rate Rate Unit	Appl Code Plot	7	8
3	ENGENIA PRO	16.0 FL OZ/A	A 103	60.0	70.0
	ROUNDUP POWERMAX	32.0 FL OZ/A	A 403	50.0	60.0
	INDUCE	0.25 % V/V	A 504	55.0	65.0
			803	70.0	70.0
			Mean =	58.5d	66.3
4	TAVIUM PLUS VAPORGRIP	56.5 FL OZ/A	A 104	50.0	50.0
	ROUNDUP POWERMAX	32.0 FL OZ/A	A 302	50.0	60.0
	INDUCE	0.25 % V/V	A 602	40.0	30.0
			703	70.0	60.0
			Mean =	52.0d	50.0
5	PREFIX	32.0 FL OZ/A	A 201	80.0	80.0
	ROUNDUP POWERMAX	32.0 FL OZ/A	A 303	40.0	50.0
	2,4-D LV6	12.0 FL OZ/A	A 604	60.0	60.0
	ADJUVANT-COC	1.0 % V/V	A 801	85.0	70.0
			Mean =	65.0d	65.0
6	ANTHEM MAXX	3.25 FL OZ/A	A 202	70.0	60.0
	ROUNDUP POWERMAX	32.0 FL OZ/A	A 404	60.0	65.0
	2,4-D LV6	12.0 FL OZ/A	A 502	60.0	60.0
	INDUCE	0.25 % V/V	A 704	50.0	55.0
			Mean =	59.8d	60.0
7	Fierce EZ	6 FL OZ/A	A 203	80.0	80.0
	Roundup PowerMax	32 FL OZ/A	A 401	60.0	60.0
	2,4-D LV6	12 FL OZ/A	A 601	50.0	50.0
	INDUCE	0.25 % V/V	A 802	80.0	75.0
			Mean =	66.9d	66.3
8	Boundary	2.1 PT/A	A 204	50.0	25.0
	Roundup PowerMax	32 FL OZ/A	A 301	80.0	75.0
	2,4-D LV6	12 FL OZ/A	A 501	25.0	30.0
	INDUCE	0.25 % V/V	A 804	60.0	70.0
			Mean =	51.7d	50.0

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ENGENIA PRIME VS. COMPETITORS / PRE / ALL SOILS/ NT

Trial ID: 20-19_SOY-CAL Location: Caldwell County KY Trial Year: 2020
 Protocol ID: MKD-H-2020-US-D0G-B-00.1 Investigator (Creator): Travis Legleiter
 Project ID: Study Director: Tracy Rowlandson
 Sponsor Contact:

Pest Type
 W, Weed = Weed or volunteer crop
Pest Code
 AMATA, Amaranthus x tamariscinus, Common waterhemp = US
Crop Type, Code
 C = EPPO species (Bayer) codes
 GLXMA, BSOY, Glycine max, Soybean = US
Part Rated
 PLANT = plant
 P = Pest is Part Rated
 C = Crop is Part Rated
Rating Type
 CONTRO = control / burndown or knockdown
 PHYGEN = phytotoxicity - general / injury
Rating Unit
 % = percent
ARM Action Codes
 EC = Do not analyze untreated check, while still reporting treatment mean on AOV Means Table
 AS = Automatic square root transformation of X+0.5

Pest Type	W Weed AMATA	W Weed AMATA	W Weed AMATA		W Weed AMATA	W Weed AMATA
Pest Code	Common waterhemp	Common waterhemp	Common waterhemp		Common waterhemp	Common waterhemp
Pest Name						
Crop Type, Code				C GLXMA		
Crop Scientific Name				Glycine max		
Crop Name				Soybean		
Rating Date	6-3-2020	6-10-2020	6-17-2020	6-25-2020	6-25-2020	7-2-2020
Part Rated	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P
Rating Type	CONTO	CONTO	CONTO	PHYGEN	CONTO	CONTO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Data Entry Date	6-10-2020	8-27-2020	8-27-2020	8-27-2020	8-27-2020	8-27-2020
Rating Timing						
Days After First/Last Applic.	6 6	13 13	20 20	28 28	28 28	35 35
Trt-Eval Interval	6 DA-A	13 DA-A	20 DA-A	28 DA-A	28 DA-A	35 DA-A
Days After Emergence	-13 DE-1	-6 DE-1	1 DE-1	9 DE-1	9 DE-1	16 DE-1
ARM Action Codes					EC	
Number of Decimals						
Trt Treatment						
No. Name	1	2	3	4	5	6
Rate						
Rate Unit						
Appl Code						
1 CHECK	0.0 b	0.0 b	0.0 b	0.0 a	0.0	0.0 b
2 ENGENIA PRIME	87.5 a	98.8 a	99.3 a	0.0 a	93.8 a	88.3 a
ROUNDUP POWERMAX						
INDUCE						
3 ENGENIA PRO	67.5 a	91.0 a	91.8 a	0.0 a	86.8 a	85.0 a
ROUNDUP POWERMAX						
INDUCE						
4 TAVIUM PLUS VAPORGRIP	90.0 a	99.5 a	98.8 a	0.0 a	83.8 a	81.3 a
ROUNDUP POWERMAX						
INDUCE						

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Pest Type	W Weed AMATA	W Weed AMATA	W Weed AMATA		W Weed AMATA	W Weed AMATA				
Pest Code	Common waterhemp	Common waterhemp	Common waterhemp		Common waterhemp	Common waterhemp				
Pest Name				C GLXMA Glycine max Soybean						
Crop Type, Code										
Crop Scientific Name										
Crop Name										
Rating Date	6-3-2020	6-10-2020	6-17-2020	6-25-2020	6-25-2020	7-2-2020				
Part Rated	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P				
Rating Type	CONTO	CONTO	CONTO	PHYGEN	CONTO	CONTO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Data Entry Date	6-10-2020	8-27-2020	8-27-2020	8-27-2020	8-27-2020	8-27-2020				
Rating Timing										
Days After First/Last Applic.	6 6	13 13	20 20	28 28	28 28	35 35				
Trt-Eval Interval	6 DA-A	13 DA-A	20 DA-A	28 DA-A	28 DA-A	35 DA-A				
Days After Emergence	-13 DE-1	-6 DE-1	1 DE-1	9 DE-1	9 DE-1	16 DE-1				
ARM Action Codes					EC					
Number of Decimals										
Trt No.	Treatment Name	Rate	Unit	Appl Code	1	2	3	4	5	6
5	PREFIX ROUNDUP POWERMAX 2,4-D LV6 ADJUVANT-COC	32.0 32.0 12.0 1.0	FL OZ/A FL OZ/A FL OZ/A % V/V	A A A A	87.5 a	99.3 a	98.8 a	0.0 a	91.8 a	86.3 a
6	ANTHEM MAXX ROUNDUP POWERMAX 2,4-D LV6 INDUCE	3.25 32.0 12.0 0.25	FL OZ/A FL OZ/A FL OZ/A % V/V	A A A A	95.0 a	100.0 a	99.8 a	0.0 a	90.5 a	85.0 a
7	Fierce EZ Roundup PowerMax 2,4-D LV6 INDUCE	6 32 12 0.25	FL OZ/A FL OZ/A FL OZ/A % V/V	A A A A	100.0 a	100.0 a	99.3 a	0.0 a	88.8 a	83.0 a
8	Boundary Roundup PowerMax 2,4-D LV6 INDUCE	2.1 32 12 0.25	PT/A FL OZ/A FL OZ/A % V/V	A A A A	97.5 a	100.0 a	99.3 a	0.0 a	88.8 a	79.5 a
LSD P=.05		22.32			7.45	7.79			12.45	12.71
Standard Deviation		15.18			5.07	5.30	0.00		8.38	8.64
CV		19.43			5.89	6.17	0.00		9.4	11.75
Levene's F		0.686			1.168	1.155	0.00		0.453	1.266
Levene's Prob(F)		0.683			0.357	0.364	0.00*		0.835	0.308
Skewness		-1.4545*			-2.282*	-2.2802*	.		-0.8194	-2.0182*
Kurtosis		0.8249			3.5581*	3.5543*	.		0.3567	2.819*
Replicate F		3.129			1.086	1.257	0.000		1.700	2.084
Replicate Prob(F)		0.0474			0.3766	0.3146	1.0000		0.2027	0.1330
Treatment F		19.031			189.937	172.439	0.000		0.617	47.691
Treatment Prob(F)		0.0001			0.0001	0.0001	1.0000		0.7141	0.0001

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Pest Type		W Weed	W Weed
Pest Code		AMATA	AMATA
Pest Name		Common waterhemp	Common waterhemp
Crop Type, Code			
Crop Scientific Name			
Crop Name			
Rating Date		7-9-2020	7-15-2020
Part Rated		PLANT P	PLANT P
Rating Type		CONTRO	CONTRO
Rating Unit		%	%
Number of Subsamples		1	1
Data Entry Date		8-27-2020	8-27-2020
Rating Timing			
Days After First/Last Applic.		42 42	48 48
Trt-Eval Interval		42 DA-A	48 DA-A
Days After Emergence		23 DE-1	29 DE-1
ARM Action Codes		AS	
Number of Decimals			
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			7 8
1 CHECK		A	0.0 b 0.0 b
2 ENGENIA PRIME	16.0 FL OZ/A	A	71.1 a 66.3 a
ROUNDUP POWERMAX	32.0 FL OZ/A	A	
INDUCE	0.25 % V/V	A	
3 ENGENIA PRO	16.0 FL OZ/A	A	58.5 a 66.3 a
ROUNDUP POWERMAX	32.0 FL OZ/A	A	
INDUCE	0.25 % V/V	A	
4 TAVIUM PLUS VAPORGRIP	56.5 FL OZ/A	A	52.0 a 50.0 a
ROUNDUP POWERMAX	32.0 FL OZ/A	A	
INDUCE	0.25 % V/V	A	

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Pest Type				W Weed	W Weed
Pest Code				AMATA	AMATA
Pest Name				Common waterhemp	Common waterhemp
Crop Type, Code					
Crop Scientific Name					
Crop Name					
Rating Date				7-9-2020	7-15-2020
Part Rated				PLANT P	PLANT P
Rating Type				CONTRO	CONTRO
Rating Unit				%	%
Number of Subsamples				1	1
Data Entry Date				8-27-2020	8-27-2020
Rating Timing					
Days After First/Last Applic.				42 42	48 48
Trt-Eval Interval				42 DA-A	48 DA-A
Days After Emergence				23 DE-1	29 DE-1
ARM Action Codes				AS	
Number of Decimals					
Trt No.	Treatment Name	Rate	Appl Code	7	8
		Rate Unit			
5	PREFIX ROUNDUP POWERMAX 2,4-D LV6 ADJUVANT-COC	32.0 FL OZ/A 32.0 FL OZ/A 12.0 FL OZ/A 1.0 % V/V	A A A A	65.0 a	65.0 a
6	ANTHEM MAXX ROUNDUP POWERMAX 2,4-D LV6 INDUCE	3.25 FL OZ/A 32.0 FL OZ/A 12.0 FL OZ/A 0.25 % V/V	A A A A	59.8 a	60.0 a
7	Fierce EZ Roundup PowerMax 2,4-D LV6 INDUCE	6 FL OZ/A 32 FL OZ/A 12 FL OZ/A 0.25 % V/V	A A A A	66.9 a	66.3 a
8	Boundary Roundup PowerMax 2,4-D LV6 INDUCE	2.1 PT/A 32 FL OZ/A 12 FL OZ/A 0.25 % V/V	A A A A	51.7 a	50.0 a
LSD P=.05				18.83 - 18.92	17.62
Standard Deviation				0.82t	11.98
CV				11.82t	22.63
Levene's F				2.236	8.856
Levene's Prob(F)				0.067	0.001*
Skewness				-1.8401*	-1.3229*
Kurtosis				2.3305*	0.6843
Replicate F				3.034	2.065
Replicate Prob(F)				0.0519	0.1355
Treatment F				38.854	14.110
Treatment Prob(F)				0.0001	0.0001

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ENGENIA PRIME VS. COMPETITORS / PRE / ALL SOILS/ NT

Trial ID: 20-19_SOY-CAL Location: Caldwell County KY Trial Year: 2020
Protocol ID: MKD-H-2020-US-D0G-B-00.1 Investigator (Creator): Travis Legleiter
Project ID: Study Director: Tracy Rowlandson
Sponsor Contact:

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

AMATA, Amaranthus x tamariscinus, Common waterhemp = US

Crop Type, Code

C = EPPO species (Bayer) codes

GLXMA, BSOY, Glycine max, Soybean = US

Part Rated

PLANT = plant

P = Pest is Part Rated

C = Crop is Part Rated

Rating Type

CONTRO = control / burndown or knockdown

PHYGEN = phytotoxicity - general / injury

Rating Unit

% = percent

ARM Action Codes

EC = Do not analyze untreated check, while still reporting treatment mean on AOV Means Table

AS = Automatic square root transformation of X+0.5

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Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
31.255	mL	2,4-D LV6	672	GA/L	EC	
25.001	mL	ADJUVANT-COC			OL	
4.232	mL	ANTHEM MAXX	516	GA/L	SC	
7.814	mL	Fierce EZ	3.04	LBA/GAL	SC	
83.346	mL	Roundup PowerMax	4.5	LBAE/GAL	SL	
31.255	mL	2,4-D LV6	6	LBAE/GAL	EC	
43.757	mL	Boundary	6.5	LBA/GAL	EC	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2.0003 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2.0003 L.

General Trial Information

Study Director: Tracy Rowlandson

Investigator: Travis Legleiter **Title:** Assistant Extension Professor

Trial Status: E established

ARM Trial Created On: 4-8-2020 **Trial Usage/Type:** 8

Initiation Date: 5-28-2020

Completion Date: 7-15-2020

Trial Location

City: Princeton **Country:** USA United States

State/Prov.: Kentucky

Postal Code: 42445

Latitude of LL Corner °: 37.065337 N

Longitude of LL Corner °: -87.795635 W

Conducted Under GLP: No

Conducted Under GEP: No

Contacts

Role: STYDIR study director

Study Director: Tracy Rowlandson

Role: INVEST investigator

Investigator: Travis Legleiter

Title: Assistant Extension Professor

Organization: University of Kentucky

Address 1: 348 University Drive

Phone No.: 859-562-1323

Country: USA United States

E-mail: Travis.Legleiter@uky.edu

City: Princeton, KY

Postal Code: 42445

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Crop Description	
Crop 1: C GLXMA Glycine max	Soybean
Variety: Asgrow 42X6	Stage Scale: BBCH
Attributes: Glyphosate and Dicamba Resistant(RR2Xtend)	
Planting Date: 6-12-2020	
Depth: 1 IN	Planting Density: 140000 S/A
Rows per Plot: 7	Planting Method: PLANTD planted
Row Spacing: 15 IN	Planting Equipment: VP vacuum planter
Emergence Date: 6-16-2020	

Pest Description	
Pest 1 Type: W Code: AMATA Common Name: Amaranthus x tamariscinus Common Name: Common waterhemp	Stage Scale: BBCH
Pest 2 Type: W Code: CERVU Common Name: Cerastium fontanum vulgare Common Name: Mouse-ear chickweed	Stage Scale: BBCH
Pest 3 Type: W Code: VERAR Common Name: Veronica arvensis Common Name: Corn speedwell	Stage Scale: BBCH
Pest 4 Type: W Code: CYPES Common Name: Cyperus esculentus Common Name: Yellow nutsedge	Stage Scale: BBCH
Pest 5 Type: W Code: OXAST Common Name: Oxalis stricta Common Name: European wood sorrel	Stage Scale: BBCH
Pest 6 Type: W Code: TAROF Common Name: Taraxacum officinale Common Name: Blowball	Stage Scale: BBCH
Pest 7 Type: W Code: STEME Common Name: Stellaria media Common Name: Common chickweed	Stage Scale: BBCH
Pest 8 Type: W Code: SIDSP Common Name: Sida spinosa Common Name: Prickly sida	Stage Scale: BBCH

Site and Design	
Treated Plot Width: 6.67 FT	Site Type: FIELD field
Treated Plot Length: 30 FT	Experimental Unit: 1 PLOT plot
Treated Plot Area: 200.1 FT ²	Tillage Type: NOTILL no-till
Treatments: 8	Study Design: RAOBL Randomized Complete Block (RCB)
Replications: 4	

Soil Description	
Description Name: Caldwell County Waterhemp	
% Sand: 8	% OM: 2.5 Texture: SIL silt loam
% Silt: 76	pH: 6.5 Soil Name: Sadler silt loam
% Clay: 16	CEC: 14 Fert. Level: G good

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Application Description	
	A
Application Date	5-28-2020
Appl. Start Time	12:10 PM
Appl. Stop Time	12:28 PM
Application Method	BROADC
Application Timing	PREPLA
Application Placement	FOLIAR
Applied By	JG
Air Temperature Start, Stop	84 94 F
% Relative Humidity Start, Stop	64 54
Wind Velocity+Dir. Start	3 MPH S
Wind Velocity+Dir. Stop	3 MPH S
Wind Velocity+Dir. Max	6.1 MPH E
Wet Leaves (Y/N)	N no
Soil Temperature	81 F
Soil Moisture	wet
% Cloud Cover	65

Crop Stage At Each Application	
	A
Crop 1 Code, BBCH Scale	GLXMA BSOY
Days after Emergence	-19

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Pest Stage At Each Application	
	A
Pest 1 Code, Type, Scale	AMATA W BBCH
Height Average	2 in
Height Minimum, Maximum	0.25 4.5
Density Average	29 FT2
Density Minimum, Maximum	3 158
Pest 2 Code, Type, Scale	CERVU W BBCH
Height Average	0.5 IN
Height Minimum, Maximum	0.5 0.5
Density Average	0.125 FT2
Density Minimum, Maximum	1 1
Pest 3 Code, Type, Scale	VERAR W BBCH
Height Average	2.25 IN
Height Minimum, Maximum	2.25 2.25
Density Average	0.125 FT2
Density Minimum, Maximum	1 1
Pest 4 Code, Type, Scale	CYPES W BBCH
Height Average	2 IN
Height Minimum, Maximum	1 3.5
Density Average	3.5 FT2
Density Minimum, Maximum	2 13
Pest 5 Code, Type, Scale	OXAST W BBCH
Height Average	0.8 IN
Height Minimum, Maximum	0.75 1
Density Average	0.25 FT2
Density Minimum, Maximum	1 1
Pest 6 Code, Type, Scale	TAROF W BBCH
Height Average	1 IN
Height Minimum, Maximum	1 1
Density Average	0.25 FT2
Density Minimum, Maximum	1 1
Pest 7 Code, Type, Scale	STEME W BBCH
Height Average	1.5 IN
Height Minimum, Maximum	1 2.25
Density Average	4 FT2
Density Minimum, Maximum	2 30
Pest 8 Code, Type, Scale	SIDSP W BBCH
Height Average	1 IN
Height Minimum, Maximum	0.5 1.5
Density Average	0.25 FT2
Density Minimum, Maximum	1 1

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Pest Type	BA -	BA -	W Weed	W Weed	W Weed		W Weed		
Pest Code		NNNNN	AMATA	AMATA	AMATA		AMATA		
Pest Name			Common waterhemp	Common waterhemp	Common waterhemp		Common waterhemp		
Crop Type, Code						C GLXMA			
Crop Scientific Name						Glycine max			
Crop Name						Soybean			
Rating Date			6-3-2020	6-10-2020	6-17-2020	6-25-2020	6-25-2020		
Part Rated	PX -	PX -	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P		
Rating Type	CONTRO	PHYTOX	CONTO	CONTO	CONTO	PHYGEN	CONTO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Rating Timing									
Days After First/Last Applic.			6 6	13 13	20 20	28 28	28 28		
Trt-Eval Interval			6 DA-A	13 DA-A	20 DA-A	28 DA-A	28 DA-A		
Days After Emergence			-13 DE-1	-6 DE-1	1 DE-1	9 DE-1	9 DE-1		
ARM Action Codes	P	P					EC		
Number of Decimals	0	0							
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7
3 ENGENIA PRO	16.0 FL OZ/A	A 103			50.0	97.0	97.0	0.0	92.0
ROUNDUP POWERMAX	32.0 FL OZ/A	A 403			50.0	70.0	70.0	0.0	70.0
INDUCE	0.25 % V/V	A 504			70.0	97.0	100.0	0.0	95.0
		A 803			100.0	100.0	100.0	0.0	90.0
		Mean =			67.5	91.0	91.8	0.0	86.8
4 TAVIUM PLUS VAPORGRIP	56.5 FL OZ/A	A 104			60.0	98.0	95.0	0.0	90.0
ROUNDUP POWERMAX	32.0 FL OZ/A	A 302			100.0	100.0	100.0	0.0	90.0
INDUCE	0.25 % V/V	A 602			100.0	100.0	100.0	0.0	70.0
		A 703			100.0	100.0	100.0	0.0	85.0
		Mean =			90.0	99.5	98.8	0.0	83.8
5 PREFIX	32.0 FL OZ/A	A 201			100.0	100.0	100.0	0.0	100.0
ROUNDUP POWERMAX	32.0 FL OZ/A	A 303			50.0	97.0	95.0	0.0	80.0
2,4-D LV6	12.0 FL OZ/A	A 604			100.0	100.0	100.0	0.0	97.0
ADJUVANT-COC	1.0 % V/V	A 801			100.0	100.0	100.0	0.0	90.0
		Mean =			87.5	99.3	98.8	0.0	91.8
6 ANTHEM MAXX	3.25 FL OZ/A	A 202			80.0	100.0	99.0	0.0	97.0
ROUNDUP POWERMAX	32.0 FL OZ/A	A 404			100.0	100.0	100.0	0.0	90.0
2,4-D LV6	12.0 FL OZ/A	A 502			100.0	100.0	100.0	0.0	90.0
INDUCE	0.25 % V/V	A 704			100.0	100.0	100.0	0.0	85.0
		Mean =			95.0	100.0	99.8	0.0	90.5
7 Fierce EZ	6 FL OZ/A	A 203			100.0	100.0	97.0	0.0	100.0
Roundup PowerMax	32 FL OZ/A	A 401			100.0	100.0	100.0	0.0	75.0
2,4-D LV6	12 FL OZ/A	A 601			100.0	100.0	100.0	0.0	85.0
INDUCE	0.25 % V/V	A 802			100.0	100.0	100.0	0.0	95.0
		Mean =			100.0	100.0	99.3	0.0	88.8
8 Boundary	2.1 PT/A	A 204			90.0	100.0	97.0	0.0	90.0
Roundup PowerMax	32 FL OZ/A	A 301			100.0	100.0	100.0	0.0	100.0
2,4-D LV6	12 FL OZ/A	A 501			100.0	100.0	100.0	0.0	80.0
INDUCE	0.25 % V/V	A 804			100.0	100.0	100.0	0.0	85.0
		Mean =			97.5	100.0	99.3	0.0	88.8

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Pest Type			W Weed	W Weed	W Weed	
Pest Code			AMATA	AMATA	AMATA	
Pest Name			Common waterhemp	Common waterhemp	Common waterhemp	
Crop Type, Code						
Crop Scientific Name						
Crop Name						
Rating Date			7-2-2020	7-9-2020	7-15-2020	
Part Rated			PLANT P	PLANT P	PLANT P	
Rating Type			CONTRO	CONTRO	CONTRO	
Rating Unit			%	%	%	
Number of Subsamples			1	1	1	
Rating Timing						
Days After First/Last Applic.			35 35	42 42	48 48	
Trt-Eval Interval			35 DA-A	42 DA-A	48 DA-A	
Days After Emergence			16 DE-1	23 DE-1	29 DE-1	
ARM Action Codes				AS		
Number of Decimals						
Trt	Treatment	Rate	Appl			
No.	Name	Rate Unit	Code Plot	8	9	10
1	CHECK		A 101	0.0	0.0	0.0
			402	0.0	0.0	0.0
			503	0.0	0.0	0.0
			701	0.0	0.0	0.0
			Mean =	0.0	0.0d	0.0
2	ENGENIA PRIME	16.0 FL OZ/A	A 102	90.0	70.0	70.0
	ROUNDUP POWERMAX	32.0 FL OZ/A	A 304	80.0	70.0	65.0
	INDUCE	0.25 % V/V	A 603	93.0	65.0	60.0
			702	90.0	80.0	70.0
			Mean =	88.3	71.1d	66.3

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			W Weed AMATA	W Weed AMATA	W Weed AMATA	
Pest Type			Common waterhemp	Common waterhemp	Common waterhemp	
Pest Code						
Pest Name						
Crop Type, Code						
Crop Scientific Name						
Crop Name						
Rating Date			7-2-2020	7-9-2020	7-15-2020	
Part Rated			PLANT P	PLANT P	PLANT P	
Rating Type			CONTRO	CONTRO	CONTRO	
Rating Unit			%	%	%	
Number of Subsamples			1	1	1	
Rating Timing						
Days After First/Last Applic.			35 35	42 42	48 48	
Trt-Eval Interval			35 DA-A	42 DA-A	48 DA-A	
Days After Emergence			16 DE-1	23 DE-1	29 DE-1	
ARM Action Codes				AS		
Number of Decimals						
Trt No.	Treatment Name	Rate Rate Unit	Appl Code Plot	8	9	10
3	ENGENIA PRO	16.0 FL OZ/A	A 103	85.0	60.0	70.0
	ROUNDUP POWERMAX	32.0 FL OZ/A	A 403	75.0	50.0	60.0
	INDUCE	0.25 % V/V	A 504	90.0	55.0	65.0
			803	90.0	70.0	70.0
			Mean =	85.0	58.5d	66.3
4	TAVIUM PLUS VAPORGRIP	56.5 FL OZ/A	A 104	80.0	50.0	50.0
	ROUNDUP POWERMAX	32.0 FL OZ/A	A 302	85.0	50.0	60.0
	INDUCE	0.25 % V/V	A 602	70.0	40.0	30.0
			703	90.0	70.0	60.0
			Mean =	81.3	52.0d	50.0
5	PREFIX	32.0 FL OZ/A	A 201	95.0	80.0	80.0
	ROUNDUP POWERMAX	32.0 FL OZ/A	A 303	70.0	40.0	50.0
	2,4-D LV6	12.0 FL OZ/A	A 604	90.0	60.0	60.0
	ADJUVANT-COC	1.0 % V/V	A 801	90.0	85.0	70.0
			Mean =	86.3	65.0d	65.0
6	ANTHEM MAXX	3.25 FL OZ/A	A 202	90.0	70.0	60.0
	ROUNDUP POWERMAX	32.0 FL OZ/A	A 404	90.0	60.0	65.0
	2,4-D LV6	12.0 FL OZ/A	A 502	75.0	60.0	60.0
	INDUCE	0.25 % V/V	A 704	85.0	50.0	55.0
			Mean =	85.0	59.8d	60.0
7	Fierce EZ	6 FL OZ/A	A 203	95.0	80.0	80.0
	Roundup PowerMax	32 FL OZ/A	A 401	70.0	60.0	60.0
	2,4-D LV6	12 FL OZ/A	A 601	75.0	50.0	50.0
	INDUCE	0.25 % V/V	A 802	92.0	80.0	75.0
			Mean =	83.0	66.9d	66.3
8	Boundary	2.1 PT/A	A 204	80.0	50.0	25.0
	Roundup PowerMax	32 FL OZ/A	A 301	93.0	80.0	75.0
	2,4-D LV6	12 FL OZ/A	A 501	60.0	25.0	30.0
	INDUCE	0.25 % V/V	A 804	85.0	60.0	70.0
			Mean =	79.5	51.7d	50.0

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ENGENIA PRIME VS. COMPETITORS / PRE / ALL SOILS/ NT

Trial ID: 20-19_SOY-CAL Location: Caldwell County KY Trial Year: 2020
 Protocol ID: MKD-H-2020-US-D0G-B-00.1 Investigator (Creator): Travis Legleiter
 Project ID: Study Director: Tracy Rowlandson
 Sponsor Contact:

Pest Type
 BA, = BA,
 W, Weed = Weed or volunteer crop

Pest Code
 AMATA, Amaranthus x tamariscinus, Common waterhemp = US

Crop Type, Code
 C = EPPO species (Bayer) codes
 GLXMA, BSOY, Glycine max, Soybean = US

Part Rated
 PLANT = plant
 P = Pest is Part Rated
 C = Crop is Part Rated

Rating Type
 CONTRO = control / burndown or knockdown
 PHYGEN = phytotoxicity - general / injury

Rating Unit
 % = percent

ARM Action Codes
 P = Rating scale of 0 to 100 (e.g. % control or injury)
 EC = Do not analyze untreated check, while still reporting treatment mean on AOV Means Table
 AS = Automatic square root transformation of X+0.5

	BA -	BA -	W Weed	W Weed	W Weed		W Weed
Pest Type			AMATA	AMATA	AMATA		AMATA
Pest Code		NNNNN	Common waterhemp	Common waterhemp	Common waterhemp		Common waterhemp
Pest Name							
Crop Type, Code						C GLXMA	
Crop Scientific Name						Glycine max	
Crop Name						Soybean	
Rating Date			6-3-2020	6-10-2020	6-17-2020	6-25-2020	6-25-2020
Part Rated	PX -	PX -	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P
Rating Type	CONTRO	PHYTOX	CONTO	CONTO	CONTO	PHYGEN	CONTO
Rating Unit	%	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1	1
Rating Timing							
Days After First/Last Applic.			6 6	13 13	20 20	28 28	28 28
Trt-Eval Interval			6 DA-A	13 DA-A	20 DA-A	28 DA-A	28 DA-A
Days After Emergence			-13 DE-1	-6 DE-1	1 DE-1	9 DE-1	9 DE-1
ARM Action Codes	P	P					EC
Number of Decimals	0	0					
Trt Treatment							
No. Name	Rate	Appl	1	2	3	4	5
	Rate Unit	Code					
1 CHECK		A			0.0 b	0.0 b	0.0 b
2 ENGENIA PRIME	16.0 FL OZ/A	A			87.5 a	98.8 a	99.3 a
ROUNDUP POWERMAX	32.0 FL OZ/A	A					0.0 a
INDUCE	0.25 % V/V	A					
3 ENGENIA PRO	16.0 FL OZ/A	A			67.5 a	91.0 a	91.8 a
ROUNDUP POWERMAX	32.0 FL OZ/A	A					0.0 a
INDUCE	0.25 % V/V	A					
4 TAVIUM PLUS VAPORGRIP	56.5 FL OZ/A	A			90.0 a	99.5 a	98.8 a
ROUNDUP POWERMAX	32.0 FL OZ/A	A					0.0 a
INDUCE	0.25 % V/V	A					

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Pest Type	BA -	BA -	W Weed	W Weed	W Weed		W Weed		
Pest Code	NNNNN	NNNNN	AMATA	AMATA	AMATA		AMATA		
Pest Name			Common waterhemp	Common waterhemp	Common waterhemp		Common waterhemp		
Crop Type, Code						C GLXMA			
Crop Scientific Name						Glycine max			
Crop Name						Soybean			
Rating Date			6-3-2020	6-10-2020	6-17-2020	6-25-2020	6-25-2020		
Part Rated	PX -	PX -	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P		
Rating Type	CONTRO	PHYTOX	CONTO	CONTO	CONTO	PHYGEN	CONTO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Rating Timing									
Days After First/Last Applic.			6 6	13 13	20 20	28 28	28 28		
Trt-Eval Interval			6 DA-A	13 DA-A	20 DA-A	28 DA-A	28 DA-A		
Days After Emergence			-13 DE-1	-6 DE-1	1 DE-1	9 DE-1	9 DE-1		
ARM Action Codes	P	P					EC		
Number of Decimals	0	0							
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	1	2	3	4	5	6	7
5 PREFIX	32.0 FL OZ/A	A			87.5 a	99.3 a	98.8 a	0.0 a	91.8 a
ROUNDUP POWERMAX	32.0 FL OZ/A	A							
2,4-D LV6	12.0 FL OZ/A	A							
ADJUVANT-COC	1.0 % V/V	A							
6 ANTHEM MAXX	3.25 FL OZ/A	A			95.0 a	100.0 a	99.8 a	0.0 a	90.5 a
ROUNDUP POWERMAX	32.0 FL OZ/A	A							
2,4-D LV6	12.0 FL OZ/A	A							
INDUCE	0.25 % V/V	A							
7 Fierce EZ	6 FL OZ/A	A			100.0 a	100.0 a	99.3 a	0.0 a	88.8 a
Roundup PowerMax	32 FL OZ/A	A							
2,4-D LV6	12 FL OZ/A	A							
INDUCE	0.25 % V/V	A							
8 Boundary	2.1 PT/A	A			97.5 a	100.0 a	99.3 a	0.0 a	88.8 a
Roundup PowerMax	32 FL OZ/A	A							
2,4-D LV6	12 FL OZ/A	A							
INDUCE	0.25 % V/V	A							
LSD P=.05					22.32	7.45	7.79	.	12.45
Standard Deviation					15.18	5.07	5.30	0.00	8.38
CV					19.43	5.89	6.17	0.0	9.4
Levene's F					0.686	1.168	1.155	0.00	0.453
Levene's Prob(F)					0.683	0.357	0.364	0.00*	0.835
Skewness					-1.4545*	-2.282*	-2.2802*	.	-0.8194
Kurtosis					0.8249	3.5581*	3.5543*	.	0.3567
Replicate F					3.129	1.086	1.257	0.000	1.700
Replicate Prob(F)					0.0474	0.3766	0.3146	1.0000	0.2027
Treatment F					19.031	189.937	172.439	0.000	0.617
Treatment Prob(F)					0.0001	0.0001	0.0001	1.0000	0.7141

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Pest Type	W Weed	W Weed	W Weed
Pest Code	AMATA	AMATA	AMATA
Pest Name	Common waterhemp	Common waterhemp	Common waterhemp
Crop Type, Code			
Crop Scientific Name			
Crop Name			
Rating Date	7-2-2020	7-9-2020	7-15-2020
Part Rated	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1
Rating Timing			
Days After First/Last Applic.	35 35	42 42	48 48
Trt-Eval Interval	35 DA-A	42 DA-A	48 DA-A
Days After Emergence	16 DE-1	23 DE-1	29 DE-1
ARM Action Codes		AS	
Number of Decimals			
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			8
			9
			10
1 CHECK	A		0.0 b
2 ENGENIA PRIME	16.0 FL OZ/A A		88.3 a
ROUNDUP POWERMAX	32.0 FL OZ/A A		71.1 a
INDUCE	0.25 % V/V A		66.3 a
3 ENGENIA PRO	16.0 FL OZ/A A		85.0 a
ROUNDUP POWERMAX	32.0 FL OZ/A A		58.5 a
INDUCE	0.25 % V/V A		66.3 a
4 TAVIUM PLUS VAPORGRIP	56.5 FL OZ/A A		81.3 a
ROUNDUP POWERMAX	32.0 FL OZ/A A		52.0 a
INDUCE	0.25 % V/V A		50.0 a

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Pest Type	W Weed	W Weed	W Weed
Pest Code	AMATA	AMATA	AMATA
Pest Name	Common waterhemp	Common waterhemp	Common waterhemp
Crop Type, Code			
Crop Scientific Name			
Crop Name			
Rating Date	7-2-2020	7-9-2020	7-15-2020
Part Rated	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1
Rating Timing			
Days After First/Last Applic.	35 35	42 42	48 48
Trt-Eval Interval	35 DA-A	42 DA-A	48 DA-A
Days After Emergence	16 DE-1	23 DE-1	29 DE-1
ARM Action Codes		AS	
Number of Decimals			
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
8			10
5 PREFIX	32.0 FL OZ/A A		65.0 a
ROUNDUP POWERMAX	32.0 FL OZ/A A		
2,4-D LV6	12.0 FL OZ/A A		
ADJUVANT-COC	1.0 % V/V A		
6 ANTHEM MAXX	3.25 FL OZ/A A		60.0 a
ROUNDUP POWERMAX	32.0 FL OZ/A A		
2,4-D LV6	12.0 FL OZ/A A		
INDUCE	0.25 % V/V A		
7 Fierce EZ	6 FL OZ/A A		66.3 a
Roundup PowerMax	32 FL OZ/A A		
2,4-D LV6	12 FL OZ/A A		
INDUCE	0.25 % V/V A		
8 Boundary	2.1 PT/A A		50.0 a
Roundup PowerMax	32 FL OZ/A A		
2,4-D LV6	12 FL OZ/A A		
INDUCE	0.25 % V/V A		
LSD P=.05	12.71	18.83 - 18.92	17.62
Standard Deviation	8.64	0.82t	11.98
CV	11.75	11.82t	22.63
Levene's F	1.266	2.236	8.856
Levene's Prob(F)	0.308	0.067	0.001*
Skewness	-2.0182*	-1.8401*	-1.3229*
Kurtosis	2.819*	2.3305*	0.6843
Replicate F	2.084	3.034	2.065
Replicate Prob(F)	0.1330	0.0519	0.1355
Treatment F	47.691	38.854	14.110
Treatment Prob(F)	0.0001	0.0001	0.0001

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ENGENIA PRIME VS. COMPETITORS / PRE / ALL SOILS/ NT

Trial ID: 20-19_SOY-CAL Location: Caldwell County KY Trial Year: 2020
Protocol ID: MKD-H-2020-US-D0G-B-00.1 Investigator (Creator): Travis Legleiter
Project ID: Study Director: Tracy Rowlandson
Sponsor Contact:

Pest Type

BA, = BA,
W, Weed = Weed or volunteer crop

Pest Code

AMATA, Amaranthus x tamariscinus, Common waterhemp = US

Crop Type Code

C = EPPO species (Bayer) codes
GLXMA, BSOY, Glycine max, Soybean = US

Part Rated

PLANT = plant
P = Pest is Part Rated
C = Crop is Part Rated

Rating Type

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

Rating Unit

% = percent

ARM Action Codes

P = Rating scale of 0 to 100 (e.g. % control or injury)
EC = Do not analyze untreated check, while still reporting treatment mean on AOV Means Table
AS = Automatic square root transformation of X+0.5

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EXPANDING RESIDUAL WITH ALITE 27

Trial ID: 20-20_SOY-REC Location: Trial Year: 2020
 Protocol ID: MKD-H-2020-US-D62-A-01.0 Investigator (Creator): Travis Legleiter
 Project ID: Study Director: Jared Roskamp
 Sponsor Contact:

Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	Amt Product to Measure	Rep			
										1	2	3	4
1	CHECK									101	207	305	402
2	ZIDUA SC	500 GA/L	SC		4.0 FL OZ/A	VL	A		4.167 mL/mx	102	203	310	403
	LIBERTY 280 SL	280 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	ROUNDUP POWERMAX II	540.0 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	Amsol AMS	3.4 lba/gal	SL		3 LB AI/A	NA	B		117.6 mL/mx				
3	ZIDUA SC	500 GA/L	SC		4.0 FL OZ/A	VL	A		4.167 mL/mx	103	204	302	410
	ALITE 27	486 GA/L	SC		3.0 FL OZ/A	VL	A		3.125 mL/mx				
	LIBERTY 280 SL	280 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	ROUNDUP POWERMAX II	540 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
Amsol AMS	3.4 lba/gal	SL		3 LB AI/A	NA	B		117.6 mL/mx					
4	ZIDUA PRO	490 GA/L	SC		4.5 FL OZ/A	VL	A		4.687 mL/mx	104	205	301	409
	LIBERTY 280 SL	280.0 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	ROUNDUP POWERMAX II	540.0 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	Amsol AMS	3.4 lba/gal	SL		3 LB AI/A	NA	B		117.6 mL/mx				
5	ZIDUA PRO	490 GA/L	SC		4.5 FL OZ/A	VL	A		4.687 mL/mx	105	202	303	404
	ALITE 27	486 GA/L	SC		3.0 FL OZ/A	VL	A		3.125 mL/mx				
	LIBERTY 280 SL	280.0 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	ROUNDUP POWERMAX II	540.0 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
Amsol AMS	3.4 lba/gal	SL		3 LB AI/A	NA	B		117.6 mL/mx					
6	ZIDUA PRO	490 GA/L	SC		4.5 FL OZ/A	VL	A		4.687 mL/mx	106	210	308	401
	ALITE 27	486 GA/L	SC		3.0 FL OZ/A	VL	A		3.125 mL/mx				
7	MATADOR	563 GA/L	EC		43.0 FL OZ/A	VL	A		44.79 mL/mx	107	206	309	407
	LIBERTY 280 SL	280 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	ROUNDUP POWERMAX II	540 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	Amsol AMS	3.4 lba/gal	SL		3 LB AI/A	NA	B		117.6 mL/mx				
8	MATADOR	563 GA/L	EC		43.0 FL OZ/A	VL	A		44.79 mL/mx	108	209	307	406
	ALITE 27	486 GA/L	SC		3.0 FL OZ/A	VL	A		3.125 mL/mx				
	LIBERTY 280 SL	280.0 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	ROUNDUP POWERMAX II	540.0 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
Amsol AMS	3.4 lba/gal	SL		3 LB AI/A	NA	B		117.6 mL/mx					
9	SONIC	70 %	WG		5.0 OZ WT/A	VL	A		4.993 g/mx	109	208	306	408
	LIBERTY 280 SL	280.0 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	ROUNDUP POWERMAX II	540.0 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	Amsol AMS	3.4 lba/gal	SL		3 LB AI/A	NA	B		117.6 mL/mx				
10	SONIC	70 %	WG		5.0 OZ WT/A	VL	A		4.993 g/mx	110	201	304	405
	ALITE 27	486 GA/L	SC		3.0 FL OZ/A	VL	A		3.125 mL/mx				
	LIBERTY 280 SL	280.0 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	ROUNDUP POWERMAX II	540.0 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
Amsol AMS	3.4 lba/gal	SL		3 LB AI/A	NA	B		117.6 mL/mx					

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Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)
 Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
10.417	mL	ZIDUA SC	500	GA/L	SC	
333.333	mL	LIBERTY 280 SL	280	GA/L	SL	
333.333	mL	ROUNDUP POWERMAX II	540.0	GA/L	SL	
1,176.343	mL	Amsol AMS	3.4	lba/gal	SL	
19.531	mL	ALITE 27	486	GA/L	SC	
17.578	mL	ZIDUA PRO	490	GA/L	SC	
111.979	mL	MATADOR	563	GA/L	EC	
12.482	g	SONIC	70	%	WG	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

General Trial Information

Study Director: Jared Roskamp

Investigator: Travis Legleiter **Title:** Assistant Extension Professor

Trial Status: E established

ARM Trial Created On: 4-8-2020 **Trial Usage/Type:** 10

Trial Location

City: Princeton **Country:** USA United States

State/Prov.: Kentucky

Postal Code: 42445

Angle y-axis to North °: 0

Conducted Under GLP: No

Conducted Under GEP: No

Contacts

Role: STYDIR study director

Study Director: Jared Roskamp

Role: INVEST investigator

Investigator: Travis Legleiter

Title: Assistant Extension Professor

Organization: University of Kentucky

Address 1: 348 University Drive

Phone No.: 859-562-1323

Country: USA United States

E-mail: Travis.Legleiter@uky.edu

City: Princeton, KY

Postal Code: 42445

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Crop Description
Crop 1: C GLXMA Glycine max Soybean
Variety: CZ4539GTLL
Planting Date: 6-8-2020
Depth: 1.5 IN
Row Spacing: 15 IN
Stage Scale: BBCH
Planting Rate: 140000 S/A
Planting Method: PLANTD planted
Planting Equipment: VP vacuum planter

Pest Description
Pest 1 Type: W **Code:** IPOSS Ipomoea sp.
Common Name: Morning glory **Stage Scale:** BBCH
Pest 2 Type: W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed **Stage Scale:** BBCH
Pest 3 Type: W **Code:** CYPES Cyperus esculentus
Common Name: Yellow nutsedge **Stage Scale:** BBCH
Pest 4 Type: W **Code:** ERICA Erigeron canadensis
Common Name: Canada horseweed **Stage Scale:** BBCH

Site and Design
Treated Plot Width: 10 FT
Treated Plot Length: 30 FT
Treated Plot Area: 300.0 FT2 **Treatments:** 10
Replications: 4
Site Type: FIELD field
Experimental Unit: 1 PLOT plot
Tillage Type: NOTILL no-till
Study Design: RAOBL Randomized Complete Block (RCB)

Maintenance

No.	Date	Type	Maintenance Product Name	Form Conc	Form Unit	Form Type	Description	Rate	Rate Unit	Tank Mix
1.	4-6-2020	FERT	DAP	46	% P2O5	GR	18-46-0	100	LB/A	no
2.	4-16-2020	HERB	Cornerstone Plus	3	LBAE/GAL	L		48	FLOZ/A	yes
3.	4-16-2020	HERB	2,4-D LV6	6	LBA/GAL	L		11	FLOZ/A	yes
4.	6-8-2020	HERB	Gramoxone	2	LBA/GAL	L		3	PT/A	no

Field Prep./Maintenance:

Soil Description
Description Name: 108-C3
% Sand: 4.3 **% OM:** 2.7 **Texture:** SIL silt loam
% Silt: 48.7 **pH:** 6.88 **Soil Name:** Crider Silt Loam
% Clay: 11.1 **CEC:** 11.27

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Application Description				
	A		B	
Application Date	6-8-2020		7-6-2020	
Appl. Start Time	3:01 PM		10:58 AM	
Appl. Stop Time	3:29 PM		11:18 AM	
Application Method	SPRAY		SPRAY	
Application Placement	SOIL		FOLIAR	
Applied By	JLG		JLG	
Air Temperature Start, Stop	87.4	87.6 F	94.2	94.6 F
% Relative Humidity Start, Stop	62.7	58.7	48.7	50.7
Wind Velocity+Dir. Start	3.4	MPH E	2.9	MPH SE
Wind Velocity+Dir. Stop	5.6	MPH E	1.5	MPH SE
Wind Velocity+Dir. Max	7.7	MPH E	3.2	MPH SE
Wet Leaves (Y/N)	N no		N no	
Soil Temperature	70	F	70	F
Soil Moisture	DRY		WET	
% Cloud Cover	90		60	

Crop Stage At Each Application				
	A		B	
Crop 1 Code, BBCH Scale	GLXMA	BSOY	GLXMA	BSOY
Stage Majority, Percent			V2	
Stage Minimum, Percent			V1	
Stage Maximum, Percent			V2	
Height Average			7.25	IN
Height Minimum, Maximum			5.50	9

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Pest Stage At Each Application		
	A	B
Pest 1 Code, Type, Scale	IPOSS W BBCH	IPOSS W BBCH
Height Average		2 in
Height Minimum, Maximum		1.25 2.75
Density Average		1.875 FT2
Density Minimum, Maximum		1 3
Pest 2 Code, Type, Scale	AMBTR W BBCH	AMBTR W BBCH
Height Average		0.75 IN
Height Minimum, Maximum		0 1.50
Density Average		0.125 FT2
Density Minimum, Maximum		0 1
Pest 3 Code, Type, Scale	CYPES W BBCH	CYPES W BBCH
Height Average		1 IN
Height Minimum, Maximum		0 2
Density Average		0.125 FT2
Density Minimum, Maximum		0 1
Pest 4 Code, Type, Scale	ERICA W BBCH	ERICA W BBCH
Height Average		2.625 IN
Height Minimum, Maximum		0.50 4.75
Density Average		0.75 FT2
Density Minimum, Maximum		1 3

Application Equipment		
	A	B
Appl. Equipment	SPRYBAC	SPRYBAC
Operation Pressure	32 PSI	32 PSI
Nozzle Type	XR11002	XR11002
Nozzle Spacing	20 IN	20 IN
Boom ID	Blue Tape	White Tape
Boom Length	10 FT	10 FT
Boom Height	18 IN	18 IN
Ground Speed	3 MPH	3 MPH
Carrier	WATER	WATER
Application Amount	15 GAL/AC	15 GAL/AC
Mix Overage	436 mL	436 mL
Mix Size	2 L	2 L
Propellant	COMCO2	COMCO2

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EXPANDING RESIDUAL WITH ALITE 27

Trial ID: 20-20_SOY-REC Location: Trial Year: 2020
 Protocol ID: MKD-H-2020-US-D62-A-01.0 Investigator (Creator): Travis Legleiter
 Project ID: Study Director: Jared Roskamp
 Sponsor Contact:

Pest Type	W Weed DIGSA	W Weed AMBTR	W Weed AMACH	W Weed IPOSS	W Weed ERICA	W Weed DIGSA												
Pest Code	large crabgrass	Giant ragweed	Green pigweed	Morning glory	Canada horseweed	large crabgrass												
Pest Name																		
Crop Type, Code	C GLXMA																	
Crop Scientific Name	Glycine max																	
Crop Name	Soybean																	
Rating Date	7-23-2020	7-23-2020	7-23-2020	7-23-2020	7-23-2020	7-29-2020												
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P												
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN												
Rating Unit	%	%	%	%	%	%												
Number of Subsamples	1	1	1	1	1	1												
Data Entry Date	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020												
Rating Timing																		
Days After First/Last Applic.	45 17	45 17	45 17	45 17	45 17	51 23												
Trt-Eval Interval																		
Days After Emergence																		
ARM Action Codes					AA													
Number of Decimals																		
Trt Treatment	Rate	Appl	1		2		3		4		5		6		7		8	
No. Name	Rate Unit	Code Plot	1		2		3		4		5		6		7		8	
1 CHECK		101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		207	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		305	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		402	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 ZIDUA SC	4.0 FL OZ/A	A 102	0.0	100.0	97.0	100.0	97.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
LIBERTY 280 SL	32.0 FL OZ/A	B 203	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 310	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Amsol AMS	3 LB AI/A	B 403	0.0	100.0	100.0	100.0	97.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
		Mean =	0.0	100.0	99.3	100.0	98.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
3 ZIDUA SC	4.0 FL OZ/A	A 103	0.0	100.0	97.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	98.0	100.0	100.0
ALITE 27	3.0 FL OZ/A	A 204	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
LIBERTY 280 SL	32.0 FL OZ/A	B 302	0.0	96.0	100.0	100.0	95.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 410	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Amsol AMS	3 LB AI/A	B																
		Mean =	0.0	99.0	99.3	100.0	98.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	99.5	100.0	100.0
4 ZIDUA PRO	4.5 FL OZ/A	A 104	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
LIBERTY 280 SL	32.0 FL OZ/A	B 205	0.0	100.0	100.0	100.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 301	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Amsol AMS	3 LB AI/A	B 409	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
		Mean =	0.0	100.0	100.0	100.0	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
5 ZIDUA PRO	4.5 FL OZ/A	A 105	0.0	100.0	97.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
ALITE 27	3.0 FL OZ/A	A 202	0.0	100.0	100.0	100.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	98.0	100.0	100.0
LIBERTY 280 SL	32.0 FL OZ/A	B 303	0.0	100.0	100.0	100.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 404	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Amsol AMS	3 LB AI/A	B																
		Mean =	0.0	100.0	99.3	100.0	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	99.5	100.0	100.0

d=Means are reported in de-transformed data units

University of Kentucky

Pest Type Pest Code Pest Name Crop Type, Code Crop Scientific Name Crop Name Rating Date Part Rated Rating Type Rating Unit Number of Subsamples Data Entry Date Rating Timing Days After First/Last Applic. Trt-Eval Interval Days After Emergence ARM Action Codes Number of Decimals		W Weed DIGSA large crabgrass	W Weed AMBTR Giant ragweed	W Weed AMACH Green pigweed	W Weed IPOSS Morning glory	W Weed ERICA Canada horseweed	C GLXMA Glycine max Soybean 7-23-2020 PLANT P PHYGEN % 1 11-16-2020 45 17	C GLXMA Glycine max Soybean 7-29-2020 PLANT P PHYGEN % 1 11-16-2020 51 23	W Weed DIGSA large crabgrass 7-29-2020 PLANT P CONTRO % 1 11-16-2020 51 23	
Trt Treatment No. Name	Rate Rate Unit	Appl Code Plot	1	2	3	4	5	6	7	8
6 ZIDUA PRO ALITE 27	4.5 FL OZ/A 3.0 FL OZ/A	A 106 A 210 308 401 Mean =	0.0 100.0 100.0 100.0 0.0	100.0 100.0 100.0 100.0 100.0	70.0 70.0 70.0 60.0 67.5	95.0 100.0 100.0 90.0 96.3	100.0 100.0 100.0 70.0 92.5	70.0 70.0 60.0 50.0 62.7d	0.0 0.0 0.0 0.0 0.0	90.0 100.0 100.0 100.0 97.5
7 MATADOR LIBERTY 280 SL ROUNDUP POWERMAX II Amsol AMS	43.0 FL OZ/A 32.0 FL OZ/A 32.0 FL OZ/A 3 LB AI/A	A 107 B 206 B 309 B 407 Mean =	0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0	100.0 97.0 100.0 90.0 96.8	100.0 100.0 100.0 100.0 100.0	100.0 97.0 100.0 100.0 99.3	100.0 100.0 100.0 90.0 99.4d	0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0
8 MATADOR ALITE 27 LIBERTY 280 SL ROUNDUP POWERMAX II Amsol AMS	43.0 FL OZ/A 3.0 FL OZ/A 32.0 FL OZ/A 32.0 FL OZ/A 3 LB AI/A	A 108 A 209 B 307 B 406 B Mean =	0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0	97.0 100.0 100.0 100.0 99.3	100.0 100.0 100.0 100.0 100.0	98.0 95.0 100.0 100.0 100.0d	100.0 100.0 100.0 100.0 0.0	0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0
9 SONIC LIBERTY 280 SL ROUNDUP POWERMAX II Amsol AMS	5.0 OZ WT/A 32.0 FL OZ/A 32.0 FL OZ/A 3 LB AI/A	A 109 B 208 B 306 B 408 Mean =	0.0 0.0 0.0 0.0 0.0	100.0 95.0 100.0 97.0 98.0	100.0 97.0 100.0 100.0 99.3	100.0 100.0 100.0 100.0 100.0	100.0 100.0 100.0 100.0 100.0d	100.0 100.0 100.0 100.0 0.0	0.0 0.0 0.0 0.0 0.0	100.0 100.0 97.0 100.0 99.3
10 SONIC ALITE 27 LIBERTY 280 SL ROUNDUP POWERMAX II Amsol AMS	5.0 OZ WT/A 3.0 FL OZ/A 32.0 FL OZ/A 32.0 FL OZ/A 3 LB AI/A	A 110 A 201 B 304 B 405 B Mean =	0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0	95.0 95.0 100.0 100.0 97.5	100.0 100.0 100.0 100.0 100.0	100.0 100.0 95.0 100.0 98.8	100.0 100.0 100.0 100.0 100.0d	0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0

d=Means are reported in de-transformed data units

University of Kentucky

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed										
Pest Code	AMBTR	AMACH	IPOSS	ERICA	DIGSA	AMBTR	AMACH	IPOSS										
Pest Name	Giant ragweed	Green pigweed	Morning glory	Canada horseweed	large crabgrass	Giant ragweed	Green pigweed	Morning glory										
Crop Type, Code																		
Crop Scientific Name																		
Crop Name																		
Rating Date	7-29-2020	7-29-2020	7-29-2020	7-29-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020										
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P										
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO										
Rating Unit	%	%	%	%	%	%	%	%										
Number of Subsamples	1	1	1	1	1	1	1	1										
Data Entry Date	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020										
Rating Timing																		
Days After First/Last Applic.	51 23	51 23	51 23	51 23	56 28	56 28	56 28	56 28										
Trt-Eval Interval																		
Days After Emergence																		
ARM Action Codes	AA		AA															
Number of Decimals																		
Trt Treatment	Rate	Appl	9		10		11		12		13		14		15		16	
No. Name	Rate Unit	Code Plot																
1 CHECK		101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		207	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		305	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		402	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		Mean =	0.0d	0.0	0.0d	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2 ZIDUA SC	4.0 FL OZ/A	A 102	90.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	85.0	100.0	100.0	100.0	100.0	100.0	100.0	
LIBERTY 280 SL	32.0 FL OZ/A	B 203	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.0	97.0	
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 310	100.0	100.0	97.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.0	97.0	
Amsol AMS	3 LB AI/A	B 403	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0	
		Mean =	98.7d	100.0	99.8d	100.0	100.0	100.0	100.0	100.0	96.3	100.0	100.0	100.0	100.0	98.0	98.0	
3 ZIDUA SC	4.0 FL OZ/A	A 103	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.0	100.0	100.0	100.0	100.0	100.0	100.0	
ALITE 27	3.0 FL OZ/A	A 204	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
LIBERTY 280 SL	32.0 FL OZ/A	B 302	90.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	80.0	100.0	100.0	100.0	100.0	100.0	100.0	
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 410	95.0	100.0	90.0	100.0	100.0	100.0	100.0	100.0	80.0	100.0	100.0	100.0	100.0	85.0	85.0	
Amsol AMS	3 LB AI/A	B																
		Mean =	98.1d	100.0	99.4d	100.0	100.0	100.0	100.0	100.0	88.8	100.0	100.0	100.0	100.0	96.3	96.3	
4 ZIDUA PRO	4.5 FL OZ/A	A 104	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
LIBERTY 280 SL	32.0 FL OZ/A	B 205	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 301	95.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.0	100.0	100.0	100.0	100.0	100.0	100.0	
Amsol AMS	3 LB AI/A	B 409	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
		Mean =	99.7d	100.0	100.0d	100.0	100.0	100.0	100.0	100.0	98.8	100.0	100.0	100.0	100.0	100.0	100.0	
5 ZIDUA PRO	4.5 FL OZ/A	A 105	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
ALITE 27	3.0 FL OZ/A	A 202	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.0	97.0	
LIBERTY 280 SL	32.0 FL OZ/A	B 303	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 404	96.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Amsol AMS	3 LB AI/A	B																
		Mean =	99.7d	100.0	100.0d	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	99.3	

d=Means are reported in de-transformed data units

University of Kentucky

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed										
Pest Code	AMBTR	AMACH	IPOSS	ERICA	DIGSA	AMBTR	AMACH	IPOSS										
Pest Name	Giant ragweed	Green pigweed	Morning glory	Canada horseweed	large crabgrass	Giant ragweed	Green pigweed	Morning glory										
Crop Type, Code																		
Crop Scientific Name																		
Crop Name																		
Rating Date	7-29-2020	7-29-2020	7-29-2020	7-29-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020										
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P										
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO										
Rating Unit	%	%	%	%	%	%	%	%										
Number of Subsamples	1	1	1	1	1	1	1	1										
Data Entry Date	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020										
Rating Timing																		
Days After First/Last Applic.	51 23	51 23	51 23	51 23	56 28	56 28	56 28	56 28										
Trt-Eval Interval																		
Days After Emergence																		
ARM Action Codes	AA		AA															
Number of Decimals																		
Trt Treatment	Rate	Appl	9		10		11		12		13		14		15		16	
No. Name	Rate Unit	Code Plot																
6 ZIDUA PRO	4.5 FL OZ/A	A 106	50.0	100.0	97.0	100.0	90.0	60.0	100.0	97.0	100.0	60.0	100.0	100.0	97.0	100.0	90.0	60.0
ALITE 27	3.0 FL OZ/A	A 210	70.0	100.0	90.0	100.0	100.0	70.0	100.0	100.0	100.0	70.0	100.0	100.0	100.0	100.0	70.0	100.0
		308	70.0	100.0	100.0	100.0	100.0	70.0	100.0	100.0	100.0	70.0	100.0	100.0	100.0	100.0	70.0	100.0
		401	50.0	100.0	80.0	100.0	50.0	100.0	45.0	100.0	100.0	45.0	100.0	100.0	100.0	100.0	70.0	100.0
		Mean =	60.2d	100.0	94.4d	100.0	78.8	97.5	58.8	100.0	100.0	58.8	100.0	100.0	100.0	100.0	89.3	100.0
7 MATADOR	43.0 FL OZ/A	A 107	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LIBERTY 280 SL	32.0 FL OZ/A	B 206	100.0	100.0	97.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.0	100.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 309	100.0	100.0	100.0	100.0	100.0	100.0	97.0	100.0	100.0	97.0	100.0	100.0	100.0	100.0	100.0	100.0
Amsol AMS	3 LB AI/A	B 407	90.0	100.0	100.0	100.0	100.0	100.0	95.0	100.0	100.0	95.0	100.0	100.0	100.0	100.0	97.0	100.0
		Mean =	99.4d	100.0	99.8d	100.0	100.0	100.0	98.0	100.0	100.0	98.0	100.0	100.0	100.0	100.0	98.5	100.0
8 MATADOR	43.0 FL OZ/A	A 108	100.0	100.0	100.0	100.0	100.0	90.0	100.0	100.0	100.0	90.0	100.0	100.0	100.0	100.0	97.0	100.0
ALITE 27	3.0 FL OZ/A	A 209	100.0	100.0	97.0	100.0	100.0	97.0	100.0	100.0	100.0	97.0	100.0	100.0	100.0	100.0	97.0	100.0
LIBERTY 280 SL	32.0 FL OZ/A	B 307	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 406	97.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Amsol AMS	3 LB AI/A	B																
		Mean =	99.8d	100.0	99.8d	100.0	100.0	100.0	96.8	100.0	100.0	96.8	100.0	100.0	100.0	100.0	99.3	100.0
9 SONIC	5.0 OZ WT/A	A 109	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LIBERTY 280 SL	32.0 FL OZ/A	B 208	100.0	100.0	100.0	100.0	100.0	97.0	100.0	100.0	100.0	97.0	100.0	100.0	100.0	100.0	100.0	100.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 306	100.0	100.0	100.0	100.0	97.0	100.0	95.0	100.0	100.0	95.0	100.0	100.0	100.0	100.0	100.0	100.0
Amsol AMS	3 LB AI/A	B 408	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		Mean =	100.0d	100.0	100.0d	100.0	99.3	99.3	98.0	100.0	100.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0
10 SONIC	5.0 OZ WT/A	A 110	100.0	100.0	97.0	100.0	100.0	95.0	100.0	100.0	100.0	95.0	100.0	100.0	100.0	100.0	97.0	100.0
ALITE 27	3.0 FL OZ/A	A 201	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LIBERTY 280 SL	32.0 FL OZ/A	B 304	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 405	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Amsol AMS	3 LB AI/A	B																
		Mean =	100.0d	100.0	99.8d	100.0	100.0	100.0	98.8	100.0	100.0	98.8	100.0	100.0	100.0	100.0	99.3	100.0

d=Means are reported in de-transformed data units

University of Kentucky

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	ERICA	DIGSA	AMBTR	AMACH	IPOSS	ERICA	AMBTR		
Pest Name	Canada horseweed	large crabgrass	Giant ragweed	Green pigweed	Morning glory	Canada horseweed	Giant ragweed		
Crop Type, Code									
Crop Scientific Name									
Crop Name									
Rating Date	8-3-2020	8-11-2020	8-11-2020	8-11-2020	8-11-2020	8-11-2020	8-21-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Data Entry Date	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020		
Rating Timing									
Days After First/Last Applic.	56 28	64 36	64 36	64 36	64 36	64 36	74 46		
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes									
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	17	18	19	20	21	22	23
1 CHECK		101	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		207	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		305	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		402	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 ZIDUA SC	4.0 FL OZ/A	A 102	100.0	100.0	85.0	100.0	100.0	100.0	75.0
LIBERTY 280 SL	32.0 FL OZ/A	B 203	100.0	100.0	97.0	100.0	97.0	100.0	97.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 310	100.0	100.0	100.0	100.0	97.0	100.0	98.0
Amsol AMS	3 LB AI/A	B 403	100.0	100.0	95.0	100.0	98.0	100.0	90.0
		Mean =	100.0	100.0	94.3	100.0	98.0	100.0	90.0
3 ZIDUA SC	4.0 FL OZ/A	A 103	100.0	100.0	90.0	100.0	100.0	100.0	80.0
ALITE 27	3.0 FL OZ/A	A 204	100.0	100.0	95.0	100.0	100.0	100.0	97.0
LIBERTY 280 SL	32.0 FL OZ/A	B 302	100.0	100.0	80.0	100.0	100.0	100.0	90.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 410	100.0	100.0	75.0	100.0	85.0	100.0	90.0
Amsol AMS	3 LB AI/A	B							
		Mean =	100.0	100.0	85.0	100.0	96.3	100.0	89.3
4 ZIDUA PRO	4.5 FL OZ/A	A 104	100.0	100.0	95.0	100.0	100.0	100.0	95.0
LIBERTY 280 SL	32.0 FL OZ/A	B 205	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 301	100.0	100.0	95.0	100.0	100.0	100.0	100.0
Amsol AMS	3 LB AI/A	B 409	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		Mean =	100.0	100.0	97.5	100.0	100.0	100.0	98.8
5 ZIDUA PRO	4.5 FL OZ/A	A 105	100.0	100.0	97.0	100.0	100.0	100.0	95.0
ALITE 27	3.0 FL OZ/A	A 202	100.0	100.0	100.0	100.0	97.0	100.0	100.0
LIBERTY 280 SL	32.0 FL OZ/A	B 303	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 404	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Amsol AMS	3 LB AI/A	B							
		Mean =	100.0	100.0	99.3	100.0	99.3	100.0	98.8

d=Means are reported in de-transformed data units

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	ERICA	DIGSA	AMBTR	AMACH	IPOSS	ERICA	AMBTR		
Pest Name	Canada horseweed	large crabgrass	Giant ragweed	Green pigweed	Morning glory	Canada horseweed	Giant ragweed		
Crop Type, Code									
Crop Scientific Name									
Crop Name									
Rating Date	8-3-2020	8-11-2020	8-11-2020	8-11-2020	8-11-2020	8-11-2020	8-21-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Data Entry Date	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020		
Rating Timing									
Days After First/Last Applic.	56 28	64 36	64 36	64 36	64 36	64 36	74 46		
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes									
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	17	18	19	20	21	22	23
6 ZIDUA PRO	4.5 FL OZ/A	A 106	100.0	90.0	60.0	100.0	97.0	100.0	50.0
ALITE 27	3.0 FL OZ/A	A 210	95.0	100.0	60.0	100.0	90.0	95.0	85.0
		308	80.0	100.0	60.0	100.0	100.0	80.0	50.0
		401	50.0	100.0	50.0	100.0	70.0	50.0	0.0
		Mean =	81.3	97.5	57.5	100.0	89.3	81.3	46.3
7 MATADOR	43.0 FL OZ/A	A 107	100.0	100.0	97.0	100.0	100.0	100.0	97.0
LIBERTY 280 SL	32.0 FL OZ/A	B 206	100.0	100.0	100.0	100.0	97.0	100.0	97.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 309	100.0	100.0	97.0	100.0	100.0	100.0	97.0
Amsol AMS	3 LB AI/A	B 407	100.0	100.0	90.0	100.0	95.0	100.0	95.0
		Mean =	100.0	100.0	96.0	100.0	98.0	100.0	96.5
8 MATADOR	43.0 FL OZ/A	A 108	100.0	100.0	90.0	100.0	100.0	100.0	95.0
ALITE 27	3.0 FL OZ/A	A 209	100.0	100.0	97.0	100.0	97.0	100.0	100.0
LIBERTY 280 SL	32.0 FL OZ/A	B 307	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 406	100.0	100.0	95.0	100.0	100.0	100.0	95.0
Amsol AMS	3 LB AI/A	B							
		Mean =	100.0	100.0	95.5	100.0	99.3	100.0	97.5
9 SONIC	5.0 OZ WT/A	A 109	100.0	100.0	97.0	100.0	100.0	100.0	95.0
LIBERTY 280 SL	32.0 FL OZ/A	B 208	100.0	100.0	90.0	100.0	100.0	100.0	95.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 306	97.0	97.0	90.0	100.0	100.0	97.0	90.0
Amsol AMS	3 LB AI/A	B 408	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		Mean =	99.3	99.3	94.3	100.0	100.0	99.3	95.0
10 SONIC	5.0 OZ WT/A	A 110	100.0	100.0	90.0	100.0	97.0	100.0	95.0
ALITE 27	3.0 FL OZ/A	A 201	100.0	100.0	97.0	100.0	100.0	100.0	95.0
LIBERTY 280 SL	32.0 FL OZ/A	B 304	100.0	100.0	100.0	100.0	100.0	100.0	97.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 405	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Amsol AMS	3 LB AI/A	B							
		Mean =	100.0	100.0	96.8	100.0	99.3	100.0	96.8

d=Means are reported in de-transformed data units

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EXPANDING RESIDUAL WITH ALITE 27

Trial ID: 20-20_SOY-REC Location: Trial Year: 2020
 Protocol ID: MKD-H-2020-US-D62-A-01.0 Investigator (Creator): Travis Legleiter
 Project ID: Study Director: Jared Roskamp
 Sponsor Contact:

Pest Type
 W, Weed = Weed or volunteer crop
Pest Code
 DIGSA, Digitaria sanguinalis, large crabgrass = US
 AMBTR, Ambrosia trifida, Giant ragweed = US
 AMACH, Amaranthus hybridus, Green pigweed = US
 IPOSS, Ipomoea sp., Morning glory = US
 ERICA, Erigeron canadensis, Canada horseweed = US
Crop Type Code
 C = EPPO species (Bayer) codes
 GLXMA, BSOY, Glycine max, Soybean = US
Part Rated
 PLANT = plant
 C = Crop is Part Rated
 P = Pest is Part Rated
Rating Type
 PHYGEN = phytotoxicity - general / injury
 CONTRO = control / burndown or knockdown
Rating Unit
 % = percent
ARM Action Codes
 AA = Automatic arcsine square root % transformation

Pest Type		W Weed DIGSA large crabgrass	W Weed AMBTR Giant ragweed	W Weed AMACH Green pigweed	W Weed IPOSS Morning glory	W Weed ERICA Canada horseweed		W Weed DIGSA large crabgrass
Pest Code								
Pest Name								
Crop Type, Code	C GLXMA						C GLXMA	
Crop Scientific Name	Glycine max						Glycine max	
Crop Name	Soybean						Soybean	
Rating Date	7-23-2020	7-23-2020	7-23-2020	7-23-2020	7-23-2020	7-23-2020	7-29-2020	7-29-2020
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO
Rating Unit	%	%	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1	1	1
Data Entry Date	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020
Rating Timing								
Days After First/Last Applic.	45 17	45 17	45 17	45 17	45 17	45 17	51 23	51 23
Trt-Eval Interval								
Days After Emergence								
ARM Action Codes						AA		
Number of Decimals								
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	1	2	3	4	5	6
1 CHECK			0.0 a	0.0 b	0.0 c	0.0 c	0.0 b	0.0 c
2 ZIDUA SC	4.0 FL OZ/A	A	0.0 a	100.0 a	99.3 a	100.0 a	98.5 a	100.0 a
LIBERTY 280 SL	32.0 FL OZ/A	B						
ROUNDUP POWERMAX II	32.0 FL OZ/A	B						
Amsol AMS	3 LB AI/A	B						

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Pest Type		W Weed DIGSA	W Weed AMBTR	W Weed AMACH	W Weed IPOSS	W Weed ERICA		W Weed DIGSA		
Pest Code		large crabgrass	Giant ragweed	Green pigweed	Morning glory	Canada horseweed		large crabgrass		
Pest Name										
Crop Type, Code	C GLXMA						C GLXMA			
Crop Scientific Name	Glycine max						Glycine max			
Crop Name	Soybean						Soybean			
Rating Date	7-23-2020	7-23-2020	7-23-2020	7-23-2020	7-23-2020	7-23-2020	7-29-2020	7-29-2020		
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO		
Rating Unit	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1		
Data Entry Date	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020		
Rating Timing										
Days After First/Last Applic.	45 17	45 17	45 17	45 17	45 17	45 17	51 23	51 23		
Trt-Eval Interval										
Days After Emergence										
ARM Action Codes						AA				
Number of Decimals										
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8
10 SONIC	5.0 OZ WT/A	A	0.0 a	100.0 a	97.5 a	100.0 a	98.8 a	100.0 a	0.0 a	100.0 a
ALITE 27	3.0 FL OZ/A	A								
LIBERTY 280 SL	32.0 FL OZ/A	B								
ROUNDUP POWERMAX II	32.0 FL OZ/A	B								
Amsol AMS	3 LB AI/A	B								
LSD P=.05			. .	1.49	3.72	2.20	7.43	0.68 - 7.80	. .	2.49
Standard Deviation			0.00	1.03	2.56	1.51	5.12	3.27t	0.00	1.71
CV			0.0	1.15	2.98	1.69	5.79	4.26t	0.0	1.91
Levene's F			0.00	3.644	1.052		0.777	1.565	0.00	0.837
Levene's Prob(F)			0.00*	0.004*	0.425		0.639	0.171	0.00*	0.589
Skewness			.	-2.7652*	-2.3434*	-2.7554*	-2.6621*	-2.1201*	.	-2.7567*
Kurtosis			.	5.9562*	4.239*	5.9195*	5.524*	3.2465*	.	5.9244*
Replicate F			0.000	0.441	1.189	1.000	0.561	1.937	0.000	0.962
Replicate Prob(F)			1.0000	0.7259	0.3325	0.4079	0.6456	0.1474	1.0000	0.4248
Treatment F			0.000	3752.770	613.855	1733.364	148.029	323.818	0.000	1350.313
Treatment Prob(F)			1.0000	0.0001	0.0001	0.0001	0.0001	0.0001	1.0000	0.0001

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Pest Type Pest Code Pest Name Crop Type, Code Crop Scientific Name Crop Name Rating Date Part Rated Rating Type Rating Unit Number of Subsamples Data Entry Date Rating Timing Days After First/Last Applic. Trt-Eval Interval Days After Emergence ARM Action Codes Number of Decimals	W Weed AMBTR Giant ragweed	W Weed AMACH Green pigweed	W Weed IPOSS Morning glory	W Weed ERICA Canada horseweed	W Weed DIGSA large crabgrass	W Weed AMBTR Giant ragweed	W Weed AMACH Green pigweed	W Weed IPOSS Morning glory		
	7-29-2020 PLANT P CONTRO % 1 11-16-2020 51 23 AA	7-29-2020 PLANT P CONTRO % 1 11-16-2020 51 23 AA	7-29-2020 PLANT P CONTRO % 1 11-16-2020 51 23 AA	7-29-2020 PLANT P CONTRO % 1 11-16-2020 51 23	8-3-2020 PLANT P CONTRO % 1 11-16-2020 56 28	8-3-2020 PLANT P CONTRO % 1 11-16-2020 56 28	8-3-2020 PLANT P CONTRO % 1 11-16-2020 56 28	8-3-2020 PLANT P CONTRO % 1 11-16-2020 56 28		
Trt Treatment No. Name	Rate Rate Unit	Appl Code	9	10	11	12	13	14	15	16
3 ZIDUA SC ALITE 27 LIBERTY 280 SL ROUNDUP POWERMAX II Amsol AMS	4.0 FL OZ/A 3.0 FL OZ/A 32.0 FL OZ/A 32.0 FL OZ/A 3 LB AI/A	A A B B B	98.1 a	100.0 a	99.4 ab	100.0 a	100.0 a	88.8 a	100.0 a	96.3 a
4 ZIDUA PRO LIBERTY 280 SL ROUNDUP POWERMAX II Amsol AMS	4.5 FL OZ/A 32.0 FL OZ/A 32.0 FL OZ/A 3 LB AI/A	A B B B	99.7 a	100.0 a	100.0 a	100.0 a	100.0 a	98.8 a	100.0 a	100.0 a
5 ZIDUA PRO ALITE 27 LIBERTY 280 SL ROUNDUP POWERMAX II Amsol AMS	4.5 FL OZ/A 3.0 FL OZ/A 32.0 FL OZ/A 32.0 FL OZ/A 3 LB AI/A	A A B B B	99.7 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	99.3 a
6 ZIDUA PRO ALITE 27	4.5 FL OZ/A 3.0 FL OZ/A	A A	60.2 b	100.0 a	94.4 b	78.8 b	97.5 a	58.8 b	100.0 a	89.3 a
7 MATADOR LIBERTY 280 SL ROUNDUP POWERMAX II Amsol AMS	43.0 FL OZ/A 32.0 FL OZ/A 32.0 FL OZ/A 3 LB AI/A	A B B B	99.4 a	100.0 a	99.8 ab	100.0 a	100.0 a	98.0 a	100.0 a	98.5 a
8 MATADOR ALITE 27 LIBERTY 280 SL ROUNDUP POWERMAX II Amsol AMS	43.0 FL OZ/A 3.0 FL OZ/A 32.0 FL OZ/A 32.0 FL OZ/A 3 LB AI/A	A A B B B	99.8 a	100.0 a	99.8 ab	100.0 a	100.0 a	96.8 a	100.0 a	99.3 a
9 SONIC LIBERTY 280 SL ROUNDUP POWERMAX II Amsol AMS	5.0 OZ WT/A 32.0 FL OZ/A 32.0 FL OZ/A 3 LB AI/A	A B B B	100.0 a	100.0 a	100.0 a	99.3 a	99.3 a	98.0 a	100.0 a	100.0 a

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	AMBTR	AMACH	IPOSS	ERICA	DIGSA	AMBTR	AMACH	IPOSS		
Pest Name	Giant ragweed	Green pigweed	Morning glory	Canada horseweed	large crabgrass	Giant ragweed	Green pigweed	Morning glory		
Crop Type, Code										
Crop Scientific Name										
Crop Name										
Rating Date	7-29-2020	7-29-2020	7-29-2020	7-29-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1		
Data Entry Date	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020		
Rating Timing										
Days After First/Last Applic.	51 23	51 23	51 23	51 23	56 28	56 28	56 28	56 28		
Trt-Eval Interval										
Days After Emergence										
ARM Action Codes	AA		AA							
Number of Decimals										
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	9	10	11	12	13	14	15	16
10 SONIC	5.0 OZ WT/A	A	100.0 a	100.0 a	99.8 ab	100.0 a	100.0 a	98.8 a	100.0 a	99.3 a
ALITE 27	3.0 FL OZ/A	A								
LIBERTY 280 SL	32.0 FL OZ/A	B								
ROUNDUP POWERMAX II	32.0 FL OZ/A	B								
Amsol AMS	3 LB AI/A	B								
LSD P=.05	2.16 - 13.79				2.04 - 4.71	10.66	2.42	8.27		6.91
Standard Deviation	5.82t	0.00			5.66t	7.35	1.67	5.70	0.00	4.76
CV	7.84t	0.0			7.24t	8.37	1.86	6.84	0.0	5.41
Levene's F	1.495	0.00			1.43	15.201	0.939	2.143	0.00	2.078
Levene's Prob(F)	0.195	0.00*			0.22	0.001*	0.507	0.057	0.00*	0.064
Skewness	-1.9895*	-2.7717*			-2.5277*	-2.4531*	-2.7575*	-2.0903*	-2.7717*	-2.6328*
Kurtosis	2.8857*	5.9791*			5.0454*	4.5448*	5.9268*	3.2023*	5.9791*	5.4195*
Replicate F	2.634	0.000			0.819	1.036	0.800	0.703	0.000	2.043
Replicate Prob(F)	0.0702	1.0000			0.4949	0.3924	0.5046	0.5584	1.0000	0.1315
Treatment F	95.931	0.000			96.293	73.791	1429.092	124.501	0.000	170.458
Treatment Prob(F)	0.0001	1.0000			0.0001	0.0001	0.0001	0.0001	1.0000	0.0001

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	ERICA	DIGSA	AMBTR	AMACH	IPOSS	ERICA	AMBTR		
Pest Name	Canada horseweed	large crabgrass	Giant ragweed	Green pigweed	Morning glory	Canada horseweed	Giant ragweed		
Crop Type, Code									
Crop Scientific Name									
Crop Name									
Rating Date	8-3-2020	8-11-2020	8-11-2020	8-11-2020	8-11-2020	8-11-2020	8-21-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Data Entry Date	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020		
Rating Timing									
Days After First/Last Applic.	56 28	64 36	64 36	64 36	64 36	64 36	74 46		
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes									
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	17	18	19	20	21	22	23
1 CHECK			0.0 c	0.0 b	0.0 d	0.0 b	0.0 b	0.0 c	0.0 c
2 ZIDUA SC	4.0 FL OZ/A	A	100.0 a	100.0 a	94.3 a	100.0 a	98.0 a	100.0 a	90.0 a
LIBERTY 280 SL	32.0 FL OZ/A	B							
ROUNDUP POWERMAX II	32.0 FL OZ/A	B							
Amsol AMS	3 LB AI/A	B							

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	ERICA	DIGSA	AMBTR	AMACH	IPOSS	ERICA	AMBTR		
Pest Name	Canada horseweed	large crabgrass	Giant ragweed	Green pigweed	Morning glory	Canada horseweed	Giant ragweed		
Crop Type, Code									
Crop Scientific Name									
Crop Name									
Rating Date	8-3-2020	8-11-2020	8-11-2020	8-11-2020	8-11-2020	8-11-2020	8-21-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Data Entry Date	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020		
Rating Timing									
Days After First/Last Applic.	56 28	64 36	64 36	64 36	64 36	64 36	74 46		
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes									
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	17	18	19	20	21	22	23
3 ZIDUA SC	4.0 FL OZ/A	A	100.0 a	100.0 a	85.0 b	100.0 a	96.3 a	100.0 a	89.3 a
ALITE 27	3.0 FL OZ/A	A							
LIBERTY 280 SL	32.0 FL OZ/A	B							
ROUNDUP POWERMAX II	32.0 FL OZ/A	B							
Amsol AMS	3 LB AI/A	B							
4 ZIDUA PRO	4.5 FL OZ/A	A	100.0 a	100.0 a	97.5 a	100.0 a	100.0 a	100.0 a	98.8 a
LIBERTY 280 SL	32.0 FL OZ/A	B							
ROUNDUP POWERMAX II	32.0 FL OZ/A	B							
Amsol AMS	3 LB AI/A	B							
5 ZIDUA PRO	4.5 FL OZ/A	A	100.0 a	100.0 a	99.3 a	100.0 a	99.3 a	100.0 a	98.8 a
ALITE 27	3.0 FL OZ/A	A							
LIBERTY 280 SL	32.0 FL OZ/A	B							
ROUNDUP POWERMAX II	32.0 FL OZ/A	B							
Amsol AMS	3 LB AI/A	B							
6 ZIDUA PRO	4.5 FL OZ/A	A	81.3 b	97.5 a	57.5 c	100.0 a	89.3 a	81.3 b	46.3 b
ALITE 27	3.0 FL OZ/A	A							
7 MATADOR	43.0 FL OZ/A	A	100.0 a	100.0 a	96.0 a	100.0 a	98.0 a	100.0 a	96.5 a
LIBERTY 280 SL	32.0 FL OZ/A	B							
ROUNDUP POWERMAX II	32.0 FL OZ/A	B							
Amsol AMS	3 LB AI/A	B							
8 MATADOR	43.0 FL OZ/A	A	100.0 a	100.0 a	95.5 a	100.0 a	99.3 a	100.0 a	97.5 a
ALITE 27	3.0 FL OZ/A	A							
LIBERTY 280 SL	32.0 FL OZ/A	B							
ROUNDUP POWERMAX II	32.0 FL OZ/A	B							
Amsol AMS	3 LB AI/A	B							
9 SONIC	5.0 OZ WT/A	A	99.3 a	99.3 a	94.3 a	100.0 a	100.0 a	99.3 a	95.0 a
LIBERTY 280 SL	32.0 FL OZ/A	B							
ROUNDUP POWERMAX II	32.0 FL OZ/A	B							
Amsol AMS	3 LB AI/A	B							

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	ERICA	DIGSA	AMBTR	AMACH	IPOSS	ERICA	AMBTR		
Pest Name	Canada horseweed	large crabgrass	Giant ragweed	Green pigweed	Morning glory	Canada horseweed	Giant ragweed		
Crop Type, Code									
Crop Scientific Name									
Crop Name									
Rating Date	8-3-2020	8-11-2020	8-11-2020	8-11-2020	8-11-2020	8-11-2020	8-21-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Data Entry Date	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020		
Rating Timing									
Days After First/Last Applic.	56 28	64 36	64 36	64 36	64 36	64 36	74 46		
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes									
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	17	18	19	20	21	22	23
10 SONIC	5.0 OZ WT/A	A	100.0 a	100.0 a	96.8 a	100.0 a	99.3 a	100.0 a	96.8 a
ALITE 27	3.0 FL OZ/A	A							
LIBERTY 280 SL	32.0 FL OZ/A	B							
ROUNDUP POWERMAX II	32.0 FL OZ/A	B							
Amsol AMS	3 LB AI/A	B							
LSD P=.05			10.34	2.42	7.15	.	6.89	10.34	16.96
Standard Deviation			7.13	1.67	4.93	0.00	4.75	7.13	11.69
CV			8.1	1.86	6.04	0.0	5.4	8.1	14.45
Levene's F			5.025	0.939	1.902	0.00	2.063	5.025	2.165
Levene's Prob(F)			0.001*	0.507	0.09	0.00*	0.066	0.001*	0.055
Skewness			-2.4995*	-2.7575*	-2.0633*	-2.7717*	-2.6315*	-2.4995*	-1.9458*
Kurtosis			4.7394*	5.9268*	3.1751*	5.9791*	5.4157*	4.7394*	2.295*
Replicate F			1.005	0.800	1.073	0.000	2.234	1.005	1.455
Replicate Prob(F)			0.4055	0.5046	0.3770	1.0000	0.1072	0.4055	0.2490
Treatment F			78.042	1429.092	160.392	0.000	171.151	78.042	30.912
Treatment Prob(F)			0.0001	0.0001	0.0001	1.0000	0.0001	0.0001	0.0001

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EXPANDING RESIDUAL WITH ALITE 27

Trial ID: 20-20_SOY-REC Location: Trial Year: 2020
Protocol ID: MKD-H-2020-US-D62-A-01.0 Investigator (Creator): Travis Legleiter
Project ID: Study Director: Jared Roskamp
Sponsor Contact:

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

DIGSA, Digitaria sanguinalis, large crabgrass = US

AMBTR, Ambrosia trifida, Giant ragweed = US

AMACH, Amaranthus hybridus, Green pigweed = US

IPOSS, Ipomoea sp., Morning glory = US

ERICA, Erigeron canadensis, Canada horseweed = US

Crop Type Code

C = EPPO species (Bayer) codes

GLXMA, BSOY, Glycine max, Soybean = US

Part Rated

PLANT = plant

C = Crop is Part Rated

P = Pest is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

ARM Action Codes

AA = Automatic arcsine square root % transformation

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LIBERTY EFFICACY IN ENLIST SOYBEAN

Trial ID: 20-21_SOY-REC Location: UKREC 108-C4 Trial Year: 2020
 Protocol ID: MKD-H-2020-US-D47-A-01.0 Investigator (Creator): Travis Legleiter
 Project ID: Study Director: Jared Roskamp
 Sponsor Contact:

Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate	Rate Unit	Appl Timing	Appl Code	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	CHECK									101	205	301	403
2	ZIDUA PRO	490 GA/L	SC		4.5 FL OZ/A	VL	A		4.687 mL/mx	102	207	303	408
	ENLIST DUO	398 GA/L	SL		56.0 FL OZ/A	NA	C		58.33 mL/mx				
	ZIDUA SC	500 GA/L	SC		4.0 FL OZ/A	NA	C		4.167 mL/mx				
3	ZIDUA PRO	490 GA/L	SC		4.5 FL OZ/A	VL	A		4.687 mL/mx	103	202	304	406
	LIBERTY 280 SL	280 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	ROUNDUP POWERMAX II	540 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	ZIDUA SC	500 GA/L	SC		4.0 FL OZ/A	NA	B		4.167 mL/mx				
	Amsol AMS	3.4 lba/gal	SL		3.0 LB AI/A	NA	B		117.6 mL/mx				
4	ZIDUA PRO	490 GA/L	SC		4.5 FL OZ/A	VL	A		4.687 mL/mx	104	203	308	405
	LIBERTY 280 SL	280 GA/L	SL		32.0 FL OZ/A	NA	C		33.33 mL/mx				
	ENLIST ONE	456 GA/L	SL		32.0 FL OZ/A	NA	C		33.33 mL/mx				
	ZIDUA SC	500 GA/L	SC		4.0 FL OZ/A	NA	C		4.167 mL/mx				
	Amsol AMS	3.4 lba/gal	SL		3.0 LB AI/A	NA	C		117.6 mL/mx				
5	ZIDUA PRO	490 GA/L	SC		4.5 FL OZ/A	VL	A		4.687 mL/mx	105	208	306	407
	LIBERTY 280 SL	280 GA/L	SL		32.0 FL OZ/A	NA	C		33.33 mL/mx				
	ENLIST ONE	456 GA/L	SL		32.0 FL OZ/A	NA	C		33.33 mL/mx				
	ROUNDUP POWERMAX II	540 GA/L	SL		32.0 FL OZ/A	NA	C		33.33 mL/mx				
	ZIDUA SC	500 GA/L	SC		4.0 FL OZ/A	NA	C		4.167 mL/mx				
Amsol AMS	3.4 lba/gal	SL		3.0 LB AI/A	NA	C		117.6 mL/mx					
6	ZIDUA PRO	490 GA/L	SC		4.5 FL OZ/A	VL	A		4.687 mL/mx	106	201	307	402
	LIBERTY 280 SL	280 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	ROUNDUP POWERMAX II	540 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	ZIDUA SC	500 GA/L	SC		4.0 FL OZ/A	NA	B		4.167 mL/mx				
	Amsol AMS	3.4 lba/gal	SL		3.0 LB AI/A	NA	B		117.6 mL/mx				
ENLIST DUO	398 GA/L	SL		56.0 FL OZ/A	NA3	E		58.33 mL/mx					
7	ZIDUA PRO	490 GA/L	SC		4.5 FL OZ/A	VL	A		4.687 mL/mx	107	204	305	404
	ENLIST DUO	398 GA/L	SL		56.0 FL OZ/A	NA	C		58.33 mL/mx				
	WARRANT	360 GA/L	CS		48.0 FL OZ/A	NA	C		50.0 mL/mx				
	LIBERTY 280 SL	280 GA/L	SL		32.0 FL OZ/A	NA3	D		33.33 mL/mx				
	ROUNDUP POWERMAX II	540 GA/L	SL		32.0 FL OZ/A	NA3	D		33.33 mL/mx				
Amsol AMS	3.4 lba/gal	SL		3.0 LB AI/A	NA3	D		117.6 mL/mx					
8	ZIDUA PRO	490 GA/L	SC		4.5 FL OZ/A	VL	A		4.687 mL/mx	108	206	302	401
	LIBERTY 280 SL	280 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	ROUNDUP POWERMAX II	540 GA/L	SL		32.0 FL OZ/A	NA	B		33.33 mL/mx				
	ZIDUA SC	500 GA/L	SC		4.0 FL OZ/A	NA	B		4.167 mL/mx				
	Amsol AMS	3.4 lba/gal	SL		3.0 LB AI/A	NA	B		117.6 mL/mx				
	LIBERTY 280 SL	280 GA/L	SL		32.0 FL OZ/A	NA3	D		33.33 mL/mx				
	ROUNDUP POWERMAX II	540 GA/L	SL		32.0 FL OZ/A	NA3	D		33.33 mL/mx				
Amsol AMS	3.4 lba/gal	SL		3.0 LB AI/A	NA3	D		117.6 mL/mx					

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Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
41.016	mL	ZIDUA PRO	490	GA/L	SC	
218.750	mL	ENLIST DUO	398	GA/L	SL	
31.250	mL	ZIDUA SC	500	GA/L	SC	
291.666	mL	LIBERTY 280 SL	280	GA/L	SL	
250.000	mL	ROUNDUP POWERMAX II	540	GA/L	SL	
1,029.300	mL	Amsol AMS	3.4	lba/gal	SL	
83.333	mL	ENLIST ONE	456	GA/L	SL	
62.500	mL	WARRANT	360	GA/L	CS	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

General Trial Information

Study Director: Jared Roskamp
Investigator: Travis Legleiter **Title:** Assistant Extension Professor

Trial Status: E established
ARM Trial Created On: 4-8-2020 **Trial Usage/Type:** 8

Trial Location

City: Princeton **Country:** USA United States
State/Prov.: Kentucky
Postal Code: 42445

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Role: STYDIR study director
Study Director: Jared Roskamp

Role: INVEST investigator
Investigator: Travis Legleiter **Title:** Assistant Extension Professor

Organization: University of Kentucky
Address 1: 348 University Drive **Phone No.:** 859-562-1323
Country: USA United States **E-mail:** Travis.Legleiter@uky.edu
City: Princeton, KY **Postal Code:** 42445

Crop Description

Crop 1: C GLXMA Glycine max Soybean
Stage Scale: BBCH

Variety: P41T07E
Planting Date: 6-8-2020 **Planting Rate:** 140000 S/A
Depth: 1.5 IN

Rows per Plot: 7 **Planting Method:** PLANTD planted
Row Spacing: 15 IN **Planting Equipment:** VP vacuum planter

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Pest Description

Pest 1 Type: W **Code:** ERICA *Erigeron canadensis*
Common Name: Canada horseweed **Stage Scale:** BBCH

Pest 2 Type: W **Code:** IPOSS *Ipomoea* sp.
Common Name: Morning glory **Stage Scale:** BBCH

Pest 3 Type: W **Code:** AMACH *Amaranthus hybridus*
Common Name: Green pigweed **Stage Scale:** BBCH

Pest 4 Type: W **Code:** DIGSS *Digitaria* sp.
Common Name: Crabgrass **Stage Scale:** BBCH

Site and Design

Treated Plot Width: 10 FT **Site Type:** FIELD field
Treated Plot Length: 30 FT **Experimental Unit:** 1 PLOT plot
Treated Plot Area: 300.0 FT2 **Treatments:** 8 **Tillage Type:** NOTILL no-till
Replications: 4 **Study Design:** RACOB L Randomized Complete Block (RCB)

Maintenance

No.	Date	Type	Maintenance Product Name	Form Conc	Form Unit	Form Type	Description	Rate	Rate Unit	Tank Mix
1.	4-6-2020	FERT	DAP	46	% P2O5	GR	18-46-0	100	LB/A	no
2.	4-16-2020	HERB	Cornerstone Plus	3	LBAE/GAL	L		48	FLOZ/A	yes
3.	4-16-2020	HERB	2,4-D LV6	6	LBA/GAL	L		11	FLOZ/A	yes
4.	6-8-2020	HERB	Gramoxone	2	LBA/GAL	L		3	PT/A	no

Field Prep./Maintenance:

4/6/20- Applied 100 lbs/acre rate of DAP.

4/16/20- Sprayed 48 fl oz of CornerStone Plus, 11 oz/a 2,4-D LV6, AMS 2 1/2 % V/V (Sprayed back half of plot)

Soil Description

Description Name: 108-C4
% Sand: 4.2 **% OM:** 2.6 **Texture:** SIL silt loam
% Silt: 80.8 **pH:** 5.25 **Soil Name:** Crider Silt Loam
% Clay: 15.1 **CEC:** 12.7

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Application Description															
	A			B			C			D		E			
Application Date	6-8-2020			7-2-2020			7-2-2020			7-14-2020		7-14-2020			
Appl. Start Time	1:28 PM			9:26 AM			9:26 AM			10:20 AM		10:20 AM			
Appl. Stop Time	1:44 PM			9:53 AM			9:53 AM			10:38 AM		10:38 AM			
Application Method	SPRAY			SPRAY			SPRAY			SRPAY		SRPAY			
Application Placement	SOIL			FOLIAR			FOLIAR			FOLIAR		FOLIAR			
Applied By	JLG														
Air Temperature Start, Stop	86.1	88.4	F	85.3	86.2	F	85.3	86.2	F	94.2	95.0	F	94.2	95.0	F
% Relative Humidity Start, Stop	58.6	59.9		77.1	65.4		77.1	65.4		43.7	58.8		43.7	58.8	
Wind Velocity+Dir. Start	5.2	MPH	E	1.7	MPH		1.7	MPH		SE			SE		
Wind Velocity+Dir. Stop	6.5	MPH	E	1.1	MPH		1.1	MPH		SE			SE		
Wind Velocity+Dir. Max	10.3	MPH	E	4.3	MPH		4.3	MPH		SE			SE		
Wet Leaves (Y/N)	N no			N no			N no								
Soil Temperature	73	F		70	F		70	F		72	F		72	F	
Soil Moisture	DRY			DAMP			DAMP			DAMP		DAMP			
% Cloud Cover	90			100			100			0		0			

Crop Stage At Each Application													
	A			B			C			D		E	
Crop 1 Code, BBCH Scale	GLXMA BSOY			GLXMA BSOY			GLXMA BSOY			GLXMA BSOY		GLXMA BSOY	
Stage Majority, Percent				13			13			17		17	
Stage Minimum, Percent				12			12			15		15	
Stage Maximum, Percent				13			13			18		18	
Height Average				6.375 IN			6.375 IN			13 IN		13 IN	
Height Minimum, Maximum				4.25 8.5			4.25 8.5			8.5 16.25		8.5 16.25	

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Pest Stage At Each Application					
	A	B	C	D	E
Pest 1 Code, Type, Scale	ERICA W BBCH	ERICA W BBCH	ERICA W BBCH	ERICA W BBCH	ERICA W BBCH
Height Average		2 IN	2 IN		
Height Minimum, Maximum		1.25 5.25	1.25 5.25		
Density Average		1.5 FT2	1.5 FT2		
Density Minimum, Maximum		0 5	0 5		
Pest 2 Code, Type, Scale	IPOSS W BBCH	IPOSS W BBCH	IPOSS W BBCH	IPOSS W BBCH	IPOSS W BBCH
Height Average		2 IN	2 IN		
Height Minimum, Maximum		1.25 2.75	1.25 2.75		
Density Average		1.25 FT2	1.25 FT2		
Density Minimum, Maximum		0 3	0 3		
Pest 3 Code, Type, Scale	AMACH W BBCH	AMACH W BBCH	AMACH W BBCH	AMACH W BBCH	AMACH W BBCH
Height Average		1 IN	1 IN		
Height Minimum, Maximum		0 1.5	0 1.5		
Density Average		0.125 FT2	0.125 FT2		
Density Minimum, Maximum		0 1	0 1		
Pest 4 Code, Type, Scale	DIGSS W BBCH	DIGSS W BBCH	DIGSS W BBCH	DIGSS W BBCH	DIGSS W BBCH
Height Average		0.125 IN	0.125 IN		
Height Minimum, Maximum		0 0.75	0 0.75		
Density Average		0.125 FT2	0.125 FT2		
Density Minimum, Maximum		0 1	0 1		

Application Equipment					
	A	B	C	D	E
Appl. Equipment	SPRYBAC	SPRYBAC	SPRYBAC	SPRYBAC	SPRYBAC
Operation Pressure	31 PSI	32 PSI	34 PSI	32 PSI	35 PSI
Nozzle Type	XR11002	XR11002	AIXR11002	XR11002	AIXR11002
Nozzle Size		02	02	02	02
Nozzle Spacing	20 IN	20 IN	20 IN	20 IN	20 IN
Boom ID	Red Tape	White Tape	White Tape	Blue Tape	Blue Tape
Boom Length	10 FT	10 FT	10 FT	10 FT	10 FT
Boom Height	18 IN	18 IN	18 IN	18 IN	18 IN
Ground Speed	3 MPH	3 MPH	3 MPH	3 MPH	3 MPH
Carrier	WATER	WATER	WATER	WATER	WATER
Application Amount	15 GAL/AC	15 GAL/AC	15 GAL/AC	15 GAL/AC	15 GAL/AC
Mix Overage	436 mL	436 mL	436 mL	436 mL	436 mL
Mix Size	2 L	2 L	2 L	2 L	2 L
Propellant	COMCO2	COMCO2	COMCO2	COMCO2	COMCO2

Protocol Equipment Comment:
Use XR, TTJ, or TT nozzle to produce med-coarse droplets

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LIBERTY EFFICACY IN ENLIST SOYBEAN

Trial ID: 20-21_SOY-REC Location: UKREC 108-C4 Trial Year: 2020
 Protocol ID: MKD-H-2020-US-D47-A-01.0 Investigator (Creator): Travis Legleiter
 Project ID: Study Director: Jared Roskamp
 Sponsor Contact:

Pest Type		W Weed	W Weed	W Weed		W Weed	W Weed	W Weed			
Pest Code		DIGSA	IPOSS	AMBTR		DIGSA	IPOSS	AMBTR			
Pest Name		large crabgrass	Morning glory	Giant ragweed		large crabgrass	Morning glory	Giant ragweed			
Crop Type, Code	C GLXMA				C GLXMA				C GLXMA		
Crop Scientific Name	Glycine max				Glycine max				Glycine max		
Crop Name	Soybean				Soybean				Soybean		
Rating Date	7-15-2020	7-15-2020	7-15-2020	7-15-2020	7-23-2020	7-23-2002	7-23-2002	7-23-2020	7-29-2020		
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT C		
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN		
Rating Unit	%	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Data Entry Date	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020		
Rating Timing											
Days After First/Last Applic.	37 1	37 1	37 1	37 1	45 9	45 9	-6530 -6530	45 9	51 15		
Trt-Eval Interval											
Days After Emergence											
ARM Action Codes					ET3						
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7	8	9
1 CHECK		101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		205	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		301	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		403	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 ZIDUA PRO	4.5 FL OZ/A A	102	2.0	100.0	100.0	100.0	0.0	100.0	100.0	97.0	0.0
ENLIST DUO	56.0 FL OZ/A C	207	0.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
ZIDUA SC	4.0 FL OZ/A C	303	1.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
		408	1.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
		Mean =	1.0	100.0	100.0	100.0	0.0	100.0	100.0	99.3	0.0
3 ZIDUA PRO	4.5 FL OZ/A A	103	4.0	100.0	100.0	100.0	2.0	100.0	97.0	100.0	0.0
LIBERTY 280 SL	32.0 FL OZ/A B	202	2.0	100.0	95.0	95.0	0.0	100.0	97.0	97.0	0.0
ROUNDUP POWERMAX II	32.0 FL OZ/A B	304	5.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
ZIDUA SC	4.0 FL OZ/A B	406	0.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
Amsol AMS	3.0 LB AI/A B										
		Mean =	2.8	100.0	98.8	98.8	0.5	100.0	98.5	99.3	0.0
4 ZIDUA PRO	4.5 FL OZ/A A	104	5.0	100.0	100.0	97.0	0.0	100.0	100.0	100.0	0.0
LIBERTY 280 SL	32.0 FL OZ/A C	203	5.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
ENLIST ONE	32.0 FL OZ/A C	308	2.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
ZIDUA SC	4.0 FL OZ/A C	405	2.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
Amsol AMS	3.0 LB AI/A C										
		Mean =	3.5	100.0	100.0	99.3	0.0	100.0	100.0	100.0	0.0

d=Means are reported in de-transformed data units

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Pest Type		W Weed	W Weed	W Weed		W Weed	W Weed	W Weed			
Pest Code		DIGSA	IPOSS	AMBTR		DIGSA	IPOSS	AMBTR			
Pest Name		large crabgrass	Morning glory	Giant ragweed		large crabgrass	Morning glory	Giant ragweed			
Crop Type, Code	C GLXMA				C GLXMA				C GLXMA		
Crop Scientific Name	Glycine max				Glycine max				Glycine max		
Crop Name	Soybean				Soybean				Soybean		
Rating Date	7-15-2020	7-15-2020	7-15-2020	7-15-2020	7-23-2020	7-23-2020	7-23-2020	7-23-2020	7-29-2020		
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT C		
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN		
Rating Unit	%	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Data Entry Date	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020		
Rating Timing											
Days After First/Last Applic.	37 1	37 1	37 1	37 1	45 9	45 9	-6530 -6530	45 9	51 15		
Trt-Eval Interval											
Days After Emergence											
ARM Action Codes					ET3						
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7	8	9
5 ZIDUA PRO	4.5 FL OZ/A A	105	5.0	100.0	100.0	90.0	0.0	100.0	97.0	100.0	0.0
LIBERTY 280 SL	32.0 FL OZ/A C	208	2.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
ENLIST ONE	32.0 FL OZ/A C	306	7.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
ROUNDUP POWERMAX II	32.0 FL OZ/A C	407	1.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
ZIDUA SC	4.0 FL OZ/A C										
Amsol AMS	3.0 LB AI/A C										
	Mean =		3.8	100.0	100.0	97.5	0.0	100.0	99.3	100.0	0.0
6 ZIDUA PRO	4.5 FL OZ/A A	106	2.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
LIBERTY 280 SL	32.0 FL OZ/A B	201	3.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
ROUNDUP POWERMAX II	32.0 FL OZ/A B	307	3.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
ZIDUA SC	4.0 FL OZ/A B	402	5.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
Amsol AMS	3.0 LB AI/A B										
ENLIST DUO	56.0 FL OZ/A E										
	Mean =		3.3	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
7 ZIDUA PRO	4.5 FL OZ/A A	107	5.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
ENLIST DUO	56.0 FL OZ/A C	204	5.0	100.0	95.0	100.0	0.0	100.0	97.0	100.0	0.0
WARRANT	48.0 FL OZ/A C	305	0.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
LIBERTY 280 SL	32.0 FL OZ/A D	404	5.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
ROUNDUP POWERMAX II	32.0 FL OZ/A D										
Amsol AMS	3.0 LB AI/A D										
	Mean =		3.8	100.0	98.8	100.0	0.0	100.0	99.3	100.0	0.0
8 ZIDUA PRO	4.5 FL OZ/A A	108	3.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
LIBERTY 280 SL	32.0 FL OZ/A B	206	2.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
ROUNDUP POWERMAX II	32.0 FL OZ/A B	302	5.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
ZIDUA SC	4.0 FL OZ/A B	401	3.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0
Amsol AMS	3.0 LB AI/A B										
LIBERTY 280 SL	32.0 FL OZ/A D										
ROUNDUP POWERMAX II	32.0 FL OZ/A D										
Amsol AMS	3.0 LB AI/A D										
	Mean =		3.3	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0

d=Means are reported in de-transformed data units

University of Kentucky

Pest Type	W Weed	W Weed	W Weed		W Weed	W Weed	W Weed	W Weed		
Pest Code	DIGSA	IPOSS	AMBTR		DIGSA	IPOSS	AMBTR	DIGSA		
Pest Name	large crabgrass	Morning glory	Giant ragweed		large crabgrass	Morning glory	Giant ragweed	large crabgrass		
Crop Type, Code				C GLXMA						
Crop Scientific Name				Glycine max						
Crop Name				Soybean						
Rating Date	7-29-2020	7-29-2020	7-29-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020	8-11-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT C	PLNAT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1		
Data Entry Date	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020		
Rating Timing										
Days After First/Last Applic.	51 15	51 15	51 15	56 20	56 20	56 20	56 20	64 28		
Trt-Eval Interval										
Days After Emergence										
ARM Action Codes										
Number of Decimals										
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code Plot	10	11	12	13	14	15	16	17
1 CHECK		101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		205	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		301	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		403	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 ZIDUA PRO	4.5 FL OZ/A A	102	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
ENLIST DUO	56.0 FL OZ/A C	207	100.0	98.0	100.0	0.0	100.0	100.0	100.0	100.0
ZIDUA SC	4.0 FL OZ/A C	303	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
		408	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
		Mean =	100.0	99.5	100.0	0.0	100.0	100.0	100.0	100.0
3 ZIDUA PRO	4.5 FL OZ/A A	103	100.0	100.0	97.0	0.0	100.0	100.0	97.0	100.0
LIBERTY 280 SL	32.0 FL OZ/A B	202	100.0	100.0	95.0	0.0	100.0	100.0	95.0	100.0
ROUNDUP POWERMAX II	32.0 FL OZ/A B	304	100.0	97.0	100.0	0.0	100.0	100.0	100.0	100.0
ZIDUA SC	4.0 FL OZ/A B	406	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Amsol AMS	3.0 LB AI/A B									
		Mean =	100.0	99.3	98.0	0.0	100.0	100.0	98.0	100.0
4 ZIDUA PRO	4.5 FL OZ/A A	104	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
LIBERTY 280 SL	32.0 FL OZ/A C	203	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
ENLIST ONE	32.0 FL OZ/A C	308	100.0	100.0	97.0	0.0	100.0	100.0	98.0	100.0
ZIDUA SC	4.0 FL OZ/A C	405	100.0	100.0	96.0	0.0	100.0	100.0	100.0	100.0
Amsol AMS	3.0 LB AI/A C									
		Mean =	100.0	100.0	98.3	0.0	100.0	100.0	99.5	100.0

d=Means are reported in de-transformed data units

University of Kentucky

Pest Type	W Weed DIGSA	W Weed IPOSS	W Weed AMBTR		W Weed DIGSA	W Weed IPOSS	W Weed AMBTR	W Weed DIGSA		
Pest Code	large crabgrass	Morning glory	Giant ragweed		large crabgrass	Morning glory	Giant ragweed	large crabgrass		
Pest Name				C GLXMA						
Crop Type, Code				Glycine max						
Crop Scientific Name				Soybean						
Crop Name										
Rating Date	7-29-2020	7-29-2020	7-29-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020	8-11-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT C	PLNAT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1		
Data Entry Date	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020		
Rating Timing										
Days After First/Last Applic.	51 15	51 15	51 15	56 20	56 20	56 20	56 20	64 28		
Trt-Eval Interval										
Days After Emergence										
ARM Action Codes										
Number of Decimals										
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code Plot	10	11	12	13	14	15	16	17
5 ZIDUA PRO	4.5 FL OZ/A	A 105	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
LIBERTY 280 SL	32.0 FL OZ/A	C 208	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
ENLIST ONE	32.0 FL OZ/A	C 306	100.0	97.0	100.0	0.0	100.0	100.0	100.0	100.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	C 407	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
ZIDUA SC	4.0 FL OZ/A	C								
Amsol AMS	3.0 LB AI/A	C								
Mean =			100.0	99.3	100.0	0.0	100.0	100.0	100.0	100.0
6 ZIDUA PRO	4.5 FL OZ/A	A 106	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
LIBERTY 280 SL	32.0 FL OZ/A	B 201	100.0	90.0	100.0	0.0	92.0	90.0	100.0	92.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 307	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
ZIDUA SC	4.0 FL OZ/A	B 402	100.0	100.0	100.0	0.0	100.0	100.0	98.0	100.0
Amsol AMS	3.0 LB AI/A	B								
ENLIST DUO	56.0 FL OZ/A	E								
Mean =			100.0	97.5	100.0	0.0	98.0	97.5	99.5	98.0
7 ZIDUA PRO	4.5 FL OZ/A	A 107	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
ENLIST DUO	56.0 FL OZ/A	C 204	100.0	98.0	100.0	0.0	100.0	100.0	100.0	100.0
WARRANT	48.0 FL OZ/A	C 305	100.0	96.0	100.0	0.0	100.0	100.0	100.0	100.0
LIBERTY 280 SL	32.0 FL OZ/A	D 404	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	D								
Amsol AMS	3.0 LB AI/A	D								
Mean =			100.0	98.5	100.0	0.0	100.0	100.0	100.0	100.0
8 ZIDUA PRO	4.5 FL OZ/A	A 108	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
LIBERTY 280 SL	32.0 FL OZ/A	B 206	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 302	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
ZIDUA SC	4.0 FL OZ/A	B 401	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Amsol AMS	3.0 LB AI/A	B								
LIBERTY 280 SL	32.0 FL OZ/A	D								
ROUNDUP POWERMAX II	32.0 FL OZ/A	D								
Amsol AMS	3.0 LB AI/A	D								
Mean =			100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0

d=Means are reported in de-transformed data units

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			W Weed IPOSS	W Weed AMBTR
Pest Type			Morning glory	Giant ragweed
Pest Code				
Pest Name				
Crop Type, Code				
Crop Scientific Name				
Crop Name				
Rating Date			8-11-2020	8-11-2020
Part Rated			PLANT P	PLANT P
Rating Type			CONTRO	CONTRO
Rating Unit			%	%
Number of Subsamples			1	1
Data Entry Date			11-16-2020	11-16-2020
Rating Timing				
Days After First/Last Applic.			64 28	64 28
Trt-Eval Interval				
Days After Emergence				
ARM Action Codes				AA
Number of Decimals				
Trt	Treatment	Rate	Appl	
No.	Name	Rate Unit	Code Plot	
			18	19
1	CHECK		101	0.0
			205	0.0
			301	0.0
			403	0.0
			Mean =	0.0
2	ZIDUA PRO	4.5 FL OZ/A A	102	100.0
	ENLIST DUO	56.0 FL OZ/A C	207	100.0
	ZIDUA SC	4.0 FL OZ/A C	303	100.0
			408	100.0
			Mean =	100.0
3	ZIDUA PRO	4.5 FL OZ/A A	103	100.0
	LIBERTY 280 SL	32.0 FL OZ/A B	202	95.0
	ROUNDUP POWERMAX II	32.0 FL OZ/A B	304	100.0
	ZIDUA SC	4.0 FL OZ/A B	406	100.0
	Amsol AMS	3.0 LB AI/A B		98.0
			Mean =	97.1d
4	ZIDUA PRO	4.5 FL OZ/A A	104	100.0
	LIBERTY 280 SL	32.0 FL OZ/A C	203	100.0
	ENLIST ONE	32.0 FL OZ/A C	308	100.0
	ZIDUA SC	4.0 FL OZ/A C	405	100.0
	Amsol AMS	3.0 LB AI/A C		100.0
			Mean =	100.0
				99.9d

d=Means are reported in de-transformed data units

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Pest Type	W Weed	W Weed
Pest Code	IPOSS	AMBTR
Pest Name	Morning glory	Giant ragweed
Crop Type, Code		
Crop Scientific Name		
Crop Name		
Rating Date	8-11-2020	8-11-2020
Part Rated	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Number of Subsamples	1	1
Data Entry Date	11-16-2020	11-16-2020
Rating Timing		
Days After First/Last Applic.	64 28	64 28
Trt-Eval Interval		
Days After Emergence		
ARM Action Codes		AA
Number of Decimals		
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code Plot
		18
		19
5 ZIDUA PRO	4.5 FL OZ/A A	105
LIBERTY 280 SL	32.0 FL OZ/A C	208
ENLIST ONE	32.0 FL OZ/A C	306
ROUNDUP POWERMAX II	32.0 FL OZ/A C	407
ZIDUA SC	4.0 FL OZ/A C	
Amsol AMS	3.0 LB AI/A C	
	Mean =	
		100.0
		99.9d
6 ZIDUA PRO	4.5 FL OZ/A A	106
LIBERTY 280 SL	32.0 FL OZ/A B	201
ROUNDUP POWERMAX II	32.0 FL OZ/A B	307
ZIDUA SC	4.0 FL OZ/A B	402
Amsol AMS	3.0 LB AI/A B	
ENLIST DUO	56.0 FL OZ/A E	
	Mean =	
		97.5
		99.9d
7 ZIDUA PRO	4.5 FL OZ/A A	107
ENLIST DUO	56.0 FL OZ/A C	204
WARRANT	48.0 FL OZ/A C	305
LIBERTY 280 SL	32.0 FL OZ/A D	404
ROUNDUP POWERMAX II	32.0 FL OZ/A D	
Amsol AMS	3.0 LB AI/A D	
	Mean =	
		100.0
		100.0d
8 ZIDUA PRO	4.5 FL OZ/A A	108
LIBERTY 280 SL	32.0 FL OZ/A B	206
ROUNDUP POWERMAX II	32.0 FL OZ/A B	302
ZIDUA SC	4.0 FL OZ/A B	401
Amsol AMS	3.0 LB AI/A B	
LIBERTY 280 SL	32.0 FL OZ/A D	
ROUNDUP POWERMAX II	32.0 FL OZ/A D	
Amsol AMS	3.0 LB AI/A D	
	Mean =	
		100.0
		100.0d

d=Means are reported in de-transformed data units

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Pest Type		W Weed DIGSA	W Weed IPOSS	W Weed AMBTR		W Weed DIGSA	W Weed IPOSS	W Weed AMBTR			
Pest Code		large crabgrass	Morning glory	Giant ragweed		large crabgrass	Morning glory	Giant ragweed			
Pest Name											
Crop Type, Code	C GLXMA				C GLXMA				C GLXMA		
Crop Scientific Name	Glycine max				Glycine max				Glycine max		
Crop Name	Soybean				Soybean				Soybean		
Rating Date	7-15-2020	7-15-2020	7-15-2020	7-15-2020	7-23-2020	7-23-2020	7-23-2002	7-23-2020	7-29-2020		
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P	PLANT C		
Rating Type	PHYGEN	CONTR0	CONTR0	CONTR0	PHYGEN	CONTR0	CONTR0	CONTR0	PHYGEN		
Rating Unit	%	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Data Entry Date	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020		
Rating Timing											
Days After First/Last Applic.	37 1	37 1	37 1	37 1	45 9	45 9	-6530 -6530	45 9	51 15		
Trt-Eval Interval											
Days After Emergence											
ARM Action Codes					ET3						
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8	9
8 ZIDUA PRO	4.5 FL OZ/A A		3.3 a	100.0 a	100.0 a	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a	0.0 a
LIBERTY 280 SL	32.0 FL OZ/A B										
ROUNDUP POWERMAX II	32.0 FL OZ/A B										
ZIDUA SC	4.0 FL OZ/A B										
Amsol AMS	3.0 LB AI/A B										
LIBERTY 280 SL	32.0 FL OZ/A D										
ROUNDUP POWERMAX II	32.0 FL OZ/A D										
Amsol AMS	3.0 LB AI/A D										
LSD P=.05	2.70	.		1.70	2.98	.	.	1.36	1.13	.	
Standard Deviation	1.83	0.00		1.16	2.03	0.00	0.00	0.93	0.77	0.00	
CV	69.06	0.0		1.33	2.33	0.0	0.0	1.06	0.88	0.0	
Levene's F	1.669	0.00		0.00	0.797	0.00	0.00	2.286	0.00	0.00	
Levene's Prob(F)	0.164	0.00*		0.00*	0.597	0.00*	0.00*	0.062	0.00*	0.00*	
Skewness	0.2119	-2.3809*		-2.3747*	-2.3649*	.	-2.3809*	-2.3767*	-2.3786*	.	
Kurtosis	-1.1214	3.9094*		3.8912*	3.8608*	.	3.9094*	3.8973*	3.9029*	.	
Replicate F	0.604	0.000		2.333	1.145	0.000	0.000	1.750	0.636	0.000	
Replicate Prob(F)	0.6198	1.0000		0.1032	0.3541	1.0000	1.0000	0.1876	0.5999	1.0000	
Treatment F	2.313	0.000		3707.667	1200.812	0.000	0.000	5784.834	8449.304	0.000	
Treatment Prob(F)	0.0648	1.0000		0.0001	0.0001	1.0000	1.0000	0.0001	0.0001	1.0000	

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Pest Type	W Weed DIGSA	W Weed IPOSS	W Weed AMBTR		W Weed DIGSA	W Weed IPOSS	W Weed AMBTR	W Weed DIGSA	W Weed IPOSS		
Pest Code	large crabgrass	Morning glory	Giant ragweed		large crabgrass	Morning glory	Giant ragweed	large crabgrass	Morning glory		
Pest Name											
Crop Type, Code				C GLXMA							
Crop Scientific Name				Glycine max							
Crop Name				Soybean							
Rating Date	7-29-2020	7-29-2020	7-29-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020	8-11-2020	8-11-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Data Entry Date	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020	11-16-2020		
Rating Timing											
Days After First/Last Applic.	51 15	51 15	51 15	56 20	56 20	56 20	56 20	64 28	64 28		
Trt-Eval Interval											
Days After Emergence											
ARM Action Codes											
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code	10	11	12	13	14	15	16	17	18
8 ZIDUA PRO	4.5 FL OZ/A A		100.0 a	100.0 a	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
LIBERTY 280 SL	32.0 FL OZ/A B										
ROUNDUP POWERMAX II	32.0 FL OZ/A B										
ZIDUA SC	4.0 FL OZ/A B										
Amsol AMS	3.0 LB AI/A B										
LIBERTY 280 SL	32.0 FL OZ/A D										
ROUNDUP POWERMAX II	32.0 FL OZ/A D										
Amsol AMS	3.0 LB AI/A D										
LSD P=.05	.		2.93	1.77	.	2.08	2.60	1.55	2.08	2.60	
Standard Deviation	0.00		1.99	1.20	0.00	1.41	1.77	1.05	1.41	1.77	
CV	0.0		2.3	1.38	0.0	1.62	2.03	1.21	1.62	2.03	
Levene's F	0.00		0.78	19.40	0.00			5.143			
Levene's Prob(F)	0.00*		0.61	0.001*	0.00*			0.001*			
Skewness	-2.3809*		-2.3649*	-2.374*	.	-2.3729*	-2.3685*	-2.3759*	-2.3729*	-2.3685*	
Kurtosis	3.9094*		3.8611*	3.8894*	.	3.885*	3.8711*	3.8949*	3.885*	3.8711*	
Replicate F	0.000		1.593	0.079	0.000	1.000	1.000	0.226	1.000	1.000	
Replicate Prob(F)	1.0000		0.2210	0.9706	1.0000	0.4123	0.4123	0.8774	0.4123	0.4123	
Treatment F	0.000		1236.701	3418.332	0.000	2486.715	1589.572	4479.162	2486.715	1589.572	
Treatment Prob(F)	1.0000		0.0001	0.0001	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001	

Pest Type	W Weed		
Pest Code	AMBTR		
Pest Name	Giant ragweed		
Crop Type, Code			
Crop Scientific Name			
Crop Name			
Rating Date	8-11-2020		
Part Rated	PLANT P		
Rating Type	CONTRO		
Rating Unit	%		
Number of Subsamples	1		
Data Entry Date	11-16-2020		
Rating Timing			
Days After First/Last Applic.	64 28		
Trt-Eval Interval			
Days After Emergence			
ARM Action Codes	AA		
Number of Decimals			
Trt No.	Treatment Name	Rate	Appl Code
		Rate Unit	
1	CHECK		19
			0.0 c
2	ZIDUA PRO	4.5 FL OZ/A A	100.0 a
	ENLIST DUO	56.0 FL OZ/A C	
	ZIDUA SC	4.0 FL OZ/A C	
3	ZIDUA PRO	4.5 FL OZ/A A	97.1 b
	LIBERTY 280 SL	32.0 FL OZ/A B	
	ROUNDUP POWERMAX II	32.0 FL OZ/A B	
	ZIDUA SC	4.0 FL OZ/A B	
	Amsol AMS	3.0 LB AI/A B	

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Pest Type	W Weed		
Pest Code	AMBTR		
Pest Name	Giant ragweed		
Crop Type, Code			
Crop Scientific Name			
Crop Name			
Rating Date	8-11-2020		
Part Rated	PLANT P		
Rating Type	CONTRO		
Rating Unit	%		
Number of Subsamples	1		
Data Entry Date	11-16-2020		
Rating Timing			
Days After First/Last Applic.	64 28		
Trt-Eval Interval			
Days After Emergence			
ARM Action Codes	AA		
Number of Decimals			
Trt No.	Treatment Name	Rate Rate Unit	Appl Code
			19
4	ZIDUA PRO	4.5 FL OZ/A A	99.9 a
	LIBERTY 280 SL	32.0 FL OZ/A C	
	ENLIST ONE	32.0 FL OZ/A C	
	ZIDUA SC	4.0 FL OZ/A C	
	Amsol AMS	3.0 LB AI/A C	
5	ZIDUA PRO	4.5 FL OZ/A A	99.9 a
	LIBERTY 280 SL	32.0 FL OZ/A C	
	ENLIST ONE	32.0 FL OZ/A C	
	ROUNDUP POWERMAX II	32.0 FL OZ/A C	
	ZIDUA SC	4.0 FL OZ/A C	
	Amsol AMS	3.0 LB AI/A C	
6	ZIDUA PRO	4.5 FL OZ/A A	99.9 a
	LIBERTY 280 SL	32.0 FL OZ/A B	
	ROUNDUP POWERMAX II	32.0 FL OZ/A B	
	ZIDUA SC	4.0 FL OZ/A B	
	Amsol AMS	3.0 LB AI/A B	
	ENLIST DUO	56.0 FL OZ/A E	
7	ZIDUA PRO	4.5 FL OZ/A A	100.0 a
	ENLIST DUO	56.0 FL OZ/A C	
	WARRANT	48.0 FL OZ/A C	
	LIBERTY 280 SL	32.0 FL OZ/A D	
	ROUNDUP POWERMAX II	32.0 FL OZ/A D	
	Amsol AMS	3.0 LB AI/A D	

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Pest Type	W Weed
Pest Code	AMBTR
Pest Name	Giant ragweed
Crop Type, Code	
Crop Scientific Name	
Crop Name	
Rating Date	8-11-2020
Part Rated	PLANT P
Rating Type	CONTRO
Rating Unit	%
Number of Subsamples	1
Data Entry Date	11-16-2020
Rating Timing	
Days After First/Last Applic.	64 28
Trt-Eval Interval	
Days After Emergence	
ARM Action Codes	AA
Number of Decimals	
Trt Treatment	Rate Appl
No. Name	Rate Unit Code
	19
8 ZIDUA PRO	4.5 FL OZ/A A
LIBERTY 280 SL	32.0 FL OZ/A B
ROUNDUP POWERMAX II	32.0 FL OZ/A B
ZIDUA SC	4.0 FL OZ/A B
Amsol AMS	3.0 LB AI/A B
LIBERTY 280 SL	32.0 FL OZ/A D
ROUNDUP POWERMAX II	32.0 FL OZ/A D
Amsol AMS	3.0 LB AI/A D
LSD P=.05	1.00 - 2.42
Standard Deviation	3.90t
CV	5.09t
Levene's F	1.96
Levene's Prob(F)	0.104
Skewness	-2.2813*
Kurtosis	3.5989*
Replicate F	0.255
Replicate Prob(F)	0.8566
Treatment F	255.109
Treatment Prob(F)	0.0001

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LIBERTY EFFICACY IN ENLIST SOYBEAN

Trial ID: 20-21_SOY-REC Location: UKREC 108-C4 Trial Year: 2020
Protocol ID: MKD-H-2020-US-D47-A-01.0 Investigator (Creator): Travis Legleiter
Project ID: Study Director: Jared Roskamp
Sponsor Contact:

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

DIGSA, Digitaria sanguinalis, large crabgrass = US

IPOSS, Ipomoea sp., Morning glory = US

AMBTR, Ambrosia trifida, Giant ragweed = US

Crop Type, Code

C = EPPO species (Bayer) codes

GLXMA, BSOY, Glycine max, Soybean = US

Part Rated

PLANT = plant

C = Crop is Part Rated

P = Pest is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

ARM Action Codes

ET3 = Excluded treatment 3

AA = Automatic arcsine square root % transformation

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LIBERTY TANK MIX EVALUATIONS IN CORN

Trial ID: 20-22 Location: Lexington, KY Trial Year: 2020
 Protocol ID: MKD-H-2020-US-C41-B-02.0 Investigator (Creator): Sara Carter
 Project ID: Study Director: Greg Stapleton
 Sponsor Contact:

Reps: 3 Plots: 10 by 44 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 3 plots; minimum=1.7206 L)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate Unit	Appl Timing	Appl Code	Amt to Measure	Product	Rep 1	Rep 2	Rep 3
1	CHECK									101	203	305
2	VERDICT	668.0	GA/L	EC	10.0	FL OZ/A	VL A	10.42	mL/mx	102	207	303
	ATRAZIN 4L	480.0	GA/L	SC	32.0	FL OZ/A	VL A	33.33	mL/mx			
	LIBERTY 280 SL	280.0	GA/L	SL	32.0	FL OZ/A	NA B	33.33	mL/mx			
	ATRAZIN 4L	480.0	GA/L	SC	32.0	FL OZ/A	NA B	33.33	mL/mx			
	AMMONIUM SULFATE (21% N)	100.0	%	SG	3.0	LB/A	NA B	47.93	g/mx			
3	VERDICT	668.0	GA/L	EC	10.0	FL OZ/A	VL A	10.42	mL/mx	103	206	302
	ATRAZIN 4L	480.0	GA/L	SC	32.0	FL OZ/A	VL A	33.33	mL/mx			
	LIBERTY 280 SL	280.0	GA/L	SL	32.0	FL OZ/A	NA B	33.33	mL/mx			
	ARMEZON PRO	642.5	GA/L	EC	16.0	FL OZ/A	NA B	16.67	mL/mx			
	ATRAZIN 4L	480.0	GA/L	SC	32.0	FL OZ/A	NA B	33.33	mL/mx			
	AMMONIUM SULFATE (21% N)	100.0	%	SG	3.0	LB/A	NA B	47.93	g/mx			
4	VERDICT	668.0	GA/L	EC	10.0	FL OZ/A	VL A	10.42	mL/mx	104	202	307
	ATRAZIN 4L	480.0	GA/L	SC	32.0	FL OZ/A	VL A	33.33	mL/mx			
	LIBERTY 280 SL	280.0	GA/L	SL	32.0	FL OZ/A	NA B	33.33	mL/mx			
	ARMEZON PRO	642.5	GA/L	EC	16.0	FL OZ/A	NA B	16.67	mL/mx			
	ATRAZIN 4L	480.0	GA/L	SC	32.0	FL OZ/A	NA B	33.33	mL/mx			
	SURFACTANT-NONIONIC	100	%	SL	0.25	% V/V	NA B	4.999	mL/mx			
	AMMONIUM SULFATE (21% N)	100.0	%	SG	3.0	LB/A	NA B	47.93	g/mx			
5	VERDICT	668.0	GA/L	EC	10.0	FL OZ/A	VL A	10.42	mL/mx	105	204	301
	ATRAZIN 4L	480.0	GA/L	SC	32.0	FL OZ/A	VL A	33.33	mL/mx			
	ROUNDUP POWERMAX II	540.0	GA/L	SL	32.0	FL OZ/A	NA B	33.33	mL/mx			
	ARMEZON PRO	642.5	GA/L	EC	16.0	FL OZ/A	NA B	16.67	mL/mx			
	ATRAZIN 4L	480.0	GA/L	SC	32.0	FL OZ/A	NA B	33.33	mL/mx			
	SURFACTANT-NONIONIC	100	%	SL	0.25	% V/V	NA B	4.999	mL/mx			
	AMMONIUM SULFATE (21% N)	100.0	%	SG	3.0	LB/A	NA B	47.93	g/mx			
6	VERDICT	668.0	GA/L	EC	10.0	FL OZ/A	VL A	10.42	mL/mx	106	201	306
	ATRAZIN 4L	480.0	GA/L	SC	32.0	FL OZ/A	VL A	33.33	mL/mx			
	LIBERTY 280 SL	280.0	GA/L	SL	32.0	FL OZ/A	NA C	33.33	mL/mx			
	STATUS HERBICIDE	56.0	%	WG	2.5	OZ WT/A	NA C	2.496	g/mx			
	ATRAZIN 4L	480.0	GA/L	SC	32.0	FL OZ/A	NA C	33.33	mL/mx			
	AMMONIUM SULFATE (21% N)	100.0	%	SG	3.0	LB/A	NA C	47.93	g/mx			
7	VERDICT	668.0	GA/L	EC	10.0	FL OZ/A	VL A	10.42	mL/mx	107	205	304
	ATRAZIN 4L	480.0	GA/L	SC	32.0	FL OZ/A	VL A	33.33	mL/mx			
	ROUNDUP POWERMAX II	540.0	GA/L	SL	32.0	FL OZ/A	NA C	33.33	mL/mx			
	STATUS HERBICIDE	56.0	%	WG	2.5	OZ WT/A	NA C	2.496	g/mx			
	ATRAZIN 4L	480.0	GA/L	SC	32.0	FL OZ/A	NA C	33.33	mL/mx			
	AMMONIUM SULFATE (21% N)	100.0	%	SG	3.0	LB/A	NA C	47.93	g/mx			

Sort Order: Replicate 1

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Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
78.125	mL	VERDICT	668.0	GA/L	EC	
500.000	mL	ATRAZIN 4L	480.0	GA/L	SC	
166.667	mL	LIBERTY 280 SL	280.0	GA/L	SL	
359.477	g	AMMONIUM SULFATE (21% N)	100.0	%	SG	
62.500	mL	ARMEZON PRO	642.5	GA/L	EC	
12.499	mL	SURFACTANT-NONIONIC	100	%	SL	
83.333	mL	ROUNDUP POWERMAX II	540.0	GA/L	SL	
6.241	g	STATUS HERBICIDE	56.0	%	WG	

* 'Per area' calculations based on application amount= 15 GPA, mix size= 2 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GPA, mix size= 2 L.

General Trial Information

Study Director: Greg Stapleton

Investigator: Sara Carter **Title:** Research Specialist

Discipline: H herbicide

Trial Status: F one-year/final

ARM Trial Created On: 5-11-2020

Trial Usage/Type: 7

Initiation Date: 5-11-2020 **Planned Completion Date:** 11-1-2020

Trial Location

City: LEXINGTON

Country: USA United States

State/Prov.: KENTUCKY

Postal Code: 40511

Conducted Under GLP: No

Conducted Under GEP: No

Contacts

Role: STYDIR study director

Study Director: Greg Stapleton

Role: INVEST investigator

Investigator: Sara Carter

Title: Research Specialist

Organization: UNIVERSITY OF KENTUCKY

Address 1: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914 **Mobile No.:** 859-559-6710

E-mail: sara.carter@uky.edu

City: LEXINGTON, KY

Postal Code: 40546-0312

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Crop Description

Crop 1: C ZEAMX Zea mays Corn **Stage Scale:** BBCH

Variety: DKC 62-08
Attributes: Smart Stax

Planting Date: 5-11-2020 **Planting Rate:** 32000 S/A
Depth: 1.5 IN

Rows per Plot: 6 **Planting Method:** PLANTD planted
Row Spacing: 30 IN **Planting Equipment:** FE field equipment
Seed Bed: SMOOTH smooth
Soil Moisture: SLIWET slightly wet, moist

Soil Temperature: 60 F
Emergence Date: 5-18-2020
Harvest Date: 10-22-2020 **Harvest Equipment:** MASSEY FERGUSON 8XP

% Standard Moisture: 15.5 **Harvested Width:** 5 FT
Harvested Length: 40 FT

Pest Description

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

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

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

Site and Design

Treated Plot Width: 10 FT **Site Type:** FIELD field
Treated Plot Length: 44 FT
Treated Plot Area: 440.0 FT2 **Treatments:** 7 **Tillage Type:** CONTIL conventional-till
Replications: 3 **Study Design:** RACOB� Randomized Complete Block (RCB)

Maintenance

No.	Date	Type	Maintenance Product Name	Form Conc	Form Type	Rate	Rate Unit
1.	5-1-2020	FERT	Nitrogen	46	CG	200	LB A/A

Soil Description

Description Name: MAURY

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

Soil Drainage: E excellent

Weather Conditions

Overall Moisture Conditions: WEWEDR wet-wet-dry
Closest Weather Station: Spindletop **Distance:** 1.5 MI

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Application Description			
	A	B	C
Application Date	5-13-2020	6-22-2020	6-22-2020
Appl. Start Time	4:00 PM	3:30 PM	3:30 AM
Appl. Stop Time	4:30 PM	4:00 PM	4:00 AM
Application Method	SPRAY	SPRAY	SPRAY
Application Timing	PRE	V4	V4
Application Placement	BROSOI	BROFOL	BROFOL
Applied By	SARA	SARA	SARA
Air Temperature Start, Stop	52 F	80 F	80 F
% Relative Humidity Start, Stop	88	65	65
Wind Velocity+Dir. Start	8 MPH ESE	5 MPH	5 MPH
Soil Temperature	60 F	80 F	80 F
Soil Moisture	GOOD	WET	WET
Soil Surface Condition	SMOOTH	SMOOTH	SMOOTH
% Cloud Cover	100	30	30
Next Moisture Occurred On	5-16-2020	6-23-2020	6-23-2020

Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Days after Emergence	-5	35	35
Stage Majority, Percent		V4 99	V4 99
Height Average		12 IN	12 IN

Pest Stage At Each Application			
	A	B	C
Pest 1 Code, Type, Scale	SETFA W BBCH	SETFA W BBCH	SETFA W BBCH
Height Average		4 IN	4 IN
Pest 2 Code, Type, Scale	AMBTR W BBCH	AMBTR W BBCH	AMBTR W BBCH
Height Average		8 IN	8 IN
Pest 3 Code, Type, Scale	IPOSS W BBCH	IPOSS W BBCH	IPOSS W BBCH
Height Average		3 IN	3 IN

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Application Equipment			
	A	B	C
Appl. Equipment	BACKPACK	BACKPACK	BACKPACK
Equipment Type	BELSPR	BELSPR	BELSPR
Operation Pressure	30 PSI	30 PSI	30 PSI
Nozzle Type	AIR INDUC	AIR INDUC	AIR INDUC
Nozzle Size	TTI 015	110015	TTI 015
Nozzle Spacing	20 IN	20 IN	20 IN
Boom Length	10 FT	10 FT	10 FT
Boom Height	30 IN	30 IN	30 IN
Ground Speed	4 MPH	4 MPH	4 MPH
Carrier	WATER	WATER	WATER
Application Amount	15 GPA	15 GPA	15 GPA
Mix Size	2 liters	2 liters	2 liters
Propellant	CO2	CO2	CO2

		W Weed SETFA Giant foxtail	W Weed AMBTR Giant ragweed	W Weed IPOSS Morning glory		W Weed SETFA Giant foxtail	W Weed AMBTR Giant ragweed	W Weed IPOSS Morning glory				
Pest Type												
Pest Code												
Pest Name												
Crop Type, Code	C ZEAMX				C ZEAMX				C ZEAMX			
Crop Scientific Name	Zea mays				Zea mays				Zea mays			
Crop Name	Corn				Corn				Corn			
Rating Date	7-7-2020	7-7-2020	7-7-2020	7-7-2020	7-13-2020	7-13-2020	7-13-2020	7-13-2020	7-20-2020			
Part Rated												
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN			
Rating Unit	0-10	0-100	0-100	0-100	0-10	0-100	0-100	0-100	0-10			
Number of Subsamples	1	1	1	1	1	1	1	1	1			
Rating Timing	A1	A1	A1	A1	A2	A2	A2	A2	A3			
Days After First/Last Applic.	55 15	55 15	55 15	55 15	61 21	61 21	61 21	61 21	68 28			
Trt-Eval Interval												
Days After Emergence	50 DE-1	50 DE-1	50 DE-1	50 DE-1	56 DE-1	56 DE-1	56 DE-1	56 DE-1	63 DE-1			
ARM Action Codes												
Number of Decimals												
Trt Treatment	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate			
No. Name	Rate Unit	Code	Plot	1	2	3	4	5	6	7	8	9
1 CHECK		101		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		203		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		305		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 VERDICT	10.0 FL OZ/A	A	102	0.0	80.0	85.0	85.0	0.0	75.0	75.0	75.0	0.0
ATRAZIN 4L	32.0 FL OZ/A	A	207	0.0	100.0	100.0	100.0	0.0	95.0	95.0	95.0	0.0
LIBERTY 280 SL	32.0 FL OZ/A	B	303	0.0	100.0	100.0	100.0	0.0	95.0	90.0	95.0	0.0
ATRAZIN 4L	32.0 FL OZ/A	B										
AMMONIUM SULFATE (21% N)	3.0 LB/A	B										
		Mean =		0.0	93.3	95.0	95.0	0.0	88.3	86.7	88.3	0.0

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Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS			
Pest Code		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory			
Pest Name											
Crop Type, Code	C ZEAMX				C ZEAMX				C ZEAMX		
Crop Scientific Name	Zea mays				Zea mays				Zea mays		
Crop Name	Corn				Corn				Corn		
Rating Date	7-7-2020	7-7-2020	7-7-2020	7-7-2020	7-13-2020	7-13-2020	7-13-2020	7-13-2020	7-20-2020		
Part Rated											
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN		
Rating Unit	0-10	0-100	0-100	0-100	0-10	0-100	0-100	0-100	0-10		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Rating Timing	A1	A1	A1	A1	A2	A2	A2	A2	A3		
Days After First/Last Applic.	55 15	55 15	55 15	55 15	61 21	61 21	61 21	61 21	68 28		
Trt-Eval Interval											
Days After Emergence	50 DE-1	50 DE-1	50 DE-1	50 DE-1	56 DE-1	56 DE-1	56 DE-1	56 DE-1	63 DE-1		
ARM Action Codes											
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7	8	9
3 VERDICT	10.0 FL OZ/A	A 103	0.0	90.0	85.0	95.0	0.0	85.0	80.0	85.0	0.0
ATRAZIN 4L	32.0 FL OZ/A	A 206	0.0	100.0	100.0	100.0	0.0	95.0	95.0	95.0	0.0
LIBERTY 280 SL	32.0 FL OZ/A	B 302	0.0	100.0	95.0	100.0	0.0	95.0	95.0	95.0	0.0
ARMEZON PRO	16.0 FL OZ/A	B									
ATRAZIN 4L	32.0 FL OZ/A	B									
AMMONIUM SULFATE (21% N)	3.0 LB/A	B									
	Mean =		0.0	96.7	93.3	98.3	0.0	91.7	90.0	91.7	0.0
4 VERDICT	10.0 FL OZ/A	A 104	0.0	85.0	90.0	95.0	0.0	75.0	80.0	85.0	0.0
ATRAZIN 4L	32.0 FL OZ/A	A 202	0.0	90.0	95.0	95.0	0.0	85.0	90.0	90.0	0.0
LIBERTY 280 SL	32.0 FL OZ/A	B 307	0.0	100.0	100.0	100.0	0.0	98.0	98.0	98.0	0.0
ARMEZON PRO	16.0 FL OZ/A	B									
ATRAZIN 4L	32.0 FL OZ/A	B									
SURFACTANT-NONIONIC	0.25 % V/V	B									
AMMONIUM SULFATE (21% N)	3.0 LB/A	B									
	Mean =		0.0	91.7	95.0	96.7	0.0	86.0	89.3	91.0	0.0
5 VERDICT	10.0 FL OZ/A	A 105	0.0	100.0	100.0	100.0	0.0	98.0	95.0	98.0	0.0
ATRAZIN 4L	32.0 FL OZ/A	A 204	0.0	100.0	100.0	95.0	0.0	95.0	95.0	90.0	0.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 301	0.0	100.0	100.0	100.0	0.0	98.0	90.0	98.0	0.0
ARMEZON PRO	16.0 FL OZ/A	B									
ATRAZIN 4L	32.0 FL OZ/A	B									
SURFACTANT-NONIONIC	0.25 % V/V	B									
AMMONIUM SULFATE (21% N)	3.0 LB/A	B									
	Mean =		0.0	100.0	100.0	98.3	0.0	97.0	93.3	95.3	0.0
6 VERDICT	10.0 FL OZ/A	A 106	0.0	90.0	90.0	95.0	0.0	85.0	80.0	85.0	0.0
ATRAZIN 4L	32.0 FL OZ/A	A 201	0.0	100.0	95.0	100.0	0.0	95.0	90.0	95.0	0.0
LIBERTY 280 SL	32.0 FL OZ/A	C 306	0.0	100.0	100.0	100.0	0.0	98.0	98.0	98.0	0.0
STATUS HERBICIDE	2.5 OZ WT/A	C									
ATRAZIN 4L	32.0 FL OZ/A	C									
AMMONIUM SULFATE (21% N)	3.0 LB/A	C									
	Mean =		0.0	96.7	95.0	98.3	0.0	92.7	89.3	92.7	0.0

University of Kentucky

Pest Type		W Weed	W Weed	W Weed		W Weed	W Weed	W Weed			
Pest Code		SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS			
Pest Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory			
Crop Type, Code	C ZEAMX				C ZEAMX				C ZEAMX		
Crop Scientific Name	Zea mays				Zea mays				Zea mays		
Crop Name	Corn				Corn				Corn		
Rating Date	7-7-2020	7-7-2020	7-7-2020	7-7-2020	7-13-2020	7-13-2020	7-13-2020	7-13-2020	7-20-2020		
Part Rated											
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN		
Rating Unit	0-10	0-100	0-100	0-100	0-10	0-100	0-100	0-100	0-10		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Rating Timing	A1	A1	A1	A1	A2	A2	A2	A2	A3		
Days After First/Last Applic.	55 15	55 15	55 15	55 15	61 21	61 21	61 21	61 21	68 28		
Trt-Eval Interval											
Days After Emergence	50 DE-1	50 DE-1	50 DE-1	50 DE-1	56 DE-1	56 DE-1	56 DE-1	56 DE-1	63 DE-1		
ARM Action Codes											
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7	8	9
7 VERDICT	10.0 FL OZ/A	A 107	0.0	100.0	95.0	100.0	0.0	95.0	90.0	95.0	0.0
ATRAZIN 4L	32.0 FL OZ/A	A 205	0.0	100.0	100.0	100.0	0.0	98.0	98.0	95.0	0.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	C 304	0.0	100.0	100.0	100.0	0.0	98.0	98.0	98.0	0.0
STATUS HERBICIDE	2.5 OZ WT/A	C									
ATRAZIN 4L	32.0 FL OZ/A	C									
AMMONIUM SULFATE (21% N)	3.0 LB/A	C									
Mean =			0.0	100.0	98.3	100.0	0.0	97.0	95.3	96.0	0.0

University of Kentucky

Pest Type	W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA		
Pest Code	Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail		
Pest Name	Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail		
Crop Type, Code				C ZEAMX							
Crop Scientific Name				Zea mays					Zea mays		
Crop Name				Corn					Corn		
Rating Date	7-20-2020	7-20-2020	7-20-2020	7-27-2020	7-27-2020	7-27-2020	7-27-2020	8-3-2020	8-3-2020		
Part Rated											
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO		
Rating Unit	0-100	0-100	0-100	0-10	0-100	0-100	0-100	0-10	0-100		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Rating Timing	A3	A3	A3	A4	A4	A4	A4	A5	A5		
Days After First/Last Applic.	68 28	68 28	68 28	75 35	75 35	75 35	75 35	82 42	82 42		
Trt-Eval Interval											
Days After Emergence	63 DE-1	63 DE-1	63 DE-1	70 DE-1	70 DE-1	70 DE-1	70 DE-1	77 DE-1	77 DE-1		
ARM Action Codes											
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code Plot	10	11	12	13	14	15	16	17	18
1 CHECK		101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		203	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		305	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 VERDICT	10.0 FL OZ/A	A 102	70.0	70.0	70.0	0.0	60.0	65.0	70.0	0.0	60.0
ATRAZIN 4L	32.0 FL OZ/A	A 207	85.0	90.0	90.0	0.0	85.0	85.0	85.0	0.0	80.0
LIBERTY 280 SL	32.0 FL OZ/A	B 303	90.0	90.0	90.0	0.0	85.0	85.0	85.0	0.0	80.0
ATRAZIN 4L	32.0 FL OZ/A	B									
AMMONIUM SULFATE (21% N)	3.0 LB/A	B									
		Mean =	81.7	83.3	83.3	0.0	76.7	78.3	80.0	0.0	73.3

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Pest Type	W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA		
Pest Code	Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail		
Pest Name											
Crop Type, Code				C ZEAMX					C ZEAMX		
Crop Scientific Name				Zea mays					Zea mays		
Crop Name				Corn					Corn		
Rating Date	7-20-2020	7-20-2020	7-20-2020	7-27-2020	7-27-2020	7-27-2020	7-27-2020	8-3-2020	8-3-2020		
Part Rated											
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO		
Rating Unit	0-100	0-100	0-100	0-10	0-100	0-100	0-100	0-10	0-100		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Rating Timing	A3	A3	A3	A4	A4	A4	A4	A5	A5		
Days After First/Last Applic.	68 28	68 28	68 28	75 35	75 35	75 35	75 35	82 42	82 42		
Trt-Eval Interval											
Days After Emergence	63 DE-1	63 DE-1	63 DE-1	70 DE-1	70 DE-1	70 DE-1	70 DE-1	77 DE-1	77 DE-1		
ARM Action Codes											
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code Plot	10	11	12	13	14	15	16	17	18
3 VERDICT	10.0 FL OZ/A	A 103	80.0	85.0	80.0	0.0	80.0	85.0	80.0	0.0	80.0
ATRAZIN 4L	32.0 FL OZ/A	A 206	85.0	90.0	90.0	0.0	80.0	85.0	85.0	0.0	80.0
LIBERTY 280 SL	32.0 FL OZ/A	B 302	85.0	90.0	90.0	0.0	85.0	85.0	85.0	0.0	80.0
ARMEZON PRO	16.0 FL OZ/A	B									
ATRAZIN 4L	32.0 FL OZ/A	B									
AMMONIUM SULFATE (21% N)	3.0 LB/A	B									
	Mean =		83.3	88.3	86.7	0.0	81.7	85.0	83.3	0.0	80.0
4 VERDICT	10.0 FL OZ/A	A 104	70.0	70.0	80.0	0.0	70.0	70.0	80.0	0.0	70.0
ATRAZIN 4L	32.0 FL OZ/A	A 202	80.0	80.0	85.0	0.0	80.0	75.0	80.0	0.0	80.0
LIBERTY 280 SL	32.0 FL OZ/A	B 307	85.0	95.0	95.0	0.0	80.0	85.0	85.0	0.0	80.0
ARMEZON PRO	16.0 FL OZ/A	B									
ATRAZIN 4L	32.0 FL OZ/A	B									
SURFACTANT-NONIONIC	0.25 % V/V	B									
AMMONIUM SULFATE (21% N)	3.0 LB/A	B									
	Mean =		78.3	81.7	86.7	0.0	76.7	76.7	81.7	0.0	76.7
5 VERDICT	10.0 FL OZ/A	A 105	90.0	95.0	95.0	0.0	85.0	90.0	85.0	0.0	80.0
ATRAZIN 4L	32.0 FL OZ/A	A 204	85.0	90.0	85.0	0.0	85.0	85.0	80.0	0.0	80.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 301	90.0	95.0	95.0	0.0	80.0	85.0	85.0	0.0	80.0
ARMEZON PRO	16.0 FL OZ/A	B									
ATRAZIN 4L	32.0 FL OZ/A	B									
SURFACTANT-NONIONIC	0.25 % V/V	B									
AMMONIUM SULFATE (21% N)	3.0 LB/A	B									
	Mean =		88.3	93.3	91.7	0.0	83.3	86.7	83.3	0.0	80.0
6 VERDICT	10.0 FL OZ/A	A 106	80.0	85.0	80.0	0.0	80.0	80.0	80.0	0.0	80.0
ATRAZIN 4L	32.0 FL OZ/A	A 201	90.0	90.0	90.0	0.0	85.0	85.0	85.0	0.0	80.0
LIBERTY 280 SL	32.0 FL OZ/A	C 306	95.0	95.0	95.0	0.0	85.0	85.0	85.0	0.0	80.0
STATUS HERBICIDE	2.5 OZ WT/A	C									
ATRAZIN 4L	32.0 FL OZ/A	C									
AMMONIUM SULFATE (21% N)	3.0 LB/A	C									
	Mean =		88.3	90.0	88.3	0.0	83.3	83.3	83.3	0.0	80.0

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Pest Type	W Weed	W Weed	W Weed		W Weed	W Weed	W Weed		W Weed		
Pest Code	SETFA	AMBTR	IPOSS		SETFA	AMBTR	IPOSS		SETFA		
Pest Name	Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail		
Crop Type, Code				C ZEAMX					C ZEAMX		
Crop Scientific Name				Zea mays					Zea mays		
Crop Name				Corn					Corn		
Rating Date	7-20-2020	7-20-2020	7-20-2020	7-27-2020	7-27-2020	7-27-2020	7-27-2020	8-3-2020	8-3-2020		
Part Rated											
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO		
Rating Unit	0-100	0-100	0-100	0-10	0-100	0-100	0-100	0-10	0-100		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Rating Timing	A3	A3	A3	A4	A4	A4	A4	A5	A5		
Days After First/Last Applic.	68 28	68 28	68 28	75 35	75 35	75 35	75 35	82 42	82 42		
Trt-Eval Interval											
Days After Emergence	63 DE-1	63 DE-1	63 DE-1	70 DE-1	70 DE-1	70 DE-1	70 DE-1	77 DE-1	77 DE-1		
ARM Action Codes											
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code Plot	10	11	12	13	14	15	16	17	18
7 VERDICT	10.0 FL OZ/A	A 107	90.0	90.0	90.0	0.0	85.0	85.0	85.0	0.0	80.0
ATRAZIN 4L	32.0 FL OZ/A	A 205	95.0	95.0	90.0	0.0	85.0	85.0	85.0	0.0	80.0
ROUNDUP POWERMAX II	32.0 FL OZ/A	C 304	90.0	90.0	95.0	0.0	85.0	85.0	85.0	0.0	80.0
STATUS HERBICIDE	2.5 OZ WT/A	C									
ATRAZIN 4L	32.0 FL OZ/A	C									
AMMONIUM SULFATE (21% N)	3.0 LB/A	C									
Mean =			91.7	91.7	91.7	0.0	85.0	85.0	85.0	0.0	80.0

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Pest Type		W Weed	W Weed				
Pest Code		AMBTR	IPOSS				
Pest Name		Giant ragweed	Morning glory				
Crop Type, Code				C ZEAMX	C ZEAMX	C ZEAMX	
Crop Scientific Name				Zea mays	Zea mays	Zea mays	
Crop Name				Corn	Corn	Corn	
Rating Date		8-3-2020	8-3-2020	10-22-2020	10-22-2020	10-22-2020	
Part Rated							
Rating Type		CONTRO	CONTRO	YIELD	MOICON	YIELD	
Rating Unit		0-100	0-100	lb/plot	%	BU	
Number of Subsamples		1	1	1	1	1	
Rating Timing		A5	A5				
Days After First/Last Applic.		82 42	82 42	162 122	162 122	162 122	
Trt-Eval Interval							
Days After Emergence		77 DE-1	77 DE-1	157 DE-1	157 DE-1	157 DE-1	
ARM Action Codes						TY1	
Number of Decimals						1	
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code Plot	19	20	21	22	23
1 CHECK		101	0.0	0.0	0.720	0.180	3.3
		203	0.0	0.0	0.130	0.000	0.6
		305	0.0	0.0	1.250	1.270	5.7
		Mean =	0.0	0.0	0.700	0.483	3.2
2 VERDICT	10.0 FL OZ/A	A 102	60.0	70.0	42.930	20.600	156.9
ATRAZIN 4L	32.0 FL OZ/A	A 207	80.0	80.0	21.820	22.100	78.2
LIBERTY 280 SL	32.0 FL OZ/A	B 303	80.0	80.0	32.200	21.000	117.1
ATRAZIN 4L	32.0 FL OZ/A	B					
AMMONIUM SULFATE (21% N)	3.0 LB/A	B					
		Mean =	73.3	76.7	32.317	21.233	117.4

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Pest Type	W Weed	W Weed					
Pest Code	AMBTR	IPOSS					
Pest Name	Giant ragweed	Morning glory					
Crop Type, Code			C ZEAMX	C ZEAMX	C ZEAMX		
Crop Scientific Name			Zea mays	Zea mays	Zea mays		
Crop Name			Corn	Corn	Corn		
Rating Date	8-3-2020	8-3-2020	10-22-2020	10-22-2020	10-22-2020		
Part Rated							
Rating Type	CONTRO	CONTRO	YIELD	MOICON	YIELD		
Rating Unit	0-100	0-100	lb/plot	%	BU		
Number of Subsamples	1	1	1	1	1		
Rating Timing	A5	A5					
Days After First/Last Applic.	82 42	82 42	162 122	162 122	162 122		
Trt-Eval Interval							
Days After Emergence	77 DE-1	77 DE-1	157 DE-1	157 DE-1	157 DE-1		
ARM Action Codes					TY1		
Number of Decimals					1		
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code Plot	19	20	21	22	23
3 VERDICT	10.0 FL OZ/A	A 103	80.0	80.0	43.180	20.300	158.4
ATRAZIN 4L	32.0 FL OZ/A	A 206	80.0	80.0	33.220	20.600	121.4
LIBERTY 280 SL	32.0 FL OZ/A	B 302	80.0	80.0	42.400	21.000	154.2
ARMEZON PRO	16.0 FL OZ/A	B					
ATRAZIN 4L	32.0 FL OZ/A	B					
AMMONIUM SULFATE (21% N)	3.0 LB/A	B					
	Mean =		80.0	80.0	39.600	20.633	144.7
4 VERDICT	10.0 FL OZ/A	A 104	70.0	80.0	46.640	20.900	169.8
ATRAZIN 4L	32.0 FL OZ/A	A 202	70.0	80.0	25.940	21.900	93.2
LIBERTY 280 SL	32.0 FL OZ/A	B 307	80.0	80.0	50.980	22.300	182.3
ARMEZON PRO	16.0 FL OZ/A	B					
ATRAZIN 4L	32.0 FL OZ/A	B					
SURFACTANT-NONIONIC	0.25 % V/V	B					
AMMONIUM SULFATE (21% N)	3.0 LB/A	B					
	Mean =		73.3	80.0	41.187	21.700	148.5
5 VERDICT	10.0 FL OZ/A	A 105	80.0	80.0	41.620	21.200	151.0
ATRAZIN 4L	32.0 FL OZ/A	A 204	80.0	80.0	44.920	21.200	162.9
ROUNDUP POWERMAX II	32.0 FL OZ/A	B 301	80.0	80.0	28.630	21.300	103.7
ARMEZON PRO	16.0 FL OZ/A	B					
ATRAZIN 4L	32.0 FL OZ/A	B					
SURFACTANT-NONIONIC	0.25 % V/V	B					
AMMONIUM SULFATE (21% N)	3.0 LB/A	B					
	Mean =		80.0	80.0	38.390	21.233	139.2
6 VERDICT	10.0 FL OZ/A	A 106	80.0	80.0	31.280	20.900	113.9
ATRAZIN 4L	32.0 FL OZ/A	A 201	80.0	80.0	41.840	21.400	151.4
LIBERTY 280 SL	32.0 FL OZ/A	C 306	80.0	80.0	48.310	19.400	179.2
STATUS HERBICIDE	2.5 OZ WT/A	C					
ATRAZIN 4L	32.0 FL OZ/A	C					
AMMONIUM SULFATE (21% N)	3.0 LB/A	C					
	Mean =		80.0	80.0	40.477	20.567	148.2

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Pest Type	W Weed	W Weed			
Pest Code	AMBTR	IPOSS			
Pest Name	Giant ragweed	Morning glory			
Crop Type, Code			C ZEAMX	C ZEAMX	C ZEAMX
Crop Scientific Name			Zea mays	Zea mays	Zea mays
Crop Name			Corn	Corn	Corn
Rating Date	8-3-2020	8-3-2020	10-22-2020	10-22-2020	10-22-2020
Part Rated					
Rating Type	CONTRO	CONTRO	YIELD	MOICON	YIELD
Rating Unit	0-100	0-100	lb/plot	%	BU
Number of Subsamples	1	1	1	1	1
Rating Timing	A5	A5			
Days After First/Last Applic.	82 42	82 42	162 122	162 122	162 122
Trt-Eval Interval					
Days After Emergence	77 DE-1	77 DE-1	157 DE-1	157 DE-1	157 DE-1
ARM Action Codes					TY1
Number of Decimals					1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	19	20	21
7 VERDICT	10.0 FL OZ/A	A 107	80.0	80.0	32.580
ATRAZIN 4L	32.0 FL OZ/A	A 205	80.0	80.0	41.250
ROUNDUP POWERMAX II	32.0 FL OZ/A	C 304	80.0	80.0	44.860
STATUS HERBICIDE	2.5 OZ WT/A	C			20.600
ATRAZIN 4L	32.0 FL OZ/A	C			
AMMONIUM SULFATE (21% N)	3.0 LB/A	C			
Mean =			80.0	80.0	39.563
					21.800
					142.5

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LIBERTY TANK MIX EVALUATIONS IN CORN

Trial ID: 20-22 Location: Lexington, KY Trial Year: 2020
 Protocol ID: MKD-H-2020-US-C41-B-02.0 Investigator (Creator): Sara Carter
 Project ID: Study Director: Greg Stapleton
 Sponsor Contact:

Pest Type
 W, Weed = Weed or volunteer crop
Pest Code
 SETFA, Setaria faberi, Giant foxtail = US
 AMBTR, Ambrosia trifida, Giant ragweed = US
 IPOSS, Ipomoea sp., Morning glory = US
Crop Type, Code
 C = EPP0 species (Bayer) codes
 ZEAMX, BCOR, Zea mays, Corn = US
Rating Type
 PHYGEN = phytotoxicity - general / injury
 CONTRO = control / burndown or knockdown
 YIELD = yield
 MOICON = moisture content
Rating Unit
 0-10 = 0-10 index/scale
 0-100 = 0-100 index/scale-percent
 lb/plot = pounds per plot
 % = percent
 BU = bushel
Rating Timing
 A1 = 1st Assessment According to Trial Schedule
 A2 = 2nd Assessment According to trial Schedule
 A3 = 3rd Assessment According to Trial Schedule
 A4 = 4th Assessment According to Trial Schedule
 A5 = 5th Assessment According to Trial Schedule
ARM Action Codes
 TY1 = 3.889286*[21]*(100-[22])/84.5

Pest Type	W Weed SETFA Giant foxtail		W Weed AMBTR Giant ragweed		W Weed IPOSS Morning glory		W Weed SETFA Giant foxtail		W Weed AMBTR Giant ragweed		W Weed IPOSS Morning glory		W Weed SETFA Giant foxtail	
Pest Code														
Pest Name														
Crop Type, Code	C ZEAMX		C ZEAMX		C ZEAMX		C ZEAMX		C ZEAMX		C ZEAMX		C ZEAMX	
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	7-7-2020		7-7-2020		7-7-2020		7-13-2020		7-13-2020		7-13-2020		7-20-2020	
Part Rated														
Rating Type	PHYGEN		CONTRO		CONTRO		PHYGEN		CONTRO		CONTRO		PHYGEN	
Rating Unit	0-10		0-100		0-100		0-10		0-100		0-100		0-10	
Number of Subsamples	1		1		1		1		1		1		1	
Rating Timing	A1		A1		A1		A2		A2		A2		A3	
Days After First/Last Applic.	55	15	55	15	55	15	55	15	61	21	61	21	61	21
Trt-Eval Interval														
Days After Emergence	50 DE-1		50 DE-1		50 DE-1		56 DE-1		56 DE-1		56 DE-1		63 DE-1	
ARM Action Codes														
Number of Decimals														
Trt Treatment	Rate	Appl												
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8	9	10		
1 CHECK			0.0 a	0.0 b	0.0 b	0.0 b	0.0 a	0.0 b	0.0 b	0.0 b	0.0 a	0.0 c		

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Pest Type		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA		
Pest Code		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail		
Pest Name												
Crop Type, Code	C ZEAMX				C ZEAMX				C ZEAMX			
Crop Scientific Name	Zea mays				Zea mays				Zea mays			
Crop Name	Corn				Corn				Corn			
Rating Date	7-7-2020	7-7-2020	7-7-2020	7-7-2020	7-13-2020	7-13-2020	7-13-2020	7-13-2020	7-20-2020	7-20-2020		
Part Rated												
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO		
Rating Unit	0-10	0-100	0-100	0-100	0-10	0-100	0-100	0-100	0-10	0-100		
Number of Subsamples	1	1	1	1	1	1	1	1	1	1		
Rating Timing	A1	A1	A1	A1	A2	A2	A2	A2	A3	A3		
Days After First/Last Applic.	55 15	55 15	55 15	55 15	61 21	61 21	61 21	61 21	68 28	68 28		
Trt-Eval Interval												
Days After Emergence	50 DE-1	50 DE-1	50 DE-1	50 DE-1	56 DE-1	56 DE-1	56 DE-1	56 DE-1	63 DE-1	63 DE-1		
ARM Action Codes												
Number of Decimals												
Trt Treatment	Rate	Appl										
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8	9	10
7 VERDICT	10.0 FL OZ/A	A	0.0 a	100.0 a	98.3 a	100.0 a	0.0 a	97.0 a	95.3 a	96.0 a	0.0 a	91.7 a
ATRAZIN 4L	32.0 FL OZ/A	A										
ROUNDUP POWERMAX II	32.0 FL OZ/A	C										
STATUS HERBICIDE	2.5 OZ WT/A	C										
ATRAZIN 4L	32.0 FL OZ/A	C										
AMMONIUM SULFATE (21% N)	3.0 LB/A	C										
LSD P=.05				8.46	6.63	6.29		9.48	9.38	8.99		8.42
Standard Deviation			0.00	4.76	3.73	3.54	0.00	5.33	5.27	5.06	0.00	4.74
CV			0.0	5.76	4.52	4.22	0.0	6.75	6.79	6.38	0.0	6.48
Levene's F			0.00	0.679	0.756	0.538	0.00	0.754	0.629	0.449	0.00	0.938
Levene's Prob(F)			0.00*	0.669	0.616	0.771	0.00*	0.617	0.705	0.834	0.00*	0.499
Skewness			.	-2.0808*	-2.1146*	-2.1559*	.	-2.0152*	-2.0241*	-2.0722*	.	-2.0076*
Kurtosis			.	2.7948*	2.8987*	3.0089*	.	2.6038*	2.6484*	2.7718*	.	2.6049*
Replicate F			0.000	5.421	7.800	2.667	0.000	6.385	7.501	4.970	0.000	5.150
Replicate Prob(F)			1.0000	0.0210	0.0068	0.1101	1.0000	0.0129	0.0077	0.0268	1.0000	0.0243
Treatment F			0.000	177.316	286.171	328.381	0.000	129.700	127.491	144.284	0.000	141.788
Treatment Prob(F)			1.0000	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001	0.0001	1.0000	0.0001

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Pest Type	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR
Pest Code	Giant ragweed	Morning glory	C ZEAMX	Giant foxtail	Giant ragweed	Morning glory	C ZEAMX	Giant foxtail	Giant ragweed
Pest Name			Zea mays				Zea mays		
Crop Type, Code			Corn				Corn		
Crop Scientific Name									
Crop Name									
Rating Date	7-20-2020	7-20-2020	7-27-2020	7-27-2020	7-27-2020	7-27-2020	8-3-2020	8-3-2020	8-3-2020
Part Rated									
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO
Rating Unit	0-100	0-100	0-10	0-100	0-100	0-100	0-10	0-100	0-100
Number of Subsamples	1	1	1	1	1	1	1	1	1
Rating Timing	A3	A3	A4	A4	A4	A4	A5	A5	A5
Days After First/Last Applic.	68 28	68 28	75 35	75 35	75 35	75 35	82 42	82 42	82 42
Trt-Eval Interval									
Days After Emergence	63 DE-1	63 DE-1	70 DE-1	70 DE-1	70 DE-1	70 DE-1	77 DE-1	77 DE-1	77 DE-1
ARM Action Codes									
Number of Decimals									
Trt Treatment									
No. Name	Rate Rate Unit	Appl Code							
1 CHECK	11	12	13	14	15	16	17	18	19
	0.0 b	0.0 b	0.0 a	0.0 b	0.0 b	0.0 b	0.0 a	0.0 b	0.0 b

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Pest Type	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR	W Weed IPOSS		W Weed SETFA	W Weed AMBTR		
Pest Code	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed		
Pest Name			C ZEAMX Zea mays Corn				C ZEAMX Zea mays Corn				
Crop Type, Code											
Crop Scientific Name											
Crop Name											
Rating Date	7-20-2020	7-20-2020	7-27-2020	7-27-2020	7-27-2020	7-27-2020	8-3-2020	8-3-2020	8-3-2020		
Part Rated											
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO		
Rating Unit	0-100	0-100	0-10	0-100	0-100	0-100	0-10	0-100	0-100		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Rating Timing	A3	A3	A4	A4	A4	A4	A5	A5	A5		
Days After First/Last Applic.	68 28	68 28	75 35	75 35	75 35	75 35	82 42	82 42	82 42		
Trt-Eval Interval											
Days After Emergence	63 DE-1	63 DE-1	70 DE-1	70 DE-1	70 DE-1	70 DE-1	77 DE-1	77 DE-1	77 DE-1		
ARM Action Codes											
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code	11	12	13	14	15	16	17	18	19
7 VERDICT	10.0 FL OZ/A	A	91.7 a	91.7 a	0.0 a	85.0 a	85.0 a	85.0 a	0.0 a	80.0 a	80.0 a
ATRAZIN 4L	32.0 FL OZ/A	A									
ROUNDUP POWERMAX II	32.0 FL OZ/A	C									
STATUS HERBICIDE	2.5 OZ WT/A	C									
ATRAZIN 4L	32.0 FL OZ/A	C									
AMMONIUM SULFATE (21% N)	3.0 LB/A	C									
LSD P=.05			10.48	9.57	.	10.02	9.24	6.29	.	8.08	8.39
Standard Deviation			5.89	5.38	0.00	5.63	5.19	3.54	0.00	4.54	4.71
CV			7.81	7.13	0.0	8.1	7.35	4.98	0.0	6.77	7.07
Levene's F			0.864	0.409	0.00	0.646	0.857	0.538	0.00	0.867	0.867
Levene's Prob(F)			0.544	0.861	0.00*	0.693	0.549	0.771	0.00*	0.542	0.542
Skewness			-2.0002*	-2.0337*	.	-2.0351*	-2.0495*	-2.1388*	.	-2.0906*	-2.0717*
Kurtosis			2.5547*	2.6694*	.	2.63*	2.6903*	2.9583*	.	2.791*	2.7433*
Replicate F			3.840	5.219	0.000	2.400	1.721	2.667	0.000	2.077	1.500
Replicate Prob(F)			0.0514	0.0234	1.0000	0.1328	0.2203	0.1101	1.0000	0.1680	0.2621
Treatment F			97.257	115.616	0.000	89.838	109.618	235.524	0.000	128.385	118.000
Treatment Prob(F)			0.0001	0.0001	1.0000	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001

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Pest Type	W Weed				
Pest Code	IPOSS				
Pest Name	Morning glory				
Crop Type, Code		C ZEAMX	C ZEAMX	C ZEAMX	
Crop Scientific Name		Zea mays	Zea mays	Zea mays	
Crop Name		Corn	Corn	Corn	
Rating Date	8-3-2020	10-22-2020	10-22-2020	10-22-2020	
Part Rated					
Rating Type	CONTRO	YIELD	MOICON	YIELD	
Rating Unit	0-100	lb/plot	%	BU	
Number of Subsamples	1	1	1	1	
Rating Timing	A5				
Days After First/Last Applic.	82 42	162 122	162 122	162 122	
Trt-Eval Interval					
Days After Emergence	77 DE-1	157 DE-1	157 DE-1	157 DE-1	
ARM Action Codes				TY1	
Number of Decimals				1	
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code			
1 CHECK	0.0 b	20	0.700 b	21	0.483 b
		23			3.2 b

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Pest Type Pest Code Pest Name Crop Type, Code Crop Scientific Name Crop Name Rating Date Part Rated Rating Type Rating Unit Number of Subsamples Rating Timing Days After First/Last Applic. Trt-Eval Interval Days After Emergence ARM Action Codes Number of Decimals			W Weed IPOSS Morning glory	C ZEAMX Zea mays Corn	C ZEAMX Zea mays Corn	C ZEAMX Zea mays Corn
			8-3-2020	10-22-2020	10-22-2020	10-22-2020
			CONTRO	YIELD	MOICON	YIELD
			0-100	lb/plot	%	BU
			1	1	1	1
			A5			
			82 42	162 122	162 122	162 122
			77 DE-1	157 DE-1	157 DE-1	157 DE-1
						TY1
						1
Trt Treatment No. Name	Rate Rate Unit	Appl Code	20	21	22	23
2 VERDICT	10.0 FL OZ/A	A	76.7 a	32.317 a	21.233 a	117.4 a
ATRAZIN 4L	32.0 FL OZ/A	A				
LIBERTY 280 SL	32.0 FL OZ/A	B				
ATRAZIN 4L	32.0 FL OZ/A	B				
AMMONIUM SULFATE (21% N)	3.0 LB/A	B				
3 VERDICT	10.0 FL OZ/A	A	80.0 a	39.600 a	20.633 a	144.7 a
ATRAZIN 4L	32.0 FL OZ/A	A				
LIBERTY 280 SL	32.0 FL OZ/A	B				
ARMEZON PRO	16.0 FL OZ/A	B				
ATRAZIN 4L	32.0 FL OZ/A	B				
AMMONIUM SULFATE (21% N)	3.0 LB/A	B				
4 VERDICT	10.0 FL OZ/A	A	80.0 a	41.187 a	21.700 a	148.5 a
ATRAZIN 4L	32.0 FL OZ/A	A				
LIBERTY 280 SL	32.0 FL OZ/A	B				
ARMEZON PRO	16.0 FL OZ/A	B				
ATRAZIN 4L	32.0 FL OZ/A	B				
SURFACTANT-NONIONIC	0.25 % V/V	B				
AMMONIUM SULFATE (21% N)	3.0 LB/A	B				
5 VERDICT	10.0 FL OZ/A	A	80.0 a	38.390 a	21.233 a	139.2 a
ATRAZIN 4L	32.0 FL OZ/A	A				
ROUNDUP POWERMAX II	32.0 FL OZ/A	B				
ARMEZON PRO	16.0 FL OZ/A	B				
ATRAZIN 4L	32.0 FL OZ/A	B				
SURFACTANT-NONIONIC	0.25 % V/V	B				
AMMONIUM SULFATE (21% N)	3.0 LB/A	B				
6 VERDICT	10.0 FL OZ/A	A	80.0 a	40.477 a	20.567 a	148.2 a
ATRAZIN 4L	32.0 FL OZ/A	A				
LIBERTY 280 SL	32.0 FL OZ/A	C				
STATUS HERBICIDE	2.5 OZ WT/A	C				
ATRAZIN 4L	32.0 FL OZ/A	C				
AMMONIUM SULFATE (21% N)	3.0 LB/A	C				

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Pest Type		W Weed			
Pest Code		IPOSS			
Pest Name		Morning glory			
Crop Type, Code		C ZEAMX	C ZEAMX	C ZEAMX	
Crop Scientific Name		Zea mays	Zea mays	Zea mays	
Crop Name		Corn	Corn	Corn	
Rating Date		8-3-2020	10-22-2020	10-22-2020	10-22-2020
Part Rated					
Rating Type		CONTRO	YIELD	MOICON	YIELD
Rating Unit		0-100	lb/plot	%	BU
Number of Subsamples		1	1	1	1
Rating Timing		A5			
Days After First/Last Applic.		82 42	162 122	162 122	162 122
Trt-Eval Interval					
Days After Emergence		77 DE-1	157 DE-1	157 DE-1	157 DE-1
ARM Action Codes					TY1
Number of Decimals					1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	20	21	22
7 VERDICT	10.0 FL OZ/A	A	80.0 a	39.563 a	21.800 a
ATRAZIN 4L	32.0 FL OZ/A	A			
ROUNDUP POWERMAX II	32.0 FL OZ/A	C			
STATUS HERBICIDE	2.5 OZ WT/A	C			
ATRAZIN 4L	32.0 FL OZ/A	C			
AMMONIUM SULFATE (21% N)	3.0 LB/A	C			
LSD P=.05			3.88	15.3856	1.3424
Standard Deviation			2.18	8.6485	0.7546
CV			3.2	26.07	4.14
Levene's F				0.521	0.551
Levene's Prob(F)				0.783	0.762
Skewness			-2.177*	-1.2455*	-2.1602*
Kurtosis			3.0661*	0.6297	3.0478*
Replicate F			1.000	0.810	0.983
Replicate Prob(F)			0.3966	0.4678	0.4026
Treatment F			569.000	8.571	324.054
Treatment Prob(F)			0.0001	0.0009	0.0001

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LIBERTY TANK MIX EVALUTIONS IN CORN

Trial ID: 20-22 Location: Lexington, KY Trial Year: 2020
 Protocol ID: MKD-H-2020-US-C41-B-02.0 Investigator (Creator): Sara Carter
 Project ID: Study Director: Greg Stapleton
 Sponsor Contact:

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

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

Crop Type, Code

C = EPPO species (Bayer) codes
 ZEAMX, BCOR, Zea mays, Corn = US

Rating Type

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

Rating Unit

0-10 = 0-10 index/scale
 0-100 = 0-100 index/scale-percent
 lb/plot = pounds per plot
 % = percent
 BU = bushel

Rating Timing

A1 = 1st Assessment According to Trial Schedule
 A2 = 2nd Assessment According to trial Schedule
 A3 = 3rd Assessment According to Trial Schedule
 A4 = 4th Assessment According to Trial Schedule
 A5 = 5th Assessment According to Trial Schedule

ARM Action Codes

TY1 = $3.889286 * [21] * (100 - [22]) / 84.5$

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2020 Enlist Weed Control System

Trial ID: 20-23 SOY-REC Location: UKREC 108-C4 Trial Year: 2020
 Protocol ID: NA20P2E004H Investigator (Creator): Travis Legleiter
 Project ID: Study Director:
 Sponsor Contact:

Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	Untreated									101	207	306	404
2	Enlist Duo	3.3 lbae/gal		SL	75 FL OZ/A		BURNDOWN	A	78.12 mL/mx	102	204	303	401
	Sonic	70 %		DG	6 OZ/A		BURNDOWN	A	5.991 g/mx				
	Amsol AMS	3.4 lba/gal		SL	2.5 % V/V		BURNDOWN	A	49.99 mL/mx				
	Durango DMA	4 LBAE/GAL		SL	32 FL OZ/A		POST	B	33.33 mL/mx				
	Amsol AMS	3.4 lba/gal		SL	2.5 % V/V		POST	B	49.99 mL/mx				
3	Enlist Duo	3.3 lbae/gal		SL	75 FL OZ/A		BURNDOWN	A	78.12 mL/mx	103	208	305	402
	Sonic	70 %		DG	6 OZ/A		BURNDOWN	A	5.991 g/mx				
	Amsol AMS	3.4 lba/gal		SL	2.5 % V/V		BURNDOWN	A	49.99 mL/mx				
	Enlist Duo	3.3 lbae/gal		SL	75 FL OZ/A		POST	B	78.12 mL/mx				
	Amsol AMS	3.4 lba/gal		SL	2.5 % V/V		POST	B	49.99 mL/mx				
4	Enlist Duo	3.3 lbae/gal		SL	75 FL OZ/A		BURNDOWN	A	78.12 mL/mx	104	201	307	406
	Sonic	70 %		DG	6 OZ/A		BURNDOWN	A	5.991 g/mx				
	Amsol AMS	3.4 lba/gal		SL	2.5 % V/V		BURNDOWN	A	49.99 mL/mx				
	Enlist One	3.8 lbae/gal		SL	32 FL OZ/A		POST	B	33.33 mL/mx				
	Durango DMA	4 LBAE/GAL		SL	32 FL OZ/A		POST	B	33.33 mL/mx				
5	Enlist Duo	3.3 lbae/gal		SL	75 FL OZ/A		BURNDOWN	A	78.12 mL/mx	105	202	301	405
	Sonic	70 %		DG	6 OZ/A		BURNDOWN	A	5.991 g/mx				
	Amsol AMS	3.4 lba/gal		SL	2.5 % V/V		BURNDOWN	A	49.99 mL/mx				
	Liberty	2.34 lba/gal		L	32 FL OZ/A		POST	B	33.33 mL/mx				
	Amsol AMS	3.4 lba/gal		SL	2.5 % V/V		POST	B	49.99 mL/mx				
6	Enlist Duo	3.3 lbae/gal		SL	75 FL OZ/A		BURNDOWN	A	78.12 mL/mx	106	205	302	403
	Sonic	70 %		DG	6 OZ/A		BURNDOWN	A	5.991 g/mx				
	Amsol AMS	3.4 lba/gal		SL	2.5 % V/V		BURNDOWN	A	49.99 mL/mx				
	Liberty	2.34 lba/gal		L	32 FL OZ/A		POST	B	33.33 mL/mx				
	Enlist One	3.8 lbae/gal		SL	32 FL OZ/A		POST	B	33.33 mL/mx				
	Amsol AMS	3.4 lba/gal		SL	2.5 % V/V		POST	B	49.99 mL/mx				
7	Liberty	2.34 lba/gal		L	36 FL OZ/A		BURNDOWN	A	37.5 mL/mx	107	206	308	407
	Enlist One	3.8 lbae/gal		SL	32 FL OZ/A		BURNDOWN	A	33.33 mL/mx				
	Sonic	70 %		DG	6 OZ/A		BURNDOWN	A	5.991 g/mx				
	Amsol AMS	3.4 lba/gal		SL	2.5 % V/V		BURNDOWN	A	49.99 mL/mx				
	Enlist Duo	3.3 lbae/gal		SL	75 FL OZ/A		POST	B	78.12 mL/mx				
	Amsol AMS	3.4 lba/gal		SL	2.5 % V/V		POST	B	49.99 mL/mx				
8	Liberty	2.34 lba/gal		L	36 FL OZ/A		BURNDOWN	A	37.5 mL/mx	108	203	304	408
	Enlist One	3.8 lbae/gal		SL	32 FL OZ/A		BURNDOWN	A	33.33 mL/mx				
	Sonic	70 %		DG	6 OZ/A		BURNDOWN	A	5.991 g/mx				
	Amsol AMS	3.4 lba/gal		SL	2.5 % V/V		BURNDOWN	A	49.99 mL/mx				
	Liberty	2.34 lba/gal		L	32 FL OZ/A		POST	B	33.33 mL/mx				
	Amsol AMS	3.4 lba/gal		SL	2.5 % V/V		POST	B	49.99 mL/mx				

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Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)
 Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
683.593	mL	Enlist Duo	3.3	lbae/gal	SL	
52.424	g	Sonic	70	%	DG	
812.411	mL	Amsol AMS	3.4	lba/gal	SL	
83.333	mL	Durango DMA	4	LBAE/GAL	SL	
166.667	mL	Enlist One	3.8	lbae/gal	SL	
218.750	mL	Liberty	2.34	lba/gal	L	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.

General Trial Information

Investigator: Travis Legleiter **Title:** Assistant Extension Professor

Trial Status: E established

ARM Trial Created On: 4-9-2020

Trial Location

City: Princeton **Country:** USA United States

State/Prov.: Kentucky

Postal Code: 42445

Conducted Under GLP: No

Conducted Under GEP: No

Role: INVEST investigator

Investigator: Travis Legleiter

Title: Assistant Extension Professor

Organization: University of Kentucky

Address 1: 348 University Drive

Phone No.: 859-562-1323

Country: USA United States

E-mail: Travis.Legleiter@uky.edu

City: Princeton, KY

Postal Code: 42445

Crop Description

Crop 1: C GLXMA Glycine max Soybean

Stage Scale: BBCH

Variety: P41TO7E

Planting Date: 6-8-2020

Planting Rate: 140000 S/A

Depth: 1.5 IN

Planting Method: PLANTD planted

Row Spacing: 15 IN

Planting Equipment: VP vacuum planter

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Pest Description		
Pest 1 Type: W	Code: ERICA Erigeron canadensis Common Name: Canada horseweed	Stage Scale: BBCH
Pest 2 Type: W	Code: DIGSS Digitaria sp. Common Name: Crabgrass	Stage Scale: BBCH
Pest 3 Type: W	Code: TAROF Taraxacum officinale Common Name: Blowball	Stage Scale: BBCH
Pest 4 Type: W	Code: OXAST Oxalis stricta Common Name: European wood sorrel	Stage Scale: BBCH
Pest 5 Type: W	Code: AMBTR Ambrosia trifida Common Name: Giant ragweed	Stage Scale: BBCH
Pest 6 Type: W	Code: IPOSS Ipomoea sp. Common Name: Morning glory	Stage Scale: BBCH
Pest 7 Type: W	Code: ELEIN Eleusine indica Common Name: Goosegrass	Stage Scale: BBCH
Pest 8 Type: W	Code: AMACH Amaranthus hybridus Common Name: Green pigweed	Stage Scale: BBCH
Pest 9 Type: W	Code: SIDSP Sida spinosa Common Name: Prickly sida	Stage Scale: BBCH

Site and Design		
Treated Plot Width: 10 FT	Site Type: FIELD field	
Treated Plot Length: 30 FT	Experimental Unit: 1 PLOT plot	
Treated Plot Area: 300.0 FT2	Treatments: 8	Tillage Type: NOTILL no-till
Replications: 4	Study Design: RACOB� Randomized Complete Block (RCB)	

Maintenance									
No.	Date	Type	Maintenance Product Name	Form Conc	Form Unit	Form Type	Description	Rate	Rate Unit
1.	4-6-2020	FERT	DAP	46	% P2O5	GR	18-46-0	100	lb/a

Field Prep./Maintenance:

Soil Description	
Description Name: 108-C4	
% Sand: 4.2	% OM: 2.6 Texture: SIL silt loam
% Silt: 80.8	pH: 5.25 Soil Name: Crider Silt Loam
% Clay: 15.1	CEC: 12.7

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Application Description		
	A	B
Application Date	6-8-2020	7-7-2020
Appl. Start Time	12:46 PM	9:57 AM
Appl. Stop Time	1:20 PM	10:52 AM
Application Method	SPRAY	SPRAY
Application Placement	FOLIAR	FOLIAR
Applied By	JLG	JLG
Air Temperature Start, Stop	87.5 86.1 F	86.5 90.1 F
% Relative Humidity Start, Stop	58.5 58.3	65.6 53.5
Wind Velocity+Dir. Start	4.6 MPH E	0 MPH SE
Wind Velocity+Dir. Stop	4.5 MPH E	0 MPH SE
Wind Velocity+Dir. Max	8.8 MPH E	1.9 MPH SE
Soil Temperature	73 F	70 F
Soil Moisture	DRY	WET
% Cloud Cover	95	60

Crop Stage At Each Application		
	A	B
Crop 1 Code, BBCH Scale	GLXMA BSOY	GLXMA BSOY
Stage Majority, Percent		13
Stage Minimum, Percent		12
Stage Maximum, Percent		13
Height Average		7.5 IN
Height Minimum, Maximum		5 10

Pest Stage At Each Application		
	A	B
Pest 1 Code, Type, Scale	ERICA W BBCH	ERICA W BBCH
Height Average	13.40 IN	1.5 IN
Height Minimum, Maximum	1.25 20.50	0 3
Density Average	2.625 FT2	0.125 FT2
Density Minimum, Maximum	1 9	0 1
Pest 2 Code, Type, Scale	DIGSS W BBCH	DIGSS W BBCH
Height Average	3.57 IN	3.25 IN
Height Minimum, Maximum	0.75 11	1.5 5
Density Average	13.5 FT2	1.375 FT2
Density Minimum, Maximum	2 79	0 8
Pest 3 Code, Type, Scale	TAROF W BBCH	TAROF W BBCH
Height Average	0.75 IN	2.875 IN
Height Minimum, Maximum	0.25 1.25	1.25 4.5
Density Average	5.875 FT2	0.125 FT2
Density Minimum, Maximum	1 15	1 3

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Pest 4 Code, Type, Scale	OXAST W BBCH	OXAST W BBCH
Height Average	4.79 IN	1.75 IN
Height Minimum, Maximum	0.50 6.75	1.25 2.25
Density Average	1.25 FT2	0.125 FT2
Density Minimum, Maximum	1 6	0 1
Pest 5 Code, Type, Scale	AMBTR W BBCH	AMBTR W BBCH
Height Average	17.67 IN	
Height Minimum, Maximum	4.75 24	
Density Average	1.125 FT2	
Density Minimum, Maximum	1 4	
Pest 6 Code, Type, Scale	IPOSS W BBCH	IPOSS W BBCH
Height Average	2 IN	3.375 IN
Height Minimum, Maximum	1.25 2.75	1.25 5.5
Density Average	0.25 FT2	1 FT2
Density Minimum, Maximum	1 1	0 3
Pest 7 Code, Type, Scale	ELEIN W BBCH	ELEIN W BBCH
Height Average		3.75 IN
Height Minimum, Maximum		2.5 5
Density Average		1.5 FT2
Density Minimum, Maximum		0 8
Pest 8 Code, Type, Scale	AMACH W BBCH	AMACH W BBCH
Height Average		2 IN
Height Minimum, Maximum		0 4
Density Average		0.125 FT2
Density Minimum, Maximum		0 1
Pest 9 Code, Type, Scale	SIDSP W BBCH	SIDSP W BBCH
Height Average		0.75 IN
Height Minimum, Maximum		0 1.5
Density Average		0.125 FT2
Density Minimum, Maximum		0 1

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Application Equipment				
	A		B	
Appl. Equipment	SPRABAC		SPRABAC	
Equipment Type	BACCAI		BACCAI	
Operation Pressure	32	PSI	32	PSI
Nozzle Type	AIXR11002		AIXR11002	
Nozzle Spacing	20	IN	20	IN
Boom ID	Red Tape		Red Tape	
Boom Length	10	FT	10	FT
Boom Height	18	IN	18	IN
Ground Speed	3	MPH	3	MPH
Carrier	WATER		WATER	
Application Amount	15	GAL/AC	15	GAL/AC
Mix Overage	436	mL	436	mL
Mix Size	2	L	2	L
Propellant	COMCO2		COMCO2	

			W Weed ERICA	W Weed AMBTR	W Weed DIGSA	W Weed AMACH		W Weed ERICA	W Weed AMBTR
Pest Type			Canada horseweed	Giant ragweed	large crabgrass	Green pigweed		Canada horseweed	Giant ragweed
Pest Code									
Pest Name									
Crop Type, Code	C GLXMA								
Crop Scientific Name	Glycine max								
Crop Name	Soybean								
Rating Date	7-6-2020		7-6-2020	7-6-2020	7-6-2020	7-6-2020	7-23-2020	7-23-2020	7-23-2020
Part Rated	PLANT C		PLANT P	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P
Rating Type	PHYGEN		CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO
Rating Unit	%		%	%	%	%	%	%	%
Number of Subsamples	1		1	1	1	1	1	1	1
Rating Timing									
Days After First/Last Applic.	28 28		28 28	28 28	28 28	28 28	45 16	45 16	45 16
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes			ER2						
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7
1 Untreated		101	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		207	0.0		0.0	0.0	0.0	0.0	0.0
		306	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		404	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 Enlist Duo	75 FL OZ/A A	102	0.0	100.0	100.0	50.0	100.0	0.0	95.0
Sonic	6 OZ/A A	204	0.0		100.0	80.0	100.0	0.0	95.0
Amsol AMS	2.5 % V/V A	303	0.0	85.0	95.0	80.0	100.0	0.0	100.0
Durango DMA	32 FL OZ/A B	401	0.0	60.0	100.0	50.0	100.0	0.0	90.0
Amsol AMS	2.5 % V/V B								
		Mean =	0.0	81.7	98.8	65.0	100.0	0.0	95.0

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Pest Type		W Weed	W Weed	W Weed	W Weed		W Weed	W Weed										
Pest Code		ERICA	AMBTR	DIGSA	AMACH		ERICA	AMBTR										
Pest Name		Canada horseweed	Giant ragweed	large crabgrass	Green pigweed		Canada horseweed	Giant ragweed										
Crop Type, Code	C GLXMA					C GLXMA												
Crop Scientific Name	Glycine max					Glycine max												
Crop Name	Soybean					Soybean												
Rating Date	7-6-2020	7-6-2020	7-6-2020	7-6-2020	7-6-2020	7-23-2020	7-23-2020	7-23-2020										
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P										
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO										
Rating Unit	%	%	%	%	%	%	%	%										
Number of Subsamples	1	1	1	1	1	1	1	1										
Rating Timing																		
Days After First/Last Applic.	28 28	28 28	28 28	28 28	28 28	45 16	45 16	45 16										
Trt-Eval Interval																		
Days After Emergence																		
ARM Action Codes		ER2																
Number of Decimals																		
Trt Treatment	Rate	Appl	1		2		3		4		5		6		7		8	
No. Name	Rate Unit	Code Plot																
3 Enlist Duo	75 FL OZ/A	A 103	0.0	80.0	100.0	70.0	100.0	0.0	97.0	100.0								
Sonic	6 OZ/A	A 208	0.0		100.0	80.0	100.0	0.0	100.0	100.0								
Amsol AMS	2.5 % V/V	A 305	0.0	75.0	100.0	80.0	100.0	0.0	100.0	100.0								
Enlist Duo	75 FL OZ/A	B 402	0.0	70.0	100.0	50.0	100.0	0.0	100.0	100.0								
Amsol AMS	2.5 % V/V	B																
	Mean =		0.0	75.0	100.0	70.0	100.0	0.0	99.3	100.0								
4 Enlist Duo	75 FL OZ/A	A 104	0.0	90.0	100.0	60.0	100.0	0.0	100.0	100.0								
Sonic	6 OZ/A	A 201	0.0		100.0	50.0	100.0	0.0	100.0	100.0								
Amsol AMS	2.5 % V/V	A 307	0.0	85.0	100.0	90.0	100.0	0.0	100.0	100.0								
Enlist One	32 FL OZ/A	B 406	0.0	90.0	100.0	95.0	100.0	0.0	100.0	100.0								
Durango DMA	32 FL OZ/A	B																
	Mean =		0.0	88.3	100.0	73.8	100.0	0.0	100.0	100.0								
5 Enlist Duo	75 FL OZ/A	A 105	0.0	85.0	100.0	60.0	100.0	0.0	100.0	100.0								
Sonic	6 OZ/A	A 202	0.0		100.0	70.0	100.0	0.0	96.0	100.0								
Amsol AMS	2.5 % V/V	A 301	0.0	50.0	95.0	30.0	100.0	0.0	100.0	100.0								
Liberty	32 FL OZ/A	B 405	0.0	85.0	100.0	90.0	100.0	0.0	100.0	100.0								
Amsol AMS	2.5 % V/V	B																
	Mean =		0.0	73.3	98.8	62.5	100.0	0.0	99.0	100.0								
6 Enlist Duo	75 FL OZ/A	A 106	0.0	90.0	100.0	80.0	100.0	0.0	100.0	100.0								
Sonic	6 OZ/A	A 205	0.0		100.0	90.0	100.0	0.0	100.0	100.0								
Amsol AMS	2.5 % V/V	A 302	0.0	80.0	100.0	70.0	100.0	0.0	100.0	100.0								
Liberty	32 FL OZ/A	B 403	0.0	90.0	100.0	80.0	100.0	0.0	100.0	100.0								
Enlist One	32 FL OZ/A	B																
Amsol AMS	2.5 % V/V	B																
	Mean =		0.0	86.7	100.0	80.0	100.0	0.0	100.0	100.0								
7 Liberty	36 FL OZ/A	A 107	0.0	95.0	100.0	80.0	100.0	0.0	97.0	100.0								
Enlist One	32 FL OZ/A	A 206	0.0		100.0	85.0	100.0	0.0	100.0	100.0								
Sonic	6 OZ/A	A 308	0.0	97.0	100.0	75.0	100.0	0.0	100.0	100.0								
Amsol AMS	2.5 % V/V	A 407	0.0	100.0	100.0	80.0	100.0	0.0	100.0	100.0								
Enlist Duo	75 FL OZ/A	B																
Amsol AMS	2.5 % V/V	B																
	Mean =		0.0	97.3	100.0	80.0	100.0	0.0	99.3	100.0								

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Pest Type		W Weed	W Weed	W Weed	W Weed		W Weed	W Weed		
Pest Code		ERICA	AMBTR	DIGSA	AMACH		ERICA	AMBTR		
Pest Name		Canada horseweed	Giant ragweed	large crabgrass	Green pigweed		Canada horseweed	Giant ragweed		
Crop Type, Code	C GLXMA					C GLXMA				
Crop Scientific Name	Glycine max					Glycine max				
Crop Name	Soybean					Soybean				
Rating Date	7-6-2020	7-6-2020	7-6-2020	7-6-2020	7-6-2020	7-23-2020	7-23-2020	7-23-2020		
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P		
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1		
Rating Timing										
Days After First/Last Applic.	28 28	28 28	28 28	28 28	28 28	45 16	45 16	45 16		
Trt-Eval Interval										
Days After Emergence										
ARM Action Codes		ER2								
Number of Decimals										
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7	8
8 Liberty	36 FL OZ/A	A 108	0.0	100.0	100.0	75.0	100.0	0.0	100.0	100.0
Enlist One	32 FL OZ/A	A 203	0.0		100.0	80.0	100.0	0.0	100.0	100.0
Sonic	6 OZ/A	A 304	0.0	100.0	100.0	70.0	100.0	0.0	100.0	100.0
Amsol AMS	2.5 % V/V	A 408	0.0	100.0	100.0	70.0	100.0	0.0	100.0	100.0
Liberty	32 FL OZ/A	B								
Amsol AMS	2.5 % V/V	B								
Mean =			0.0	100.0	100.0	73.8	100.0	0.0	100.0	100.0

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Pest Type	W Weed	W Weed		W Weed	W Weed	W Weed	W Weed		
Pest Code	DIGSA	AMACH		ERICA	AMBTR	DIGSA	AMACH		
Pest Name	large crabgrass	Green pigweed		Canada horseweed	Giant ragweed	large crabgrass	Green pigweed		
Crop Type, Code			C GLXMA						
Crop Scientific Name			Glycine max						
Crop Name			Soybean						
Rating Date	7-23-2020	7-23-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020		
Part Rated	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Rating Timing									
Days After First/Last Applic.	45 16	45 16	56 27	56 27	56 27	56 27	56 27		
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes									
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	9	10	11	12	13	14	15
1 Untreated		101	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		207	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		306	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		404	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 Enlist Duo	75 FL OZ/A A	102	100.0	100.0	0.0	95.0	100.0	100.0	100.0
Sonic	6 OZ/A A	204	100.0	100.0	0.0	95.0	100.0	100.0	100.0
Amsol AMS	2.5 % V/V A	303	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Durango DMA	32 FL OZ/A B	401	100.0	100.0	0.0	95.0	100.0	97.0	100.0
Amsol AMS	2.5 % V/V B								
		Mean =	100.0	100.0	0.0	96.3	100.0	99.3	100.0

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Pest Type	W Weed	W Weed		W Weed	W Weed	W Weed	W Weed		
Pest Code	DIGSA	AMACH		ERICA	AMBTR	DIGSA	AMACH		
Pest Name	large crabgrass	Green pigweed		Canada horseweed	Giant ragweed	large crabgrass	Green pigweed		
Crop Type, Code			C GLXMA						
Crop Scientific Name			Glycine max						
Crop Name			Soybean						
Rating Date	7-23-2020	7-23-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020		
Part Rated	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Rating Timing									
Days After First/Last Applic.	45 16	45 16	56 27	56 27	56 27	56 27	56 27		
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes									
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	9	10	11	12	13	14	15
3 Enlist Duo	75 FL OZ/A	A 103	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Sonic	6 OZ/A	A 208	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Amsol AMS	2.5 % V/V	A 305	100.0	100.0	0.0	97.0	100.0	100.0	100.0
Enlist Duo	75 FL OZ/A	B 402	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Amsol AMS	2.5 % V/V	B							
	Mean =		100.0	100.0	0.0	99.3	100.0	100.0	100.0
4 Enlist Duo	75 FL OZ/A	A 104	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Sonic	6 OZ/A	A 201	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Amsol AMS	2.5 % V/V	A 307	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Enlist One	32 FL OZ/A	B 406	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Durango DMA	32 FL OZ/A	B							
	Mean =		100.0	100.0	0.0	100.0	100.0	100.0	100.0
5 Enlist Duo	75 FL OZ/A	A 105	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Sonic	6 OZ/A	A 202	100.0	100.0	0.0	95.0	95.0	90.0	100.0
Amsol AMS	2.5 % V/V	A 301	100.0	100.0	0.0*	98.6*	98.3*	97.3*	100.0*
Liberty	32 FL OZ/A	B 405	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Amsol AMS	2.5 % V/V	B							
	Mean =		100.0	100.0	0.0	98.4	98.3	96.8	100.0
6 Enlist Duo	75 FL OZ/A	A 106	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Sonic	6 OZ/A	A 205	100.0	100.0	0.0	100.0	100.0	97.0	100.0
Amsol AMS	2.5 % V/V	A 302	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Liberty	32 FL OZ/A	B 403	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Enlist One	32 FL OZ/A	B							
Amsol AMS	2.5 % V/V	B							
	Mean =		100.0	100.0	0.0	100.0	100.0	99.3	100.0
7 Liberty	36 FL OZ/A	A 107	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Enlist One	32 FL OZ/A	A 206	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Sonic	6 OZ/A	A 308	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Amsol AMS	2.5 % V/V	A 407	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Enlist Duo	75 FL OZ/A	B							
Amsol AMS	2.5 % V/V	B							
	Mean =		100.0	100.0	0.0	100.0	100.0	100.0	100.0

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Pest Type Pest Code Pest Name Crop Type, Code Crop Scientific Name Crop Name Rating Date Part Rated Rating Type Rating Unit Number of Subsamples Rating Timing Days After First/Last Applic. Trt-Eval Interval Days After Emergence ARM Action Codes Number of Decimals	W Weed DIGSA large crabgrass	W Weed AMACH Green pigweed	C GLXMA Glycine max Soybean	W Weed ERICA Canada horseweed	W Weed AMBTR Giant ragweed	W Weed DIGSA large crabgrass	W Weed AMACH Green pigweed		
Trt Treatment No. Name Rate Rate Unit Appl Code Plot	9	10	11	12	13	14	15		
8 Liberty	36 FL OZ/A A	108	100.0	100.0	0.0	100.0	100.0	90.0	100.0
Enlist One	32 FL OZ/A A	203	100.0	100.0	0.0	100.0	100.0	97.0	100.0
Sonic	6 OZ/A A	304	100.0	100.0	0.0	100.0	100.0	98.0	100.0
Amsol AMS	2.5 % V/V A	408	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Liberty	32 FL OZ/A B								
Amsol AMS	2.5 % V/V B								
Mean =			100.0	100.0	0.0	100.0	100.0	96.3	100.0

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Pest Type		W Weed ERICA	W Weed AMBTR	W Weed DIGSA	W Weed AMACH		W Weed ERICA	W Weed AMBTR	W Weed DIGSA		
Pest Code		Canada horseweed	Giant ragweed	large crabgrass	Green pigweed		Canada horseweed	Giant ragweed	large crabgrass		
Pest Name											
Crop Type, Code	C GLXMA					C GLXMA					
Crop Scientific Name	Glycine max					Glycine max					
Crop Name	Soybean					Soybean					
Rating Date	7-6-2020	7-6-2020	7-6-2020	7-6-2020	7-6-2020	7-23-2020	7-23-2020	7-23-2020	7-23-2020		
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P		
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Rating Timing											
Days After First/Last Applic.	28 28	28 28	28 28	28 28	28 28	45 16	45 16	45 16	45 16		
Trt-Eval Interval											
Days After Emergence											
ARM Action Codes		ER2									
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8	9
8 Liberty	36 FL OZ/A A		0.0 a	100.0 a	100.0 a	73.8 a	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a
Enlist One	32 FL OZ/A A										
Sonic	6 OZ/A A										
Amsol AMS	2.5 % V/V A										
Liberty	32 FL OZ/A B										
Amsol AMS	2.5 % V/V B										
LSD P=.05				18.01	1.70	22.49			2.60		
Standard Deviation	0.00			10.28	1.16	15.29	0.00	0.00	1.77	0.00	0.00
CV	0.0			13.66	1.33	24.23	0.0	0.0	2.05	0.0	0.0
Levene's F	0.00			1.139	0.00	4.286	0.00	0.00	1.426	0.00	0.00
Levene's Prob(F)	0.00*			0.388	0.00*	0.003*	0.00*	0.00*	0.241	0.00*	0.00*
Skewness	.			-1.7732*	-2.3747*	-1.3984*	-2.3809*	.	-2.3607*	-2.3809*	-2.3809*
Kurtosis	.			2.1219*	3.8912*	0.9811	3.9094*	.	3.8491*	3.9094*	3.9094*
Replicate F	0.000			1.414	2.333	0.356	0.000	0.000	1.023	0.000	0.000
Replicate Prob(F)	1.0000			0.2758	0.1032	0.7851	1.0000	1.0000	0.4026	1.0000	1.0000
Treatment F	0.000			28.816	3707.667	11.802	0.000	0.000	1563.433	0.000	0.000
Treatment Prob(F)	1.0000			0.0001	0.0001	0.0001	1.0000	1.0000	0.0001	1.0000	1.0000

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Pest Type	W Weed		W Weed	W Weed	W Weed	W Weed		
Pest Code	AMACH		ERICA	AMBTR	DIGSA	AMACH		
Pest Name	Green pigweed		Canada horseweed	Giant ragweed	large crabgrass	Green pigweed		
Crop Type, Code		C GLXMA						
Crop Scientific Name		Glycine max						
Crop Name		Soybean						
Rating Date	7-23-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020		
Part Rated	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Rating Timing								
Days After First/Last Applic.	45 16	56 27	56 27	56 27	56 27	56 27		
Trt-Eval Interval								
Days After Emergence								
ARM Action Codes								
Number of Decimals								
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	10	11	12	13	14	15
1 Untreated			0.0 b	0.0 a	0.0 c	0.0 b	0.0 b	0.0 b
2 Enlist Duo	75 FL OZ/A	A	100.0 a	0.0 a	96.3 b	100.0 a	99.3 a	100.0 a
Sonic	6 OZ/A	A						
Amsol AMS	2.5 % V/V	A						
Durango DMA	32 FL OZ/A	B						
Amsol AMS	2.5 % V/V	B						
3 Enlist Duo	75 FL OZ/A	A	100.0 a	0.0 a	99.3 a	100.0 a	100.0 a	100.0 a
Sonic	6 OZ/A	A						
Amsol AMS	2.5 % V/V	A						
Enlist Duo	75 FL OZ/A	B						
Amsol AMS	2.5 % V/V	B						

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Pest Type	W Weed		W Weed	W Weed	W Weed	W Weed		
Pest Code	AMACH		ERICA	AMBTR	DIGSA	AMACH		
Pest Name	Green pigweed		Canada horseweed	Giant ragweed	large crabgrass	Green pigweed		
Crop Type, Code		C GLXMA						
Crop Scientific Name		Glycine max						
Crop Name		Soybean						
Rating Date	7-23-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020		
Part Rated	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Rating Timing								
Days After First/Last Applic.	45 16	56 27	56 27	56 27	56 27	56 27		
Trt-Eval Interval								
Days After Emergence								
ARM Action Codes								
Number of Decimals								
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	10	11	12	13	14	15
4 Enlist Duo Sonic Amsol AMS Enlist One Durango DMA	75 FL OZ/A A 6 OZ/A A 2.5 % V/V A 32 FL OZ/A B 32 FL OZ/A B	A A A B B	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a
5 Enlist Duo Sonic Amsol AMS Liberty Amsol AMS	75 FL OZ/A A 6 OZ/A A 2.5 % V/V A 32 FL OZ/A B 2.5 % V/V B	A A A B B	100.0 a	0.0 a	98.4 a	98.3 a	96.8 a	100.0 a
6 Enlist Duo Sonic Amsol AMS Liberty Enlist One Amsol AMS	75 FL OZ/A A 6 OZ/A A 2.5 % V/V A 32 FL OZ/A B 32 FL OZ/A B 2.5 % V/V B	A A A B B B	100.0 a	0.0 a	100.0 a	100.0 a	99.3 a	100.0 a
7 Liberty Enlist One Sonic Amsol AMS Enlist Duo Amsol AMS	36 FL OZ/A A 32 FL OZ/A A 6 OZ/A A 2.5 % V/V A 75 FL OZ/A B 2.5 % V/V B	A A A A B B	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a

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Pest Type	W Weed		W Weed	W Weed	W Weed	W Weed		
Pest Code	AMACH		ERICA	AMBTR	DIGSA	AMACH		
Pest Name	Green pigweed		Canada horseweed	Giant ragweed	large crabgrass	Green pigweed		
Crop Type, Code		C GLXMA						
Crop Scientific Name		Glycine max						
Crop Name		Soybean						
Rating Date	7-23-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020		
Part Rated	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Rating Timing								
Days After First/Last Applic.	45 16	56 27	56 27	56 27	56 27	56 27		
Trt-Eval Interval								
Days After Emergence								
ARM Action Codes								
Number of Decimals								
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	10	11	12	13	14	15
8 Liberty	36 FL OZ/A A		100.0 a	0.0 a	100.0 a	100.0 a	96.3 a	100.0 a
Enlist One	32 FL OZ/A A							
Sonic	6 OZ/A A							
Amsol AMS	2.5 % V/V A							
Liberty	32 FL OZ/A B							
Amsol AMS	2.5 % V/V B							
LSD P=.05					2.08	1.26	3.68	
Standard Deviation	0.00	0.00			1.41	0.85	2.49	0.00
CV	0.0	0.0			1.62	0.98	2.88	0.0
Levene's F	0.00	0.00			0.887		1.297	0.00
Levene's Prob(F)	0.00*	0.00*			0.532		0.296	0.00*
Skewness	-2.3809*	.			-2.3154*	-2.3242*	-2.3018*	-2.3273*
Kurtosis	3.9094*	.			3.6141*	3.639*	3.5728*	3.6481*
Replicate F	0.000	0.000			0.433	0.952	0.691	0.000
Replicate Prob(F)	1.0000	1.0000			0.7320	0.4343	0.5683	1.0000
Treatment F	0.000	0.000			2481.459	6826.395	786.505	0.000
Treatment Prob(F)	1.0000	1.0000			0.0001	0.0001	0.0001	1.0000

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2020 Enlist Weed Control System

Trial ID: 20-23 SOY-REC Location: UKREC 108-C4 Trial Year: 2020
Protocol ID: NA20P2E004H Investigator (Creator): Travis Legleiter
Project ID: Study Director:
Sponsor Contact:

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

ERICA, Erigeron canadensis, Canada horseweed = US

AMBTR, Ambrosia trifida, Giant ragweed = US

DIGSA, Digitaria sanguinalis, large crabgrass = US

AMACH, Amaranthus hybridus, Green pigweed = US

Crop Type, Code

C = EPPO species (Bayer) codes

GLXMA, BSOY, Glycine max, Soybean = US

Part Rated

PLANT = plant

C = Crop is Part Rated

P = Pest is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

ARM Action Codes

ER2 = Excluded replicate 2

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Corteva corn showcase (NA20X01027H) NO-TILL

Trial ID: 20-24 Location: Lexington, KY Trial Year: 2020
 Protocol ID: NA20X01027H-CORTEVA Investigator (Creator): Sara Carter
 Project ID: Study Director: Travis Legleiter
 Sponsor Contact: Laura Campbell

Reps: 3 Plots: 10 by 44 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 3 plots; minimum=1.7206 L)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	Amt Product to Measure	Rep		
										1	2	3
1	RESICORE	3.3		SC	2.5	QT/A	PRE	A	83.33 mL/mx	101	205	306
2	LEADOFF	33.4		WP	1.5	OZ/A	PRE	A	1.498 g/mx	102	203	305
	DURANGO DMA	4		SL	24	FL OZ/A	PRE	A	25.0 mL/mx			
	ENLIST ONE	3.8	lbae/gal	SE	2	PT/A	PRE	A	33.33 mL/mx			
	RESICORE	3.3		SC	1.5	QT/A	V2-V3	B	50.0 mL/mx			
	ATRAZINE	4		L	2	PT/A	V2-V3	B	33.33 mL/mx			
	DURANGO DMA	4		SL	24	FL OZ/A	V2-V3	B	25.0 mL/mx			
3	RESICORE	3.3		SC	1.5	QT/A	PRE	A	50.0 mL/mx	103	204	302
	DURANGO DMA	4		SL	24	FL OZ/A	PRE	A	25.0 mL/mx			
	REVULIN Q			DF	3.4	OZ/A	V6	D	3.395 g/mx			
	ATRAZINE	4		L	2	PT/A	V6	D	33.33 mL/mx			
4	LEADOFF	33.4		WP	1.5	OZ/A	PRE	A	1.498 g/mx	104	201	304
	DURANGO DMA	4		SL	24	FL OZ/A	PRE	A	25.0 mL/mx			
	REALM Q	38.8		WDG	4	OZ/A	V2-V3	B	3.994 g/mx			
	ATRAZINE	4		L	2	PT/A	V2-V3	B	33.33 mL/mx			
	DURANGO DMA	4		SL	24	FL OZ/A	V2-V3	B	25.0 mL/mx			
5	GRAMOXONE	3	LB/GAL	SL	42	FL OZ/A	PRE	A	43.75 mL/mx	105	206	303
	ACURON	3.44		ZC	3	QT/A	PRE	A	100.0 mL/mx			
	NIS			L	0.25	% V/V	PRE	A	4.999 mL/mx			
	AMS			L	2.5	% V/V	PRE	A	49.99 mL/mx			
6	GRAMOXONE	3	LB/GAL	SL	42	FL OZ/A	PRE	A	43.75 mL/mx	106	202	301
	BICEP II MAGNUM	5.5		L	1.5	QT/A	PRE	A	50.0 mL/mx			
	ACURON GT			L	3.75	PT/A	V4	C	62.5 mL/mx			
	NIS			L	0.25	% V/V	V4	C	4.999 mL/mx			
	AMS			L	2.5	% V/V	V4	C	49.99 mL/mx			

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
229.166	mL	RESICORE	3.3		SC	
3.745	g	LEADOFF	33.4		WP	
156.250	mL	DURANGO DMA	4		SL	
41.667	mL	ENLIST ONE	3.8	lbae/gal	SE	
125.000	mL	ATRAZINE	4		L	
4.244	g	REVULIN Q			DF	
4.993	g	REALM Q	38.8		WDG	

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Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
109.375	mL	GRAMOXONE	3	LB/GAL	SL	
125.000	mL	ACURON	3.44		ZC	
12.499	mL	NIS			L	
124.986	mL	AMS			L	
62.500	mL	BICEP II MAGNUM	5.5		L	
78.125	mL	ACURON GT			L	

* 'Per area' calculations based on application amount= 15 GPA, mix size= 2 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GPA, mix size= 2 L.

General Trial Information

Study Director: Travis Legleiter

Investigator: Sara Carter **Title:** Research Specialist

Discipline: H herbicide

Trial Status: F one-year/final

ARM Trial Created On: 5-11-2020

Initiation Date: 5-14-2020 **Planned Completion Date:** 11-1-2020

Trial Location

City: LEXINGTON

Country: USA United States

State/Prov.: KENTUCKY

Postal Code: 40511

Conducted Under GLP: No

Conducted Under GEP: No

Contacts

Role: STYDIR study director

Study Director: Travis Legleiter

Role: INVEST investigator

Investigator: Sara Carter

Title: Research Specialist

Organization: UNIVERSITY OF KENTUCKY

Address 1: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914 **Mobile No.:** 859-559-6710

E-mail: sara.carter@uky.edu

City: LEXINGTON, KY

Postal Code: 40546-0312

Role: SPONSR sponsor

Sponsor: Laura Campbell

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Crop Description

Crop 1: C ZEAMX Zea mays Corn
Stage Scale: BBCH
Variety: DKC 65-95
Planting Date: 5-14-2020 **Planting Rate:** 32000 S/A
Depth: 1.5 IN
Rows per Plot: 6 **Planting Method:** PLANTD planted
Row Spacing: 30 IN **Planting Equipment:** FE field equipment
Seed Bed: MEDIUM medium
Soil Temperature: 64 F **Soil Moisture:** WET wet
Emergence Date: 5-20-2020
Harvest Date: 10-22-2020 **Harvest Equipment:** MASSEY FERGUSON 8XP
Harvested Width: 5 FT
Harvested Length: 40 FT
% Standard Moisture: 15.5

Pest Description

Pest 1 Type: W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed **Stage Scale:** BBCH
Pest 2 Type: W **Code:** GERSS Geranium sp.
Common Name: Cranesbill **Stage Scale:** BBCH
Pest 3 Type: W **Code:** TARSS Taraxacum sp.
Common Name: Dandelion **Stage Scale:** BBCH
Pest 4 Type: W **Code:** BROSS Bromus sp.
Common Name: Bromegrass **Stage Scale:** BBCH
Pest 5 Type: W **Code:** IPOSS Ipomoea sp.
Common Name: Morning glory **Stage Scale:** BBCH

Site and Design

Treated Plot Width: 10 FT **Site Type:** FIELD field
Treated Plot Length: 44 FT
Treated Plot Area: 440.0 FT² **Treatments:** 6 **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RACOB� Randomized Complete Block (RCB)

Soil Description

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

Weather Conditions

Overall Moisture Conditions: WEWEDR wet-wet-dry
Closest Weather Station: SPINDLETOP **Distance:** 1.5 MI

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Application Description				
	A	B	C	D
Application Date	5-14-2020	6-15-2020	6-22-2020	7-2-2020
Appl. Start Time	9:00 AM	12:30 PM	4:00 PM	3:30 PM
Appl. Stop Time	9:30 AM	1:00 PM	4:10 PM	3:40 PM
Application Method	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing	PRE	V2-V3	V4	V6
Application Placement	BROFOL	BROFOL	BROFOL	BROFOL
Applied By	SARA	SARA	SARA	SARA
Air Temperature Start, Stop	79 F	71 F	80 F	87 F
% Relative Humidity Start, Stop	46	61	65	45
Wind Velocity+Dir. Start	10 MPH SW	7 MPH NE	5 MPH SW	5 MPH ENE
Soil Temperature	64 F	79 F	81 F	78 F
Soil Moisture	SLIWET	SLIWET	WET	WET
Soil Surface Condition	MEDIUM	MEDIUM	MEDIUM	MEDIUM
% Cloud Cover	20	50	30	50
Next Moisture Occurred On	5-16-2020	6-18-2020	6-23-2020	7-6-2020

Crop Stage At Each Application				
	A	B	C	D
Crop 1 Code, BBCH Scale	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Days after Emergence	-6	26	33	43
Stage Majority, Percent		V2 99	V4 99	V6 99
Height Average		6 IN	8 IN	12 IN

Pest Stage At Each Application				
	A	B	C	D
Pest 1 Code, Type, Scale	AMBTR W BBCH	AMBTR W BBCH	AMBTR W BBCH	AMBTR W BBCH
Height Average	2 IN	4 IN	6 IN	8 IN
Pest 2 Code, Type, Scale	GERSS W BBCH	GERSS W BBCH	GERSS W BBCH	GERSS W BBCH
Height Average	4 IN	6 IN	7 IN	8 IN
Pest 3 Code, Type, Scale	TARSS W BBCH	TARSS W BBCH	TARSS W BBCH	TARSS W BBCH
Height Average	2 IN	4 IN	6 IN	8 IN
Pest 4 Code, Type, Scale	BROSS W BBCH	BROSS W BBCH	BROSS W BBCH	BROSS W BBCH
Height Average	4 IN	6 IN	8 IN	10 IN
Pest 5 Code, Type, Scale	IPOSS W BBCH	IPOSS W BBCH	IPOSS W BBCH	IPOSS W BBCH
Height Average	1 IN	2 IN	2.5 IN	4 IN

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Application Equipment				
	A	B	C	D
Appl. Equipment	BACKPACK	BACKPACK	BACKPACK	BACKPACK
Equipment Type	BELSPR	BELSPR	BELSPR	BELSPR
Operation Pressure	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type	FLAT FAN	FLAT FAN	FLAT FAN	FLAT FAN
Nozzle Size	8002 DG	8002 DG	8002 DG	8002 DG
Nozzle Spacing	20 IN	20 IN	20 IN	20 IN
Boom Length	10 FT	10 FT	10 FT	10 FT
Boom Height	30 IN	30 IN	30 IN	30 IN
Boom Flow Rate	1.56 GAL/MI	1.56 GAL/MI	1.56 GAL/MI	1.56 GAL/MI
Ground Speed	4 MPH	4 MPH	4 MPH	4 MPH
Carrier	WATER	WATER	WATER	WATER
Application Amount	15 GPA	15 GPA	15 GPA	15 GPA
Mix Size	2 liters	2 liters	2 liters	2 liters
Propellant	CO2	CO2	CO2	CO2

Pest Type		W Weed AMBTR	W Weed GERSS	W Weed TARSS	W Weed BROSS	W Weed IPOSS		W Weed AMBTR	W Weed TARSS	W Weed DIGSA		
Pest Code		Giant ragweed	Cranesbill	Dandelion	Bromegrass	Morning glory		Giant ragweed	Dandelion	large crabgrass		
Pest Name												
Crop Type, Code	C ZEAMX						C ZEAMX					
Crop Scientific Name	Zea mays						Zea mays					
Crop Name	Corn						Corn					
Rating Date	5-27-2020	5-27-2020	5-27-2020	5-27-2020	5-27-2020	5-27-2020	6-29-2020	6-29-2020	6-29-2020	6-29-2020		
Part Rated												
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO		
Rating Unit	0-10	0-100	0-100	0-100	0-100	0-100	0-10	0-100	0-100	0-100		
Number of Subsamples	1	1	1	1	1	1	1	1	1	1		
Data Entry Date	10-12-2020	10-12-2020	10-12-2020	10-12-2020	10-12-2020	10-12-2020	10-14-2020	10-14-2020	10-14-2020	11-6-2020		
Rating Timing	A1	A1	A1	A1	A1	A1	A2	A2	A2	A2		
Days After First/Last Applic.	13 13	13 13	13 13	13 13	13 13	13 13	46 7	46 7	46 7	46 7		
Trt-Eval Interval												
Days After Emergence	7 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1	40 DE-1	40 DE-1	40 DE-1	40 DE-1		
ARM Action Codes												
Number of Decimals												
Trt Treatment	Rate	Appl										
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7	8	9	10
1 RESICORE	2.5 QT/A	A 101	0.0	60.0	25.0	15.0	0.0	98.0	0.0	50.0	5.0	0.0
		205	0.0	40.0	10.0	5.0		98.0	0.0	40.0	10.0	0.0
		306	0.0	98.0	20.0	30.0		100.0	0.0	50.0	15.0	0.0
		Mean =	0.0	66.0	18.3	16.7	0.0	98.7	0.0	46.7	10.0	0.0
2 LEADOFF	1.5 OZ/A	A 102	0.0	75.0	100.0	100.0	100.0	95.0	0.0	95.0	95.0	100.0
DURANGO DMA	24 FL OZ/A	A 203	0.0	98.0	100.0	100.0	100.0	100.0	0.0	95.0	90.0	95.0
ENLIST ONE	2 PT/A	A 305	0.0	98.0	100.0	100.0		100.0	0.0	95.0	95.0	98.0
RESICORE	1.5 QT/A	B										
ATRAZINE	2 PT/A	B										
DURANGO DMA	24 FL OZ/A	B										
		Mean =	0.0	90.3	100.0	100.0	100.0	98.3	0.0	95.0	93.3	97.7

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Pest Type		W Weed AMBTR	W Weed GERSS	W Weed TARSS	W Weed BROSS	W Weed IPOSS		W Weed AMBTR	W Weed TARSS	W Weed DIGSA		
Pest Code		Giant ragweed	Cranesbill	Dandelion	Bromegrass	Morning glory		Giant ragweed	Dandelion	large crabgrass		
Pest Name												
Crop Type, Code	C ZEAMX											
Crop Scientific Name	Zea mays											
Crop Name	Corn											
Rating Date	5-27-2020	5-27-2020	5-27-2020	5-27-2020	5-27-2020	5-27-2020	6-29-2020	6-29-2020	6-29-2020	6-29-2020		
Part Rated												
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO		
Rating Unit	0-10	0-100	0-100	0-100	0-100	0-100	0-10	0-100	0-100	0-100		
Number of Subsamples	1	1	1	1	1	1	1	1	1	1		
Data Entry Date	10-12-2020	10-12-2020	10-12-2020	10-12-2020	10-12-2020	10-12-2020	10-14-2020	10-14-2020	10-14-2020	11-6-2020		
Rating Timing	A1	A1	A1	A1	A1	A1	A2	A2	A2	A2		
Days After First/Last Applic.	13 13	13 13	13 13	13 13	13 13	13 13	46 7	46 7	46 7	46 7		
Trt-Eval Interval												
Days After Emergence	7 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1	40 DE-1	40 DE-1	40 DE-1	40 DE-1		
ARM Action Codes												
Number of Decimals												
Trt Treatment	Rate	Appl										
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7	8	9	10
3 RESICORE	1.5 QT/A	A 103	0.0	90.0	75.0	90.0		100.0	0.0	60.0	30.0	40.0
DURANGO DMA	24 FL OZ/A	A 204	0.0	60.0	85.0	90.0		95.0	0.0	40.0	30.0	60.0
REVULIN Q	3.4 OZ/A	D 302	0.0	20.0	5.0	60.0		50.0	0.0	20.0	10.0	65.0
ATRAZINE	2 PT/A	D										
	Mean =		0.0	56.7	55.0	80.0		81.7	0.0	40.0	23.3	55.0
4 LEADOFF	1.5 OZ/A	A 104	0.0	90.0	85.0	90.0		100.0	0.0	95.0	95.0	80.0
DURANGO DMA	24 FL OZ/A	A 201	0.0	60.0	100.0	80.0	100.0	85.0	0.0	95.0	95.0	85.0
REALM Q	4 OZ/A	B 304	0.0	95.0	100.0	50.0		100.0	0.0	95.0	95.0	90.0
ATRAZINE	2 PT/A	B										
DURANGO DMA	24 FL OZ/A	B										
	Mean =		0.0	81.7	95.0	73.3	100.0	95.0	0.0	95.0	95.0	85.0
5 GRAMOXONE	42 FL OZ/A	A 105	0.0	98.0	100.0	95.0		100.0	0.0	80.0	15.0	15.0
ACURON	3 QT/A	A 206	0.0	95.0	100.0	90.0		98.0	0.0	85.0	10.0	30.0
NIS	0.25 % V/V	A 303	0.0	95.0	100.0	85.0		95.0	0.0	85.0	15.0	50.0
AMS	2.5 % V/V	A										
	Mean =		0.0	96.0	100.0	90.0		97.7	0.0	83.3	13.3	31.7
6 GRAMOXONE	42 FL OZ/A	A 106	0.0	60.0	100.0	30.0		100.0	0.0	95.0	95.0	65.0
BICEP II MAGNUM	1.5 QT/A	A 202	0.0	98.0	100.0	100.0	100.0	100.0	0.0	98.0	95.0	55.0
ACURON GT	3.75 PT/A	C 301	0.0	98.0	100.0	98.0	100.0	98.0	0.0	98.0	95.0	70.0
NIS	0.25 % V/V	C										
AMS	2.5 % V/V	C										
	Mean =		0.0	85.3	100.0	76.0	100.0	99.3	0.0	97.0	95.0	63.3

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Pest Type	W Weed		W Weed	W Weed	W Weed	W Weed					
Pest Code	IPOSS		AMBTR	TARSS	DIGSA	IPOSS					
Pest Name	Morning glory		Giant ragweed	Dandelion	large crabgrass	Morning glory					
Crop Type, Code	C ZEAMX										
Crop Scientific Name	Zea mays										
Crop Name	Corn										
Rating Date	6-29-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020	10-22-2020	10-22-2020	10-22-2020	
Part Rated											
Rating Type	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	YIELD	MOICON	YIELD	
Rating Unit	0-100	0-10	0-100	0-100	0-100	0-100	0-100	lb/plot	%	BU	
Number of Subsamples	1	1	1	1	1	1	1	1	1	1	
Data Entry Date	10-14-2020	10-14-2020	10-14-2020	11-9-2020	11-9-2020	11-9-2020	11-9-2020	11-9-2020	11-9-2020		
Rating Timing	A2	A3	A3	A3	A3	A3	A3				
Days After First/Last Applic.	46 7	62 13	62 13	62 13	62 13	62 13	62 13	161 112	161 112	161 112	
Trt-Eval Interval											
Days After Emergence	40 DE-1	56 DE-1	56 DE-1	56 DE-1	56 DE-1	56 DE-1	56 DE-1	155 DE-1	155 DE-1	155 DE-1	
ARM Action Codes										TY1	
Number of Decimals										1	
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code Plot	11	12	13	14	15	16	17	18	19
3 RESICORE	1.5 QT/A	A 103	50.0	0.0	80.0	25.0	40.0	45.0	56.340	22.400	201.2
DURANGO DMA	24 FL OZ/A	A 204	65.0	0.0	80.0	25.0	50.0	60.0	36.340	22.400	129.8
REVULIN Q	3.4 OZ/A	D 302	70.0	0.0	80.0	25.0	55.0	65.0	38.510	22.600	137.2
ATRAZINE	2 PT/A	D									
	Mean =		61.7	0.0	80.0	25.0	48.3	56.7	43.730	22.467	156.1
4 LEADOFF	1.5 OZ/A	A 104	95.0	0.0	85.0	80.0	75.0	85.0	59.520	22.600	212.0
DURANGO DMA	24 FL OZ/A	A 201	98.0	0.0	85.0	85.0	75.0	90.0	59.610	21.800	214.6
REALM Q	4 OZ/A	B 304	98.0	0.0	80.0	85.0	85.0	90.0	53.120	22.300	190.0
ATRAZINE	2 PT/A	B									
DURANGO DMA	24 FL OZ/A	B									
	Mean =		97.0	0.0	83.3	83.3	78.3	88.3	57.417	22.233	205.5
5 GRAMOXONE	42 FL OZ/A	A 105	50.0	0.0	0.0	10.0	10.0	45.0	32.350	20.700	118.1
ACURON	3 QT/A	A 206	45.0	0.0	0.0	10.0	15.0	45.0	41.560	20.200	152.6
NIS	0.25 % V/V	A 303	50.0	0.0	0.0	10.0	20.0	45.0	34.870	20.600	127.4
AMS	2.5 % V/V	A									
	Mean =		48.3	0.0	0.0	10.0	15.0	45.0	36.260	20.500	132.7
6 GRAMOXONE	42 FL OZ/A	A 106	95.0	0.0	80.0	95.0	55.0	90.0	42.850	21.300	155.2
BICEP II MAGNUM	1.5 QT/A	A 202	98.0	0.0	80.0	95.0	55.0	90.0	56.550	21.500	204.3
ACURON GT	3.75 PT/A	C 301	98.0	0.0	80.0	95.0	65.0	90.0	57.710	22.000	207.2
NIS	0.25 % V/V	C									
AMS	2.5 % V/V	C									
	Mean =		97.0	0.0	80.0	95.0	58.3	90.0	52.370	21.600	188.9

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Corteva corn showcase (NA20X01027H) NO-TILL

Trial ID: 20-24 Location: Lexington, KY Trial Year: 2020
 Protocol ID: NA20X01027H-CORTEVA Investigator (Creator): Sara Carter
 Project ID: Study Director: Travis Legleiter
 Sponsor Contact: Laura Campbell

Pest Type
 W, Weed = Weed or volunteer crop

Pest Code
 AMBTR, Ambrosia trifida, Giant ragweed = US
 GERSS, Geranium sp., Cranesbill = US
 TARSS, Taraxacum sp., Dandelion = US
 BROSS, Bromus sp., Bromegrass = US
 IPOSS, Ipomoea sp., Morning glory = US
 DIGSA, Digitaria sanguinalis, large crabgrass = US

Crop Type, Code
 C = EPPO species (Bayer) codes
 ZEAMX, BCOR, Zea mays, Corn = US

Rating Type
 PHYGEN = phytotoxicity - general / injury
 CONTRO = control / burndown or knockdown
 YIELD = yield
 MOICON = moisture content

Rating Unit
 0-10 = 0-10 index/scale
 0-100 = 0-100 index/scale-percent
 lb/plot = pounds per plot
 % = percent
 BU = bushel

Rating Timing
 A1 = 1st Assessment According to Trial Schedule
 A2 = 2nd Assessment According to trial Schedule
 A3 = 3rd Assessment According to Trial Schedule

ARM Action Codes
 TY1 = 3.889286*[17]*(100-[18])/84.5

Pest Type		W Weed AMBTR	W Weed GERSS	W Weed TARSS	W Weed BROSS	W Weed IPOSS		W Weed AMBTR	W Weed TARSS	W Weed DIGSA		
Pest Code		Giant ragweed	Cranesbill	Dandelion	Bromegrass	Morning glory		Giant ragweed	Dandelion	large crabgrass		
Pest Name												
Crop Type, Code	C ZEAMX						C ZEAMX					
Crop Scientific Name	Zea mays						Zea mays					
Crop Name	Corn						Corn					
Rating Date	5-27-2020	5-27-2020	5-27-2020	5-27-2020	5-27-2020	5-27-2020	6-29-2020	6-29-2020	6-29-2020	6-29-2020		
Part Rated												
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO		
Rating Unit	0-10	0-100	0-100	0-100	0-100	0-100	0-10	0-100	0-100	0-100		
Number of Subsamples	1	1	1	1	1	1	1	1	1	1		
Data Entry Date	10-12-2020	10-12-2020	10-12-2020	10-12-2020	10-12-2020	10-12-2020	10-14-2020	10-14-2020	10-14-2020	11-6-2020		
Rating Timing	A1	A1	A1	A1	A1	A1	A2	A2	A2	A2		
Days After First/Last Applic.	13 13	13 13	13 13	13 13	13 13	13 13	46 7	46 7	46 7	46 7		
Trt-Eval Interval												
Days After Emergence	7 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1	40 DE-1	40 DE-1	40 DE-1	40 DE-1		
ARM Action Codes												
Number of Decimals												
Trt Treatment	Rate	Appl										
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8	9	10
1 RESICORE	2.5 QT/A	A	0.0 a	66.0 a	18.3 b	16.7 b	0.0	98.7 a	0.0 a	46.7 b	10.0 c	0.0 d

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Pest Type		W Weed AMBTR	W Weed GERSS	W Weed TARSS	W Weed BROSS	W Weed IPOSS		W Weed AMBTR	W Weed TARSS	W Weed DIGSA		
Pest Code		Giant ragweed	Cranesbill	Dandelion	Bromegrass	Morning glory		Giant ragweed	Dandelion	large crabgrass		
Pest Name												
Crop Type, Code	C ZEAMX						C ZEAMX					
Crop Scientific Name	Zea mays						Zea mays					
Crop Name	Corn						Corn					
Rating Date	5-27-2020	5-27-2020	5-27-2020	5-27-2020	5-27-2020	5-27-2020	6-29-2020	6-29-2020	6-29-2020	6-29-2020		
Part Rated												
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO		
Rating Unit	0-10	0-100	0-100	0-100	0-100	0-100	0-10	0-100	0-100	0-100		
Number of Subsamples	1	1	1	1	1	1	1	1	1	1		
Data Entry Date	10-12-2020	10-12-2020	10-12-2020	10-12-2020	10-12-2020	10-12-2020	10-14-2020	10-14-2020	10-14-2020	11-6-2020		
Rating Timing	A1	A1	A1	A1	A1	A1	A2	A2	A2	A2		
Days After First/Last Applic.	13 13	13 13	13 13	13 13	13 13	13 13	46 7	46 7	46 7	46 7		
Trt-Eval Interval												
Days After Emergence	7 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1	40 DE-1	40 DE-1	40 DE-1	40 DE-1		
ARM Action Codes												
Number of Decimals												
Trt Treatment	Rate	Appl										
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8	9	10
6 GRAMOXONE	42 FL OZ/A	A	0.0 a	85.3 a	100.0 a	76.0 a	100.0	99.3 a	0.0 a	97.0 a	95.0 a	63.3 b
BICEP II MAGNUM	1.5 QT/A	A										
ACURON GT	3.75 PT/A	C										
NIS	0.25 % V/V	C										
AMS	2.5 % V/V	C										
LSD P=.05			.	44.58	34.46	39.85	.	22.18	.	16.27	10.63	15.08
Standard Deviation			0.00	24.50	18.94	21.91	.	12.19	0.00	8.94	5.85	8.29
CV			0.0	30.89	24.27	30.14	.	12.82	0.0	11.74	10.63	14.95
Levene's F			0.00	0.673	1.261	0.576	.	1.001	0.00	2.637	0.716	1.347
Levene's Prob(F)			0.00*	0.652	0.342	0.718	.	0.458	0.00*	0.078	0.624	0.31
Skewness			.	-1.205*	-1.3677*	-1.0556	-2.4495*	-3.6496*	.	-0.9753	-0.0638	-0.4575
Kurtosis			.	0.6353	0.1292	-0.3683	6.0*	14.0804*	.	-0.4686	-2.1665*	-1.0182
Replicate F			0.000	0.197	0.666	0.220		0.725	0.000	0.558	0.122	3.338
Replicate Prob(F)			1.0000	0.8245	0.5353	0.8064		0.5081	1.0000	0.5890	0.8865	0.0775
Treatment F			0.000	1.131	9.747	5.313		0.921	0.000	25.298	165.659	55.512
Treatment Prob(F)			1.0000	0.4044	0.0013	0.0122		0.5057	1.0000	0.0001	0.0001	0.0001

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Pest Type	W Weed		W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	IPOSS		AMBTR	TARSS	DIGSA	IPOSS					
Pest Name	Morning glory		Giant ragweed	Dandelion	large crabgrass	Morning glory					
Crop Type, Code		C ZEAMX					C ZEAMX	C ZEAMX	C ZEAMX		
Crop Scientific Name		Zea mays					Zea mays	Zea mays	Zea mays		
Crop Name		Corn					Corn	Corn	Corn		
Rating Date	6-29-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020	10-22-2020	10-22-2020	10-22-2020		
Part Rated											
Rating Type	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	YIELD	MOICON	YIELD		
Rating Unit	0-100	0-10	0-100	0-100	0-100	0-100	lb/plot	%	BU		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Data Entry Date	10-14-2020	10-14-2020	10-14-2020	11-9-2020	11-9-2020	11-9-2020	11-9-2020	11-9-2020			
Rating Timing	A2	A3	A3	A3	A3	A3	A3	A3			
Days After First/Last Applic.	46 7	62 13	62 13	62 13	62 13	62 13	62 13	161 112	161 112	161 112	
Trt-Eval Interval											
Days After Emergence	40 DE-1	56 DE-1	56 DE-1	56 DE-1	56 DE-1	56 DE-1	155 DE-1	155 DE-1	155 DE-1		
ARM Action Codes										TY1	
Number of Decimals										1	
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code	11	12	13	14	15	16	17	18	19
1 RESICORE	2.5 QT/A	A	15.0 d	0.0 a	0.0 b	8.3 e	0.0 f	15.0 d	9.103 c	13.483 b	34.8 c

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	
Pest Code	IPOSS	AMBT	TARSS	DIGSA	IPOSS						
Pest Name	Morning glory	Giant ragweed	Dandelion	large crabgrass	Morning glory						
Crop Type, Code	C ZEAMX										
Crop Scientific Name	Zea mays										
Crop Name	Corn										
Rating Date	6-29-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020	7-15-2020	10-22-2020	10-22-2020	10-22-2020		
Part Rated											
Rating Type	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	YIELD	MOICON	YIELD		
Rating Unit	0-100	0-10	0-100	0-100	0-100	0-100	lb/plot	%	BU		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Data Entry Date	10-14-2020	10-14-2020	10-14-2020	11-9-2020	11-9-2020	11-9-2020	11-9-2020	11-9-2020			
Rating Timing	A2	A3	A3	A3	A3	A3	A3	A3			
Days After First/Last Applic.	46 7	62 13	62 13	62 13	62 13	62 13	62 13	161 112	161 112	161 112	
Trt-Eval Interval											
Days After Emergence	40 DE-1	56 DE-1	56 DE-1	56 DE-1	56 DE-1	56 DE-1	56 DE-1	155 DE-1	155 DE-1	155 DE-1	
ARM Action Codes										TY1	
Number of Decimals										1	
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code	11	12	13	14	15	16	17	18	19
6 GRAMOXONE	42 FL OZ/A	A	97.0 a	0.0 a	80.0 a	95.0 a	58.3 c	90.0 a	52.370 ab	21.600 a	188.9 ab
BICEP II MAGNUM	1.5 QT/A	A									
ACURON GT	3.75 PT/A	C									
NIS	0.25 % V/V	C									
AMS	2.5 % V/V	C									
LSD P=.05			8.28	.	4.60	3.71	6.57	8.08	13.7591	4.9133	48.79
Standard Deviation			4.55	0.00	2.53	2.04	3.61	4.44	7.5630	2.7007	26.82
CV			6.58	0.0	4.62	3.95	7.39	6.86	17.72	13.26	17.42
Levene's F			1.371	0.00	2.10	0.00	0.492	1.60	0.253	1.323	0.246
Levene's Prob(F)			0.302	0.00*	0.136	0.00*	0.776	0.234	0.93	0.319	0.934
Skewness			-0.6571	.	-0.7568	-0.0333	-0.2008	-0.5986	-1.0382	-2.5673*	-1.0411
Kurtosis			-1.0475	.	-1.5918	-2.1243*	-1.3687	-1.1345	0.1101	5.5834*	0.1044
Replicate F			1.071	0.000	0.217	1.000	7.128	1.338	0.023	1.101	0.044
Replicate Prob(F)			0.3790	1.0000	0.8083	0.4019	0.0119	0.3055	0.9769	0.3696	0.9573
Treatment F			165.035	0.000	845.435	1231.200	297.362	150.324	17.746	4.867	17.676
Treatment Prob(F)			0.0001	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0162	0.0001

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Corteva corn showcase (NA20X01027H) NO-TILL

Trial ID: 20-24 Location: Lexington, KY Trial Year: 2020
 Protocol ID: NA20X01027H-CORTEVA Investigator (Creator): Sara Carter
 Project ID: Study Director: Travis Legleiter
 Sponsor Contact: Laura Campbell

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

AMBTR, Ambrosia trifida, Giant ragweed = US

GERSS, Geranium sp., Cranesbill = US

TARSS, Taraxacum sp., Dandelion = US

BROSS, Bromus sp., Bromegrass = US

IPOSS, Ipomoea sp., Morning glory = US

DIGSA, Digitaria sanguinalis, large crabgrass = US

Crop Type, Code

C = EPP0 species (Bayer) codes

ZEAMX, BCOR, Zea mays, Corn = US

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

YIELD = yield

MOICON = moisture content

Rating Unit

0-10 = 0-10 index/scale

0-100 = 0-100 index/scale-percent

lb/plot = pounds per plot

% = percent

BU = bushel

Rating Timing

A1 = 1st Assessment According to Trial Schedule

A2 = 2nd Assessment According to trial Schedule

A3 = 3rd Assessment According to Trial Schedule

ARM Action Codes

TY1 = $3.889286 * [17] * (100 - [18]) / 84.5$

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Balancing residual herbicide cost and application timing for maximum late season waterhemp control

Trial ID: 20-25_SOY-CAL Location: Trial Year: 2020
 Protocol ID: KySPB 2020 Investigator (Creator): Travis Legleiter
 Project ID: Study Director:
 Sponsor Contact:

Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Unit	Appl Timing	Appl Code	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1										101	304	505	706
2	Trivence (9 oz/a)									102	307	504	702
	Valor EZ	4 lba/gal		L	2.3 FL OZ/A		PRE	A	2.396 mL/mx				
	Mauler	4 lba/gal		L	0.5 PT/A		PRE	A	8.333 mL/mx				
	Classic	25 %AW/W		DF	1.4 OZ/A		PRE	A	1.398 g/mx				
	WARRANT	3 LBA/GAL		CS	1.5 QT/A		LTPOST	C	50.0 mL/mx				
	XTENDIMAX WITH VAPORGRIP	2.9 lbae/gal		SL	22 FL OZ/A		LTPOST	C	22.92 mL/mx				
	Roundup PowerMax	4.5 LBAE/GAL		SL	32 FL OZ/A		LTPOST	C	33.33 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 % V/V		LTPOST	C	20.0 mL/mx				
	OnTarget	100 %		SL	0.5 % V/V		LTPOST	C	9.999 mL/mx				
3	Trivence (9 oz/a)									103	406	503	806
	Valor EZ	4 lba/gal		L	2.3 FL OZ/A		PRE	A	2.396 mL/mx				
	Mauler	4 lba/gal		L	0.5 PT/A		PRE	A	8.333 mL/mx				
	Classic	25 %AW/W		DF	1.4 OZ/A		PRE	A	1.398 g/mx				
	Dual II Magnum	7.62 lba/gal		EC	1.33 PT/A		LTPOST	C	22.17 mL/mx				
	XTENDIMAX WITH VAPORGRIP	2.9 lbae/gal		SL	22 FL OZ/A		LTPOST	C	22.92 mL/mx				
	Roundup PowerMax	4.5 LBAE/GAL		SL	32 FL OZ/A		LTPOST	C	33.33 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 % V/V		LTPOST	C	20.0 mL/mx				
	OnTarget	100 %		SL	0.5 % V/V		LTPOST	C	9.999 mL/mx				
4	Trivence (9 oz/a)									104	306	604	803
	Valor EZ	4 lba/gal		L	2.3 FL OZ/A		PRE	A	2.396 mL/mx				
	Mauler	4 lba/gal		L	0.5 PT/A		PRE	A	8.333 mL/mx				
	Classic	25 %AW/W		DF	1.4 OZ/A		PRE	A	1.398 g/mx				
	Zidua	4.17 LBA/GAL		SC	3.25 FL OZ/A		LTPOST	C	3.385 mL/mx				
	XTENDIMAX WITH VAPORGRIP	2.9 lbae/gal		SL	22 FL OZ/A		LTPOST	C	22.92 mL/mx				
	Roundup PowerMax	4.5 LBAE/GAL		SL	32 FL OZ/A		LTPOST	C	33.33 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 % V/V		LTPOST	C	20.0 mL/mx				
	OnTarget	100 %		SL	0.5 % V/V		LTPOST	C	9.999 mL/mx				
5	Fierce XLT 4.5 oz/a)									105	405	601	802
	Valor EZ	4 lba/gal		L	2.2 FL OZ/A		PRE	A	2.292 mL/mx				
	Zidua	4.17 LBA/GAL		SC	2.7 FL OZ/A		PRE	A	2.812 mL/mx				
	Classic	25 %AW/W		DF	1.2 OZ/A		PRE	A	1.198 g/mx				
	XTENDIMAX WITH VAPORGRIP	2.9 lbae/gal		SL	22 FL OZ/A		LTPOST	C	22.92 mL/mx				
	Roundup PowerMax	4.5 LBAE/GAL		SL	32 FL OZ/A		LTPOST	C	33.33 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 % V/V		LTPOST	C	20.0 mL/mx				
	OnTarget	100 %		SL	0.5 % V/V		LTPOST	C	9.999 mL/mx				
6	Boundary	6.5 LBA/GAL		EC	2 PT/A		PRE	A	33.33 mL/mx	106	301	607	807

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Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Form Rate	Rate Unit	Appl Timing	Appl Code	Amt to Measure	Rep 1	Rep 2	Rep 3	Rep 4
	XTENDIMAX WITH VAPORGRIP	2.9 lbae/gal		SL	22 FL OZ/A		LTPOST	C	22.92 mL/mx				
	Roundup PowerMax	4.5 LBAE/GAL		SL	32 FL OZ/A		LTPOST	C	33.33 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 % V/V		LTPOST	C	20.0 mL/mx				
	OnTarget	100 %		SL	0.5 % V/V		LTPOST	C	9.999 mL/mx				
7	Broadaxe XC	7 lba/gal		L	25 FL OZ/A		PRE	A	26.04 mL/mx	107	401	502	705
	XTENDIMAX WITH VAPORGRIP	2.9 lbae/gal		SL	22 FL OZ/A		LTPOST	C	22.92 mL/mx				
	Roundup PowerMax	4.5 LBAE/GAL		SL	32 FL OZ/A		LTPOST	C	33.33 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 % V/V		LTPOST	C	20.0 mL/mx				
	OnTarget	100 %		SL	0.5 % V/V		LTPOST	C	9.999 mL/mx				
8	Valor XLT (3.75 oz/a)									201	404	501	707
	Valor EZ	4 lba/gal		L	2.25 FL OZ/A		PRE	A	2.344 mL/mx				
	Classic	25 %AW/W		DF	1.545 OZ/A		PRE	A	1.543 g/mx				
	Zidua	4.17 LBA/GAL		SC	3.25 FL OZ/A		POST	B	3.385 mL/mx				
	XTENDIMAX WITH VAPORGRIP	2.9 lbae/gal		SL	22 FL OZ/A		POST	B	22.92 mL/mx				
	Roundup PowerMax	4.5 LBAE/GAL		SL	32 FL OZ/A		POST	B	33.33 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 % V/V		POST	B	20.0 mL/mx				
	OnTarget	100 %		SL	0.5 % V/V		POST	B	9.999 mL/mx				
9	Canopy (6 oz/a)									202	407	606	805
	Mauler	4 lba/gal		L	0.48 PT/A		PRE	A	8.0 mL/mx				
	Classic	25 %AW/W		DF	2.568 OZ/A		PRE	A	2.564 g/mx				
	Dual II Magnum	7.62 lba/gal		EC	1.33 PT/A		POST	B	22.17 mL/mx				
	XTENDIMAX WITH VAPORGRIP	2.9 lbae/gal		SL	22 FL OZ/A		POST	B	22.92 mL/mx				
	Roundup PowerMax	4.5 LBAE/GAL		SL	32 FL OZ/A		POST	B	33.33 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 % V/V		POST	B	20.0 mL/mx				
OnTarget	100 %		SL	0.5 % V/V		POST	B	9.999 mL/mx					
10	Authority XL	70 %		DF	6.5 OZ/A		PRE	A	6.491 g/mx	203	305	506	701
	Dual II Magnum	7.62 lba/gal		EC	1.33 PT/A		POST	B	22.17 mL/mx				
	XTENDIMAX WITH VAPORGRIP	2.9 lbae/gal		SL	22 FL OZ/A		POST	B	22.92 mL/mx				
	Roundup PowerMax	4.5 LBAE/GAL		SL	32 FL OZ/A		POST	B	33.33 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 % V/V		POST	B	20.0 mL/mx				
OnTarget	100 %		SL	0.5 % V/V		POST	B	9.999 mL/mx					
11	Valor XLT (3.75 oz/a)									204	302	605	704
	Valor EZ	4 lba/gal		L	2.25 FL OZ/A		PRE	A	2.344 mL/mx				
	Classic	25 %AW/W		DF	1.545 OZ/A		PRE	A	1.543 g/mx				
	XTENDIMAX WITH VAPORGRIP	2.9 lbae/gal		SL	22 FL OZ/A		POST	B	22.92 mL/mx				
	Roundup PowerMax	4.5 LBAE/GAL		SL	32 FL OZ/A		POST	B	33.33 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 % V/V		POST	B	20.0 mL/mx				
OnTarget	100 %		SL	0.5 % V/V		POST	B	9.999 mL/mx					
12	Canopy (6 oz/a)									205	303	603	801
	Mauler	4 lba/gal		L	0.48 PT/A		PRE	A	8.0 mL/mx				

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Reps: 4 Plots: 10 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.564 L, overage=436 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	Amt Product to Measure	Rep 1	2	3	4
	Classic	25 %	AW/W	DF	2.568	OZ/A	PRE	A	2.564 g/mx				
	XTENDIMAX WITH VAPORGRIP	2.9	lbae/gal	SL	22	FL OZ/A	POST	B	22.92 mL/mx				
	Roundup PowerMax	4.5	LBAE/GAL	SL	32	FL OZ/A	POST	B	33.33 mL/mx				
	CLASS ACT RIDION	100 %		SL	1	% V/V	POST	B	20.0 mL/mx				
	OnTarget	100 %		SL	0.5	% V/V	POST	B	9.999 mL/mx				
13	Authority XL	70 %		DF	6.5	OZ/A	PRE	A	6.491 g/mx	206	402	507	703
	XTENDIMAX WITH VAPORGRIP	2.9	lbae/gal	SL	22	FL OZ/A	POST	B	22.92 mL/mx				
	Roundup PowerMax	4.5	LBAE/GAL	SL	32	FL OZ/A	POST	B	33.33 mL/mx				
	CLASS ACT RIDION	100 %		SL	1	% V/V	POST	B	20.0 mL/mx				
	OnTarget	100 %		SL	0.5	% V/V	POST	B	9.999 mL/mx				
14	Untreated									207	403	602	804

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
17.708	mL	Valor EZ	4	lba/gal	L	
51.250	mL	Mauler	4	lba/gal	L	
17.008	g	Classic	25	%AW/W	DF	
62.500	mL	WARRANT	3	LBA/GAL	CS	
343.750	mL	XTENDIMAX WITH VAPORGRIP	2.9	lbae/gal	SL	
500.000	mL	Roundup PowerMax	4.5	LBAE/GAL	SL	
299.967	mL	CLASS ACT RIDION	100	%	SL	
149.984	mL	OnTarget	100	%	SL	
83.125	mL	Dual II Magnum	7.62	lba/gal	EC	
11.979	mL	Zidua	4.17	LBA/GAL	SC	
41.667	mL	Boundary	6.5	LBA/GAL	EC	
32.552	mL	Broadaxe XC	7	lba/gal	L	
16.226	g	Authority XL	70	%	DF	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.

General Trial Information

Investigator: Travis Legleiter

Trial Status: E established

ARM Trial Created On: 4-10-2020

Conducted Under GLP: No

Conducted Under GEP: No

University of Kentucky

Role: INVEST investigator
Investigator: Travis Legleiter
Organization: University of Kentucky
Address 1: 1205 Hopkinsville Street
City: Princeton, KY
E-mail: Travis.Legleiter@uky.edu
Postal Code: 42445

Crop Description
Crop 1: C GLXMA Glycine max Soybean
Stage Scale: BBCH
Variety: AG 42X6
Planting Date: 6-12-2020 **Planting Rate:** 140000 S/A
Depth: 1.5 IN
Rows per Plot: 7 **Planting Method:** PLANTD planted
Row Spacing: 15 IN **Planting Equipment:** VP vacuum planter

Site and Design
Treated Plot Width: 10 FT
Treated Plot Length: 30 FT
Treated Plot Area: 300.0 FT2 **Treatments:** 14
Replications: 4 **Study Design:** RACOB L Randomized Complete Block (RCB)

Application Description

	A	B	C
Application Date	6-12-2020	7-9-2020	7-16-2020

Crop Stage At Each Application

	A		B		C	
Crop 1 Code, BBCH Scale	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY
Stage Majority, Percent			13		15	

	C GLXMA Glycine max Soybean		W Weed AMATA Common waterhemp		C GLXMA Glycine max Soybean		W Weed AMATA Common waterhemp		C GLXMA Glycine max Soybean		W Weed AMATA Common waterhemp	
Pest Type												
Pest Code												
Pest Name			Common waterhemp				Common waterhemp				Common waterhemp	
Crop Type, Code	C GLXMA				C GLXMA				C GLXMA			
Crop Scientific Name	Glycine max				Glycine max				Glycine max			
Crop Name	Soybean				Soybean				Soybean			
Rating Date	6-25-2020		6-25-2020		7-9-2020		7-9-2020		7-21-2020		7-21-2020	
Part Rated	PLANT C		PLANT P		PLANT C		PLNAT P		PLANT C		PLNAT C	
Rating Type	phygen		control		phygen		control		phygen		control	
Rating Unit	%		%		%		%		%		%	
Number of Subsamples	1		1		1		1		1		1	
Rating Timing												
Days After First/Last Applic.	13 13		13 13		27 27		27 27		39 5		39 5	
Trt-Eval Interval	13 DA-A		13 DA-A		27 DA-A		27 DA-A		39 DA-A		39 DA-A	
Days After Emergence												
ARM Action Codes											AA	
Number of Decimals												
Trt Treatment	Rate		Appl									
No. Name	Rate Unit		Code Plot		1		2		3		4	
					101		100.0		0.0		0.0	
					304		100.0		0.0		0.0	
					505		100.0		0.0		0.0	

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Pest Type			W Weed AMATA Common waterhemp			W Weed AMATA Common waterhemp			W Weed AMATA Common waterhemp			
Pest Code												
Pest Name												
Crop Type, Code	C	GLXMA				C	GLXMA				C	GLXMA
Crop Scientific Name	Glycine max					Glycine max					Glycine max	
Crop Name	Soybean					Soybean					Soybean	
Rating Date	6-25-2020		6-25-2020	7-9-2020		7-9-2020	7-21-2020		7-21-2020	7-21-2020		7-21-2020
Part Rated	PLANT C		PLANT P	PLANT C		PLNAT P	PLANT C		PLANT P	PLNAT C		PLNAT C
Rating Type	phygen		control	phygen		control	phygen		control	%plants als		%
Rating Unit	%		%	%		%	%		%	%		%
Number of Subsamples	1		1	1		1	1		1	1		1
Rating Timing												
Days After First/Last Applic.	13 13		13 13	27 27		27 27	39 5		39 5	39 5		39 5
Trt-Eval Interval	13 DA-A		13 DA-A	27 DA-A		27 DA-A	39 DA-A		39 DA-A	39 DA-A		39 DA-A
Days After Emergence												
ARM Action Codes												AA
Number of Decimals												
Trt Treatment	Rate	Appl										
No. Name	Rate	Unit	Code	Plot	1	2	3	4	5	6	7	
					706	0.0	100.0	0.0	0.0	0.0	0.0	0.0
					Mean =	0.0	100.0	0.0	0.0	0.0	0.0	0.3d
2 Trivence (9 oz/a)					102	0.0	100.0	5.0	97.0	0.0	97.0	60.0
Valor EZ	2.3	FL OZ/A	A	307	0.0	100.0	0.0	80.0	0.0	90.0	2.0	
Mauler	0.5	PT/A	A	504	0.0	100.0	0.0	90.0	0.0	90.0	15.0	
Classic	1.4	OZ/A	A	702	0.0	100.0	0.0	80.0	0.0	90.0	0.0	
WARRANT	1.5	QT/A	C									
XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	C									
Roundup PowerMax	32	FL OZ/A	C									
CLASS ACT RIDION	1	% V/V	C									
OnTarget	0.5	% V/V	C									
					Mean =	0.0	100.0	1.3	86.8	0.0	91.8	12.2d
3 Trivence (9 oz/a)					103	0.0	100.0	2.0	100.0	2.0	97.0	10.0
Valor EZ	2.3	FL OZ/A	A	406	0.0	100.0	2.0	100.0	2.0	97.0	10.0	
Mauler	0.5	PT/A	A	503	0.0	100.0	2.0	95.0	2.0	97.0	40.0	
Classic	1.4	OZ/A	A	806	0.0	100.0	2.0	97.0	5.0	97.0	15.0	
Dual II Magnum	1.33	PT/A	C									
XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	C									
Roundup PowerMax	32	FL OZ/A	C									
CLASS ACT RIDION	1	% V/V	C									
OnTarget	0.5	% V/V	C									
					Mean =	0.0	100.0	2.0	98.0	2.8	97.0	17.5d

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				W Weed AMATA Common waterhemp					W Weed AMATA Common waterhemp					W Weed AMATA Common waterhemp					W Weed AMATA Common waterhemp															
				C GLXMA Glycine max Soybean					C GLXMA Glycine max Soybean					C GLXMA Glycine max Soybean					C GLXMA Glycine max Soybean															
				6-25-2020					7-9-2020					7-21-2020					7-21-2020															
				PLANT C					PLANT C					PLANT C					PLANT C															
				phygen					phygen					phygen					phygen															
				%					%					%					%															
				1					1					1					1															
				13 13					27 27					39 5					39 5															
				13 DA-A					27 DA-A					39 DA-A					39 DA-A															
																				AA														
Trt Treatment				Rate		Appl																												
No. Name				Rate	Unit	Code	Plot																											
				1					2					3					4					5					6					7
4 Trivence (9 oz/a)							104	0.0				100.0				5.0				100.0				5.0				97.0				15.0		
			Valor EZ	2.3	FL OZ/A	A	306	0.0				100.0				3.0				90.0				2.0				100.0				2.0		
			Mauler	0.5	PT/A	A	604	0.0				100.0				2.0				85.0				3.0				97.0				15.0		
			Classic	1.4	OZ/A	A	803	0.0				100.0				10.0				100.0				7.0				95.0				50.0		
			Zidua	3.25	FL OZ/A	C																												
			XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	C																												
			Roundup PowerMax	32	FL OZ/A	C																												
			CLASS ACT RIDION	1	% V/V	C																												
			OnTarget	0.5	% V/V	C																												
			Mean =					0.0				100.0				5.0				93.8				4.3				97.3				17.4d		
5 Fierce XLT 4.5 oz/a)							105	0.0				100.0				2.0				100.0				2.0				97.0				10.0		
			Valor EZ	2.2	FL OZ/A	A	405	0.0				100.0				10.0				100.0				5.0				100.0				40.0		
			Zidua	2.7	FL OZ/A	A	601	0.0				100.0				5.0				100.0				5.0				100.0				25.0		
			Classic	1.2	OZ/A	A	802	0.0				100.0				0.0				100.0				2.0				95.0				5.0		
			XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	C																												
			Roundup PowerMax	32	FL OZ/A	C																												
			CLASS ACT RIDION	1	% V/V	C																												
			OnTarget	0.5	% V/V	C																												
			Mean =					0.0				100.0				4.3				100.0				3.5				98.0				18.1d		
6 Boundary							106	0.0				100.0				0.0				100.0				0.0				97.0				0.0		
			XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	C	301	0.0				100.0				0.0				95.0				0.0				97.0				0.0		
			Roundup PowerMax	32	FL OZ/A	C	607	0.0				100.0				0.0				100.0				0.0				100.0				0.0		
			CLASS ACT RIDION	1	% V/V	C	807	0.0				100.0				0.0				96.0				2.0				95.0				0.0		
			OnTarget	0.5	% V/V	C																												
			Mean =					0.0				100.0				0.0				97.8				0.5				97.3				0.0d		
7 Broadaxe XC							107	0.0				100.0				0.0				100.0				0.0				90.0				0.0		
			XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	C	401	0.0				100.0				0.0				90.0				0.0				90.0				0.0		
			Roundup PowerMax	32	FL OZ/A	C	502	0.0				100.0				0.0				90.0				2.0				97.0				10.0		
			CLASS ACT RIDION	1	% V/V	C	705	0.0				100.0				0.0				100.0				2.0				97.0				0.0		
			OnTarget	0.5	% V/V	C																												
			Mean =					0.0				100.0				0.0				95.0				1.0				93.5				0.6d		

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Pest Type			W Weed AMATA Common waterhemp			W Weed AMATA Common waterhemp			W Weed AMATA Common waterhemp			
Pest Code												
Pest Name												
Crop Type, Code	C GLXMA											
Crop Scientific Name	Glycine max Soybean											
Crop Name	Soybean											
Rating Date	6-25-2020		6-25-2020		7-9-2020		7-9-2020		7-21-2020		7-21-2020	
Part Rated	PLANT C		PLANT P		PLANT C		PLNAT P		PLANT C		PLNAT C	
Rating Type	phygen		control		phygen		control		phygen		%plants als	
Rating Unit	%		%		%		%		%		%	
Number of Subsamples	1		1		1		1		1		1	
Rating Timing												
Days After First/Last Applic.	13 13		13 13		27 27		27 27		39 5		39 5	
Trt-Eval Interval	13 DA-A		13 DA-A		27 DA-A		27 DA-A		39 DA-A		39 DA-A	
Days After Emergence												
ARM Action Codes											AA	
Number of Decimals												
Trt Treatment	Rate	Appl										
No. Name	Rate	Unit	Code	Plot	1	2	3	4	5	6	7	
8 Valor XLT (3.75 oz/a)				201	0.0	100.0	5.0	60.0	2.0	90.0	30.0	
Valor EZ	2.25	FL OZ/A	A	404	0.0	100.0	7.0	100.0	5.0	100.0	33.0	
Classic	1.545	OZ/A	A	501	0.0	100.0	10.0	60.0	10.0	100.0	95.0	
Zidua	3.25	FL OZ/A	B	707	0.0	100.0	1.0	70.0	2.0	100.0	10.0	
XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	B									
Roundup PowerMax	32	FL OZ/A	B									
CLASS ACT RIDION	1	% V/V	B									
OnTarget	0.5	% V/V	B									
Mean =					0.0	100.0	5.8	72.5	4.8	97.5	42.9d	
9 Canopy (6 oz/a)				202	0.0	100.0	10.0	60.0	5.0	90.0	50.0	
Mauler	0.48	PT/A	A	407	0.0	100.0	2.0	80.0	5.0	90.0	5.0	
Classic	2.568	OZ/A	A	606	0.0	100.0	2.0	80.0	0.0	95.0	0.0	
Dual II Magnum	1.33	PT/A	B	805	0.0	100.0	10.0	90.0	10.0	97.0	50.0	
XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	B									
Roundup PowerMax	32	FL OZ/A	B									
CLASS ACT RIDION	1	% V/V	B									
OnTarget	0.5	% V/V	B									
Mean =					0.0	100.0	6.0	77.5	5.0	93.0	18.8d	
10 Authority XL	6.5	OZ/A	A	203	0.0	100.0	7.0	90.0	5.0	100.0	40.0	
Dual II Magnum	1.33	PT/A	B	305	0.0	100.0	2.0	90.0	2.0	97.0	2.0	
XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	B	506	0.0	100.0	0.0	90.0	3.0	100.0	2.0	
Roundup PowerMax	32	FL OZ/A	B	701	0.0	100.0	2.0	60.0	5.0	97.0	5.0	
CLASS ACT RIDION	1	% V/V	B									
OnTarget	0.5	% V/V	B									
Mean =					0.0	100.0	2.8	82.5	3.8	98.5	8.6d	

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Pest Type			W Weed AMATA Common waterhemp			W Weed AMATA Common waterhemp			W Weed AMATA Common waterhemp			
Pest Code												
Pest Name												
Crop Type, Code	C GLXMA			C GLXMA			C GLXMA			C GLXMA		
Crop Scientific Name	Glycine max			Glycine max			Glycine max			Glycine max		
Crop Name	Soybean			Soybean			Soybean			Soybean		
Rating Date	6-25-2020		6-25-2020	7-9-2020		7-9-2020	7-21-2020		7-21-2020	7-21-2020		
Part Rated	PLANT C		PLANT P	PLANT C		PLNAT P	PLANT C		PLANT P	PLNAT C		
Rating Type	phygen		control	phygen		control	phygen		control	%plants als		
Rating Unit	%		%	%		%	%		%	%		
Number of Subsamples	1		1	1		1	1		1	1		
Rating Timing												
Days After First/Last Applic.	13 13		13 13	27 27		27 27	39 5		39 5	39 5		
Trt-Eval Interval	13 DA-A		13 DA-A	27 DA-A		27 DA-A	39 DA-A		39 DA-A	39 DA-A		
Days After Emergence												
ARM Action Codes										AA		
Number of Decimals												
Trt Treatment	Rate	Appl										
No. Name	Rate	Unit	Code	Plot	1	2	3	4	5	6	7	
11 Valor XLT (3.75 oz/a)				204	0.0	100.0	10.0	90.0	5.0	95.0	45.0	
Valor EZ	2.25	FL OZ/A	A	302	0.0	100.0	10.0	80.0	2.0	97.0	25.0	
Classic	1.545	OZ/A	A	605	0.0	100.0	0.0	90.0	0.0	100.0	5.0	
XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	B	704	0.0	100.0	10.0	90.0	5.0	100.0	33.0	
Roundup PowerMax	32	FL OZ/A	B									
CLASS ACT RIDION	1	% V/V	B									
OnTarget	0.5	% V/V	B									
				Mean =	0.0	100.0	7.5	87.5	3.0	98.0	25.0d	
12 Canopy (6 oz/a)				205	0.0	100.0	10.0	70.0	5.0	97.0	60.0	
Mauler	0.48	PT/A	A	303	0.0	100.0	5.0	70.0	2.0	95.0	30.0	
Classic	2.568	OZ/A	A	603	0.0	100.0	2.0	50.0	2.0	90.0	20.0	
XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	B	801	0.0	100.0	10.0	50.0	5.0	90.0	45.0	
Roundup PowerMax	32	FL OZ/A	B									
CLASS ACT RIDION	1	% V/V	B									
OnTarget	0.5	% V/V	B									
				Mean =	0.0	100.0	6.8	60.0	3.5	93.0	38.2d	
13 Authority XL	6.5	OZ/A	A	206	0.0	100.0	5.0	80.0	0.0	97.0	15.0	
XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	B	402	0.0	100.0	10.0	90.0	5.0	99.0	25.0	
Roundup PowerMax	32	FL OZ/A	B	507	0.0	100.0	2.0	100.0	0.0	100.0	5.0	
CLASS ACT RIDION	1	% V/V	B	703	0.0	100.0	7.0	90.0	5.0	100.0	20.0	
OnTarget	0.5	% V/V	B									
				Mean =	0.0	100.0	6.0	90.0	2.5	99.0	15.4d	
14 Untreated				207	0.0	100.0	0.0	0.0	0.0	0.0	0.0	
				403	0.0	100.0	0.0	0.0	0.0	0.0	0.0	
				602	0.0	100.0	0.0	0.0	0.0	0.0	0.0	
				804	0.0	100.0	0.0	0.0	0.0	0.0	0.0	
				Mean =	0.0	100.0	0.0	0.0	0.0	0.0	0.0d	

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Pest Type			W Weed			W Weed			W Weed			W Weed		
Pest Code			AMATA			AMATA			AMATA			AMATA		
Pest Name			Common waterhemp		Common waterhemp		Common waterhemp		Common waterhemp		Common waterhemp		Common waterhemp	
Crop Type, Code	C GLXMA													
Crop Scientific Name	Glycine max													
Crop Name	Soybean													
Rating Date	7-29-2020		7-29-2020		8-5-2020		8-11-2020		11-5-2020		10-5-2020			
Part Rated	PLANT C		PLANT P		PLANT P		PLANT P		PLANT P		PLANT P		PLANT P	
Rating Type	phygen		control		control		control		control		control		COUNT	
Rating Unit	%		%		%		%		%		%		7 m2	
Number of Subsamples	1		1		1		1		1		1		1	
Rating Timing														
Days After First/Last Applic.	47 13		47 13		54 20		60 26		146 112		115 81			
Trt-Eval Interval														
Days After Emergence														
ARM Action Codes														
Number of Decimals														
Trt Treatment	Rate	Appl												
No. Name	Rate	Unit	Code	Plot										
				8	9		10		11		12		13	
			706	0.0	0.0		0.0		0.0		0.0		264.0	
			Mean =	0.0	0.0		0.0		0.0		0.0		237.0	
2 Trivence (9 oz/a)			102	2.0	100.0		100.0		100.0		97.0		0.0	
Valor EZ	2.3	FL OZ/A	A 307	2.0	97.0		100.0		100.0		100.0		0.0	
Mauler	0.5	PT/A	A 504	2.0	95.0		100.0		100.0		100.0		0.0	
Classic	1.4	OZ/A	A 702	2.0	90.0		95.0		90.0		100.0		0.0	
WARRANT	1.5	QT/A	C											
XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	C											
Roundup PowerMax	32	FL OZ/A	C											
CLASS ACT RIDION	1	% V/V	C											
OnTarget	0.5	% V/V	C											
			Mean =	2.0	95.5		98.8		97.5		99.3		0.0	
3 Trivence (9 oz/a)			103	0.0	100.0		100.0		100.0		100.0		0.0	
Valor EZ	2.3	FL OZ/A	A 406	0.0	100.0		100.0		100.0		100.0		0.0	
Mauler	0.5	PT/A	A 503	2.0	97.0		100.0		100.0		100.0		0.0	
Classic	1.4	OZ/A	A 806	2.0	97.0		100.0		100.0		100.0		5.0	
Dual II Magnum	1.33	PT/A	C											
XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	C											
Roundup PowerMax	32	FL OZ/A	C											
CLASS ACT RIDION	1	% V/V	C											
OnTarget	0.5	% V/V	C											
			Mean =	1.0	98.5		100.0		100.0		100.0		1.3	

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Pest Type			W Weed			W Weed			W Weed			W Weed		
Pest Code			AMATA			AMATA			AMATA			AMATA		
Pest Name			Common waterhemp		Common waterhemp		Common waterhemp		Common waterhemp		Common waterhemp		Common waterhemp	
Crop Type, Code	C GLXMA													
Crop Scientific Name	Glycine max													
Crop Name	Soybean													
Rating Date	7-29-2020		7-29-2020		8-5-2020		8-11-2020		11-5-2020		10-5-2020			
Part Rated	PLANT C		PLANT P		PLANT P		PLANT P		PLANT P		PLANT P		PLANT P	
Rating Type	phygen		control		control		control		control		control		COUNT	
Rating Unit	%		%		%		%		%		%		7 m2	
Number of Subsamples	1		1		1		1		1		1		1	
Rating Timing														
Days After First/Last Applic.	47 13		47 13		54 20		60 26		146 112		115 81			
Trt-Eval Interval														
Days After Emergence														
ARM Action Codes														
Number of Decimals														
Trt Treatment	Rate		Appl											
No. Name	Rate	Unit	Code	Plot	8	9	10	11	12	13				
4 Trivence (9 oz/a)				104	0.0	100.0	100.0	100.0	100.0	0.0				
Valor EZ	2.3 FL	OZ/A	A	306	0.0	100.0	100.0	100.0	100.0	0.0				
Mauler	0.5 PT/A		A	604	2.0	100.0	100.0	100.0	100.0	0.0				
Classic	1.4 OZ/A		A	803	5.0	100.0	100.0	100.0	100.0	0.0				
Zidua	3.25 FL	OZ/A	C											
XTENDIMAX WITH VAPORGRIP	22 FL	OZ/A	C											
Roundup PowerMax	32 FL	OZ/A	C											
CLASS ACT RIDION	1 %	V/V	C											
OnTarget	0.5 %	V/V	C											
				Mean =	1.8	100.0	100.0	100.0	100.0	0.0				
5 Fierce XLT 4.5 oz/a)				105	0.0	100.0	100.0	95.0	97.0	10.0				
Valor EZ	2.2 FL	OZ/A	A	405	5.0	100.0	90.0	95.0	90.0	6.0				
Zidua	2.7 FL	OZ/A	A	601	5.0	100.0	100.0	100.0	95.0	0.0				
Classic	1.2 OZ/A		A	802	5.0	90.0	95.0	95.0	95.0	7.0				
XTENDIMAX WITH VAPORGRIP	22 FL	OZ/A	C											
Roundup PowerMax	32 FL	OZ/A	C											
CLASS ACT RIDION	1 %	V/V	C											
OnTarget	0.5 %	V/V	C											
				Mean =	3.8	97.5	96.3	96.3	94.3	5.8				
6 Boundary	2 PT/A		A	106	0.0	100.0	100.0	100.0	100.0	1.0				
XTENDIMAX WITH VAPORGRIP	22 FL	OZ/A	C	301	0.0	97.0	100.0	100.0	100.0	0.0				
Roundup PowerMax	32 FL	OZ/A	C	607	0.0	100.0	100.0	100.0	100.0	0.0				
CLASS ACT RIDION	1 %	V/V	C	807	2.0	100.0	90.0	100.0	100.0	0.0				
OnTarget	0.5 %	V/V	C											
				Mean =	0.5	99.3	97.5	100.0	100.0	0.3				
7 Broadaxe XC	25 FL	OZ/A	A	107	0.0	100.0	97.0	97.0	100.0	0.0				
XTENDIMAX WITH VAPORGRIP	22 FL	OZ/A	C	401	0.0	100.0	100.0	100.0	100.0	0.0				
Roundup PowerMax	32 FL	OZ/A	C	502	5.0	95.0	90.0	97.0	100.0	1.0				
CLASS ACT RIDION	1 %	V/V	C	705	0.0	97.0	97.0	100.0	100.0	0.0				
OnTarget	0.5 %	V/V	C											
				Mean =	1.3	98.0	96.0	98.5	100.0	0.3				

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Pest Type			W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code			AMATA	AMATA	AMATA	AMATA	AMATA					
Pest Name			Common waterhemp	Common waterhemp	Common waterhemp	Common waterhemp	Common waterhemp					
Crop Type, Code	C	GLXMA										
Crop Scientific Name	Glycine max											
Crop Name	Soybean											
Rating Date	7-29-2020		7-29-2020	8-5-2020	8-11-2020	11-5-2020	10-5-2020					
Part Rated	PLANT C		PLANT P	PLANT P	PLANT P	PLANT P	PLANT P					
Rating Type	phygen		control	control	control	control	COUNT					
Rating Unit	%		%	%	%	%	7 m2					
Number of Subsamples	1		1	1	1	1	1					
Rating Timing												
Days After First/Last Applic.	47	13	47	13	54	20	60	26	146	112	115	81
Trt-Eval Interval												
Days After Emergence												
ARM Action Codes												
Number of Decimals												
Trt Treatment	Rate	Appl										
No. Name	Rate	Unit	Code	Plot	8	9	10	11	12	13		
8 Valor XLT (3.75 oz/a)			201		2.0	90.0	90.0	95.0	100.0	1.0		
Valor EZ	2.25	FL OZ/A	A	404	5.0	95.0	95.0	100.0	95.0	1.0		
Classic	1.545	OZ/A	A	501	20.0	100.0	100.0	100.0	100.0	1.0		
Zidua	3.25	FL OZ/A	B	707	5.0	100.0	100.0	100.0	100.0	0.0		
XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	B									
Roundup PowerMax	32	FL OZ/A	B									
CLASS ACT RIDION	1	% V/V	B									
OnTarget	0.5	% V/V	B									
			Mean =		8.0	96.3	96.3	98.8	98.8	0.8		
9 Canopy (6 oz/a)			202		5.0	80.0	90.0	90.0	90.0	8.0		
Mauler	0.48	PT/A	A	407	0.0	90.0	90.0	95.0	75.0	6.0		
Classic	2.568	OZ/A	A	606	0.0	80.0	90.0	90.0	90.0	14.0		
Dual II Magnum	1.33	PT/A	B	805	5.0	90.0	90.0	80.0	75.0	17.0		
XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	B									
Roundup PowerMax	32	FL OZ/A	B									
CLASS ACT RIDION	1	% V/V	B									
OnTarget	0.5	% V/V	B									
			Mean =		2.5	85.0	90.0	88.8	82.5	11.3		
10 Authority XL	6.5	OZ/A	A	203	5.0	100.0	97.0	95.0	90.0	4.0		
Dual II Magnum	1.33	PT/A	B	305	0.0	100.0	100.0	100.0	100.0	0.0		
XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	B	506	2.0	100.0	100.0	100.0	100.0	0.0		
Roundup PowerMax	32	FL OZ/A	B	701	5.0	95.0	97.0	100.0	100.0	0.0		
CLASS ACT RIDION	1	% V/V	B									
OnTarget	0.5	% V/V	B									
			Mean =		3.0	98.8	98.5	98.8	97.5	1.0		

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Pest Type			W Weed			W Weed			W Weed			W Weed		
Pest Code			AMATA			AMATA			AMATA			AMATA		
Pest Name			Common waterhemp		Common waterhemp		Common waterhemp		Common waterhemp		Common waterhemp		Common waterhemp	
Crop Type, Code	C GLXMA													
Crop Scientific Name	Glycine max													
Crop Name	Soybean													
Rating Date	7-29-2020		7-29-2020		8-5-2020		8-11-2020		11-5-2020		10-5-2020			
Part Rated	PLANT C		PLANT P		PLANT P		PLANT P		PLANT P		PLANT P		PLANT P	
Rating Type	phygen		control		control		control		control		control		COUNT	
Rating Unit	%		%		%		%		%		%		7 m2	
Number of Subsamples	1		1		1		1		1		1		1	
Rating Timing														
Days After First/Last Applic.	47 13		47 13		54 20		60 26		146 112		115 81			
Trt-Eval Interval														
Days After Emergence														
ARM Action Codes														
Number of Decimals														
Trt Treatment	Rate		Appl											
No. Name	Rate	Unit	Code	Plot	8	9	10	11	12	13				
11 Valor XLT (3.75 oz/a)				204	5.0	90.0	80.0	70.0	75.0	44.0				
Valor EZ	2.25	FL OZ/A	A	302	5.0	80.0	80.0	9.0	93.0	11.0				
Classic	1.545	OZ/A	A	605	0.0	96.0	80.0	80.0	93.0	15.0				
XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	B	704	5.0	80.0	70.0	70.0	70.0	64.0				
Roundup PowerMax	32	FL OZ/A	B											
CLASS ACT RIDION	1	% V/V	B											
OnTarget	0.5	% V/V	B											
				Mean =	3.8	86.5	77.5	57.3	82.8	33.5				
12 Canopy (6 oz/a)				205	5.0	80.0	70.0	60.0	60.0	88.0				
Mauler	0.48	PT/A	A	303	5.0	70.0	60.0	70.0	85.0	23.0				
Classic	2.568	OZ/A	A	603	5.0	80.0	50.0	50.0	30.0	140.0				
XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	B	801	5.0	80.0	50.0	50.0	10.0	123.0				
Roundup PowerMax	32	FL OZ/A	B											
CLASS ACT RIDION	1	% V/V	B											
OnTarget	0.5	% V/V	B											
				Mean =	5.0	77.5	57.5	57.5	46.3	93.5				
13 Authority XL	6.5	OZ/A	A	206	3.0	97.0	80.0	80.0	85.0	9.0				
XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	B	402	2.0	80.0	80.0	80.0	95.0	5.0				
Roundup PowerMax	32	FL OZ/A	B	507	2.0	90.0	75.0	65.0	60.0	13.0				
CLASS ACT RIDION	1	% V/V	B	703	5.0	90.0	80.0	85.0	60.0	55.0				
OnTarget	0.5	% V/V	B											
				Mean =	3.0	89.3	78.8	77.5	75.0	20.5				
14 Untreated				207	0.0	0.0	0.0	0.0	0.0	330.0				
				403	0.0	0.0	0.0	0.0	0.0	144.0				
				602	0.0	0.0	0.0	0.0	0.0	84.0				
				804	0.0	0.0	0.0	0.0	0.0	120.0				
				Mean =	0.0	0.0	0.0	0.0	0.0	169.5				

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Pest Type	W Weed AMATA Common waterhemp		W Weed AMATA Common waterhemp		W Weed AMATA Common waterhemp		W Weed AMATA Common waterhemp			
Pest Code	C GLXMA Glycine max Soybean		C GLXMA Glycine max Soybean		C GLXMA Glycine max Soybean		C GLXMA Glycine max Soybean			
Pest Name	Common waterhemp		Common waterhemp		Common waterhemp		Common waterhemp			
Crop Type, Code	6-25-2020		7-9-2020		7-21-2020		7-29-2020			
Crop Scientific Name	PLANT C		PLANT C		PLANT C		PLANT C			
Crop Name	phygen		phygen		phygen		phygen			
Rating Date	%		%		%		%			
Part Rated	1		1		1		1			
Rating Type	control		control		control		control			
Rating Unit	%		%		%		%			
Number of Subsamples	1		1		1		1			
Rating Timing	13 13		27 27		39 5		47 13			
Days After First/Last Applic.	13 DA-A		27 DA-A		39 DA-A		47 DA-A			
Trt-Eval Interval	13 DA-A		27 DA-A		39 DA-A		47 DA-A			
Days After Emergence							AA			
ARM Action Codes							AA			
Number of Decimals										
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8
13 Authority XL	6.5 OZ/A	A	0.0 a	100.0 a	6.0 a	90.0 abc	2.5 a	99.0 a	15.4 abc	3.0 ab
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B								
Roundup PowerMax	32 FL OZ/A	B								
CLASS ACT RIDION	1 % V/V	B								
OnTarget	0.5 % V/V	B								
14 Untreated			0.0 a	100.0 a	0.0 a	0.0 e	0.0 a	0.0 c	0.0 c	0.0 b
LSD P=.05			.	.	4.29	13.23	2.95	3.94	15.74 - 30.62	3.95
Standard Deviation			0.00	0.00	3.00	9.25	2.06	2.75	14.26t	2.76
CV			0.0	0.0	88.92	12.44	83.59	3.34	71.84t	109.03
Levene's F			0.00	0.00	2.078	1.36	2.554	1.564	1.493	1.141
Levene's Prob(F)			0.00*	0.00*	0.037*	0.219	0.011*	0.135	0.16	0.355
Skewness			.	.	0.8155*	-1.5159*	0.981*	-2.0574*	0.7252*	2.9432*
Kurtosis			.	.	-0.9035	0.9641	0.701	2.3922*	0.2784	14.5842*
Replicate F			0.000	0.000	1.905	0.294	1.846	0.782	0.749	1.262
Replicate Prob(F)			1.0000	1.0000	0.1447	0.8295	0.1548	0.5114	0.5296	0.3009
Treatment F			0.000	0.000	3.539	52.046	3.135	646.479	3.495	2.465
Treatment Prob(F)			1.0000	1.0000	0.0011	0.0001	0.0029	0.0001	0.0012	0.0149

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Pest Type	W Weed		W Weed		W Weed		W Weed		W Weed					
Pest Code	AMATA		AMATA		AMATA		AMATA		AMATA					
Pest Name	Common waterhemp		Common waterhemp		Common waterhemp		Common waterhemp		Common waterhemp					
Crop Type, Code														
Crop Scientific Name														
Crop Name														
Rating Date	7-29-2020		8-5-2020		8-11-2020		11-5-2020		10-5-2020					
Part Rated	PLANT P		PLANT P		PLANT P		PLANT P		PLANT P					
Rating Type	control		control		control		control		COUNT					
Rating Unit	%		%		%		%		7 m2					
Number of Subsamples	1		1		1		1		1					
Rating Timing														
Days After First/Last Applic.	47 13		54 20		60 26		146 112		115 81					
Trt-Eval Interval														
Days After Emergence														
ARM Action Codes														
Number of Decimals														
Trt No.	Treatment Name	Rate	Unit	Appl Code	9		10		11		12		13	
1					0.0 e		0.0 e		0.0 c		0.0 c		237.0 a	
2	Trivence (9 oz/a)				95.5 ab		98.8 a		97.5 a		99.3 a		0.0 c	
	Valor EZ	2.3	FL OZ/A	A										
	Mauler	0.5	PT/A	A										
	Classic	1.4	OZ/A	A										
	WARRANT	1.5	QT/A	C										
	XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	C										
	Roundup PowerMax	32	FL OZ/A	C										
	CLASS ACT RIDION	1	% V/V	C										
	OnTarget	0.5	% V/V	C										

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	AMATA	AMATA	AMATA	AMATA	AMATA		
Pest Name	Common waterhemp	Common waterhemp	Common waterhemp	Common waterhemp	Common waterhemp		
Crop Type, Code							
Crop Scientific Name							
Crop Name							
Rating Date	7-29-2020	8-5-2020	8-11-2020	11-5-2020	10-5-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	control	control	control	control	COUNT		
Rating Unit	%	%	%	%	7 m2		
Number of Subsamples	1	1	1	1	1		
Rating Timing							
Days After First/Last Applic.	47 13	54 20	60 26	146 112	115 81		
Trt-Eval Interval							
Days After Emergence							
ARM Action Codes							
Number of Decimals							
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code	9	10	11	12	13
3 Trivence (9 oz/a)			98.5 a	100.0 a	100.0 a	100.0 a	1.3 c
Valor EZ	2.3 FL OZ/A	A					
Mauler	0.5 PT/A	A					
Classic	1.4 OZ/A	A					
Dual II Magnum	1.33 PT/A	C					
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	C					
Roundup PowerMax	32 FL OZ/A	C					
CLASS ACT RIDION	1 % V/V	C					
OnTarget	0.5 % V/V	C					
4 Trivence (9 oz/a)			100.0 a	100.0 a	100.0 a	100.0 a	0.0 c
Valor EZ	2.3 FL OZ/A	A					
Mauler	0.5 PT/A	A					
Classic	1.4 OZ/A	A					
Zidua	3.25 FL OZ/A	C					
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	C					
Roundup PowerMax	32 FL OZ/A	C					
CLASS ACT RIDION	1 % V/V	C					
OnTarget	0.5 % V/V	C					
5 Fierce XLT 4.5 oz/a)			97.5 a	96.3 ab	96.3 a	94.3 a	5.8 c
Valor EZ	2.2 FL OZ/A	A					
Zidua	2.7 FL OZ/A	A					
Classic	1.2 OZ/A	A					
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	C					
Roundup PowerMax	32 FL OZ/A	C					
CLASS ACT RIDION	1 % V/V	C					
OnTarget	0.5 % V/V	C					
6 Boundary	2 PT/A	A	99.3 a	97.5 ab	100.0 a	100.0 a	0.3 c
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	C					
Roundup PowerMax	32 FL OZ/A	C					
CLASS ACT RIDION	1 % V/V	C					
OnTarget	0.5 % V/V	C					
7 Broadaxe XC	25 FL OZ/A	A	98.0 a	96.0 ab	98.5 a	100.0 a	0.3 c
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	C					
Roundup PowerMax	32 FL OZ/A	C					
CLASS ACT RIDION	1 % V/V	C					
OnTarget	0.5 % V/V	C					

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	AMATA	AMATA	AMATA	AMATA	AMATA		
Pest Name	Common waterhemp	Common waterhemp	Common waterhemp	Common waterhemp	Common waterhemp		
Crop Type, Code							
Crop Scientific Name							
Crop Name							
Rating Date	7-29-2020	8-5-2020	8-11-2020	11-5-2020	10-5-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	control	control	control	control	COUNT		
Rating Unit	%	%	%	%	7 m2		
Number of Subsamples	1	1	1	1	1		
Rating Timing							
Days After First/Last Applic.	47 13	54 20	60 26	146 112	115 81		
Trt-Eval Interval							
Days After Emergence							
ARM Action Codes							
Number of Decimals							
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code	9	10	11	12	13
8 Valor XLT (3.75 oz/a)			96.3 ab	96.3 ab	98.8 a	98.8 a	0.8 c
Valor EZ	2.25 FL OZ/A	A					
Classic	1.545 OZ/A	A					
Zidua	3.25 FL OZ/A	B					
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B					
Roundup PowerMax	32 FL OZ/A	B					
CLASS ACT RIDION	1 % V/V	B					
OnTarget	0.5 % V/V	B					
9 Canopy (6 oz/a)			85.0 c	90.0 b	88.8 a	82.5 a	11.3 c
Mauler	0.48 PT/A	A					
Classic	2.568 OZ/A	A					
Dual II Magnum	1.33 PT/A	B					
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B					
Roundup PowerMax	32 FL OZ/A	B					
CLASS ACT RIDION	1 % V/V	B					
OnTarget	0.5 % V/V	B					
10 Authority XL			98.8 a	98.5 a	98.8 a	97.5 a	1.0 c
Dual II Magnum	1.33 PT/A	B					
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B					
Roundup PowerMax	32 FL OZ/A	B					
CLASS ACT RIDION	1 % V/V	B					
OnTarget	0.5 % V/V	B					
11 Valor XLT (3.75 oz/a)			86.5 c	77.5 c	57.3 b	82.8 a	33.5 c
Valor EZ	2.25 FL OZ/A	A					
Classic	1.545 OZ/A	A					
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B					
Roundup PowerMax	32 FL OZ/A	B					
CLASS ACT RIDION	1 % V/V	B					
OnTarget	0.5 % V/V	B					
12 Canopy (6 oz/a)			77.5 d	57.5 d	57.5 b	46.3 b	93.5 c
Mauler	0.48 PT/A	A					
Classic	2.568 OZ/A	A					
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B					
Roundup PowerMax	32 FL OZ/A	B					
CLASS ACT RIDION	1 % V/V	B					
OnTarget	0.5 % V/V	B					

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Pest Type	W Weed		W Weed		W Weed		W Weed		W Weed	
Pest Code	AMATA		AMATA		AMATA		AMATA		AMATA	
Pest Name	Common waterhemp		Common waterhemp		Common waterhemp		Common waterhemp		Common waterhemp	
Crop Type, Code										
Crop Scientific Name										
Crop Name										
Rating Date	7-29-2020		8-5-2020		8-11-2020		11-5-2020		10-5-2020	
Part Rated	PLANT P		PLANT P		PLANT P		PLANT P		PLANT P	
Rating Type	control		control		control		control		COUNT	
Rating Unit	%		%		%		%		7 m2	
Number of Subsamples	1		1		1		1		1	
Rating Timing										
Days After First/Last Applic.	47 13		54 20		60 26		146 112		115 81	
Trt-Eval Interval										
Days After Emergence										
ARM Action Codes										
Number of Decimals										
Trt Treatment	Rate		Appl							
No. Name	Rate	Unit	Code							
9			10		11		12		13	
13 Authority XL	6.5	OZ/A	A		89.3 bc		78.8 c		77.5 a	
XTENDIMAX WITH VAPORGRIP	22	FL OZ/A	B						75.0 a	
Roundup PowerMax	32	FL OZ/A	B							
CLASS ACT RIDION	1	% V/V	B							
OnTarget	0.5	% V/V	B							
14 Untreated			0.0 e		0.0 e		0.0 c		0.0 c	
LSD P=.05			6.10		5.61		14.26		15.25	
Standard Deviation			4.26		3.92		9.97		10.66	
CV			5.32		5.05		13.04		13.87	
Levene's F			2.085		2.264		1.294		13.861	
Levene's Prob(F)			0.036*		0.023*		0.254		0.001*	
Skewness			-1.9017*		-1.6485*		-1.4721*		-1.4758*	
Kurtosis			1.9925*		1.2483		0.6219		0.5603	
Replicate F			0.896		1.372		0.174		1.674	
Replicate Prob(F)			0.4520		0.2656		0.9133		0.1883	
Treatment F			263.265		318.561		51.211		45.134	
Treatment Prob(F)			0.0001		0.0001		0.0001		0.0001	
			169.5 b						20.5 c	

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Balancing residual herbicide cost and application timing for maximum late season waterhemp control

Trial ID: 20-25_SOY-CAL Location: Trial Year: 2020
Protocol ID: KySPB 2020 Investigator (Creator): Travis Legleiter
Project ID: Study Director:
Sponsor Contact:

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

AMATA, Amaranthus x tamariscinus, Common waterhemp = US

Crop Type, Code

C = EPPO species (Bayer) codes

GLXMA, BSOY, Glycine max, Soybean = US

Part Rated

PLANT = plant

C = Crop is Part Rated

P = Pest is Part Rated

Rating Type

phygen = phytotoxicity - general / injury

COUNT = count

Rating Unit

% = percent

ARM Action Codes

AA = Automatic arcsine square root % transformation

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Overlapping Residual Treatments in Soybean

Trial ID: 20-27 SOY-REC Location: UKREC Trial Year: 2020
 Protocol ID: NA20X0A028H & SYN Sales Investigator (Creator): Travis Legleiter
 Project ID: Study Director:
 Sponsor Contact:

Reps: 4 Plots: 6.7 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.048 L, overage=952 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	Amt to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	Prefix	5.29	LB/GAL	L	2	PT/A	PRE	A	33.33 mL/mx	101	209	303	411
	Tavium	3.38	LBA/GAL	CS	56.5	FL OZ/A	POST	B	58.85 mL/mx				
	Roundup PowerMax	4.5	LBAE/GAL	SL	32	FL OZ/A	POST	B	33.33 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 %	V/V	POST	B	20.0 mL/mx				
	OnTarget	100 %		SL	0.5 %	V/V	POST	B	9.999 mL/mx				
2	Broadaxe XC	7	LBA/GAL	L	22	FL OZ/A	PRE	A	22.92 mL/mx	102	208	305	401
	Tavium	3.38	LBA/GAL	CS	56.5	FL OZ/A	POST	B	58.85 mL/mx				
	Roundup PowerMax	4.5	LBAE/GAL	SL	32	FL OZ/A	POST	B	33.33 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 %	V/V	POST	B	20.0 mL/mx				
	OnTarget	100 %		SL	0.5 %	V/V	POST	B	9.999 mL/mx				
3	Boundary	6.5	LBA/GAL	EC	1.5	PT/A	PRE	A	25.0 mL/mx	103	210	304	405
	Prefix	5.29	LB/GAL	L	2	PT/A	POST	B	33.33 mL/mx				
	Roundup PowerMax	4.5	LBAE/GAL	SL	32	FL OZ/A	POST	B	33.33 mL/mx				
	Amsol AMS	3.4	lba/gal	SL	2.5 %	V/V	POST	B	49.99 mL/mx				
4	Trivence	61.3 %		WG	8	OZ/A	PRE	A	7.988 g/mx	104	201	308	409
	XTENDIMAX WITH VAPORGRIP	2.9	lbae/gal	SL	22	FL OZ/A	POST	B	22.92 mL/mx				
	Roundup PowerMax	4.5	LBAE/GAL	SL	32	FL OZ/A	POST	B	33.33 mL/mx				
	EverpreX	7.62	LBA/GAL	EC	1	PT/A	POST	B	16.67 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 %	V/V	POST	B	20.0 mL/mx				
	OnTarget	100 %		SL	0.5 %	V/V	POST	B	9.999 mL/mx				
5	Surveil	48 %		WG	3	OZ/A	PRE	A	2.996 g/mx	105	202	306	407
	XTENDIMAX WITH VAPORGRIP	2.9	lbae/gal	SL	22	FL OZ/A	POST	B	22.92 mL/mx				
	Roundup PowerMax	4.5	LBAE/GAL	SL	32	FL OZ/A	POST	B	33.33 mL/mx				
	EverpreX	7.62	LBA/GAL	EC	1	PT/A	POST	B	16.67 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 %	V/V	POST	B	20.0 mL/mx				
	OnTarget	100 %		SL	0.5 %	V/V	POST	B	9.999 mL/mx				
6	Sonic	70 %		DG	5	OZ/A	PRE	A	4.993 g/mx	106	211	309	404
	XTENDIMAX WITH VAPORGRIP	2.9	lbae/gal	SL	22	FL OZ/A	POST	B	22.92 mL/mx				
	Roundup PowerMax	4.5	LBAE/GAL	SL	32	FL OZ/A	POST	B	33.33 mL/mx				
	EverpreX	7.62	LBA/GAL	EC	1	PT/A	POST	B	16.67 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 %	V/V	POST	B	20.0 mL/mx				
	OnTarget	100 %		SL	0.5 %	V/V	POST	B	9.999 mL/mx				
7	Authority Edge	4.25	LBA/GAL	SC	7	FL OZ/A	PRE	A	7.292 mL/mx	107	205	311	406
	XTENDIMAX WITH VAPORGRIP	2.9	lbae/gal	SL	22	FL OZ/A	POST	B	22.92 mL/mx				
	Roundup PowerMax	4.5	LBAE/GAL	SL	32	FL OZ/A	POST	B	33.33 mL/mx				
	Anthem Maxx	4.3	LBA/GAL	SC	1	PT/A	POST	B	16.67 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 %	V/V	POST	B	20.0 mL/mx				
	OnTarget	100 %		SL	0.5 %	V/V	POST	B	9.999 mL/mx				

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Reps: 4 Plots: 6.7 by 30 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.048 L, overage=952 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	Amt to Measure	Rep 1	2	3	4
8	Authroity MTZ	45 %		DF	14 OZ/A		PRE	A	13.98 g/mx	108	204	301	408
	XTENDIMAX WITH VAPORGRIP	2.9 lbae/gal		SL	22 FL OZ/A		POST	B	22.92 mL/mx				
	Roundup PowerMax	4.5 LBAE/GAL		SL	32 FL OZ/A		POST	B	33.33 mL/mx				
	Anthem Maxx	4.3 LBA/GAL		SC	1 PT/A		POST	B	16.67 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 % V/V		POST	B	20.0 mL/mx				
OnTarget	100 %		SL	0.5 % V/V		POST	B	9.999 mL/mx					
9	Zidua Pro	4.09 LBA/GAL		SC	4.5 FL OZ/A		PRE	A	4.687 mL/mx	109	207	310	402
	Engenia	5 LB/GAL		L	12.8 FL OZ/A		POST	B	13.33 mL/mx				
	Roundup PowerMax	4.5 LBAE/GAL		SL	32 FL OZ/A		POST	B	33.33 mL/mx				
	Zidua	4.17 LBA/GAL		SC	4 FL OZ/A		POST	B	4.167 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 % V/V		POST	B	20.0 mL/mx				
OnTarget	100 %		SL	0.5 % V/V		POST	B	9.999 mL/mx					
10	VALOR XLT	40.3		WG	3 OZ/A		PRE	A	2.996 g/mx	110	203	302	410
	XTENDIMAX WITH VAPORGRIP	2.9 lbae/gal		SL	22 FL OZ/A		POST	B	22.92 mL/mx				
	Roundup PowerMax	4.5 LBAE/GAL		SL	32 FL OZ/A		POST	B	33.33 mL/mx				
	WARRANT	3 LBA/GAL		CS	1.5 QT/A		POST	B	50.0 mL/mx				
	CLASS ACT RIDION	100 %		SL	1 % V/V		POST	B	20.0 mL/mx				
OnTarget	100 %		SL	0.5 % V/V		POST	B	9.999 mL/mx					
11	Untreated									111	206	307	403

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
83.333	mL	Prefix	5.29	LB/GAL	L	
147.135	mL	Tavium	3.38	LBA/GAL	CS	
416.666	mL	Roundup PowerMax	4.5	LBAE/GAL	SL	
224.976	mL	CLASS ACT RIDION	100	%	SL	
112.488	mL	OnTarget	100	%	SL	
28.646	mL	Broadaxe XC	7	LBA/GAL	L	
31.250	mL	Boundary	6.5	LBA/GAL	EC	
62.493	mL	Amsol AMS	3.4	lba/gal	SL	
9.986	g	Trivence	61.3	%	WG	
171.875	mL	XTENDIMAX WITH VAPORGRIP	2.9	lbae/gal	SL	
62.500	mL	EverpreX	7.62	LBA/GAL	EC	
3.745	g	Surveil	48	%	WG	
6.241	g	Sonic	70	%	DG	
9.115	mL	Authority Edge	4.25	LBA/GAL	SC	
41.667	mL	Anthem Maxx	4.3	LBA/GAL	SC	
17.475	g	Authroity MTZ	45	%	DF	
5.859	mL	Zidua Pro	4.09	LBA/GAL	SC	

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Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
16.667	mL	Engenia	5	LB/GAL	L	
5.208	mL	Zidua	4.17	LBA/GAL	SC	
3.745	g	VALOR XLT	40.3		WG	
62.500	mL	WARRANT	3	LBA/GAL	CS	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.

General Trial Information

Investigator: Travis Legleiter **Title:** Assistant Extension Professor

Trial Status: E established

ARM Trial Created On: 4-9-2020

Trial Location

City: Princeton **Country:** USA United States

State/Prov.: Kentucky

Postal Code: 42445

Conducted Under GLP: No

Conducted Under GEP: No

Role: INVEST investigator

Investigator: Travis Legleiter

Title: Assistant Extension Professor

Organization: University of Kentucky

Address 1: 348 University Drive

Phone No.: 859-562-1323

Country: USA United States

E-mail: Travis.Legleiter@uky.edu

City: Princeton, KY

Postal Code: 42445

Crop Description

Crop 1: C GLXMA Glycine max Soybean

Stage Scale: BBCH

Variety: AG42X6

Planting Date: 6-8-2020

Planting Rate: 140000 S/A

Depth: 1.5 IN

Planting Method: PLANTD planted

Row Spacing: 15 IN

Planting Equipment: VP vacuum planter

Harvested Width: 5 FT

% Standard Moisture: 15.5

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Pest Description		
Pest 1 Type: W	Code: IPOSS Ipomoea sp. Common Name: Morning glory	Stage Scale: BBCH
Pest 2 Type: W	Code: ERICA Erigeron canadensis Common Name: Canada horseweed	Stage Scale: BBCH
Pest 3 Type: W	Code: DIGSS Digitaria sp. Common Name: Crabgrass	Stage Scale: BBCH
Pest 4 Type: W	Code: ELEIN Eleusine indica Common Name: Goosegrass	Stage Scale: BBCH
Pest 5 Type: W	Code: SORHA Sorghum halepense Common Name: Johnson grass	Stage Scale: BBCH
Pest 6 Type: W	Code: AMBTR Ambrosia trifida Common Name: Giant ragweed	Stage Scale: BBCH

Site and Design		
Treated Plot Width: 6.7 FT	Site Type: FIELD field	
Treated Plot Length: 30 FT	Experimental Unit: 1 PLOT plot	
Treated Plot Area: 201.0 FT2	Tillage Type: NOTILL no-till	Treatments: 11
Replications: 4	Study Design: RAOBL Randomized Complete Block (RCB)	

Maintenance										
No.	Date	Type	Maintenance Product Name	Form Conc	Form Unit	Form Type	Description	Rate	Rate Unit	Tank Mix
1.	4-6-2020	FERT	DAP	46	% P2O5	GR	18-46-0	100	lb/a	
2.	4-16-2020	HERB	Cornerstone Plus	3	LBAE/GAL	L		48	floz/a	yes
3.	4-16-2020	HERB	2,4-D LV6	6	LBAE/GAL	L		11	floz/a	yes
4.	5-22-2020	HERB	Roundup PowerMax	4.5	LBAE/GAL	SL		44	fl oz/a	

Field Prep./Maintenance:

Soil Description		
Description Name: 108 C1&2	% Sand: 4.8	% OM: 2.7
% Silt: 82.1	pH: 6.01	Texture: SIL silt loam
% Clay: 13.1	CEC: 13.13	Soil Name: Crider Silt Loam

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Application Description				
	A		B	
Application Date	6-8-2020		7-7-2020	
Appl. Start Time	3:55 PM		10:15 AM	
Appl. Stop Time	4:26 PM		10:48 AM	
Application Method	spray		spray	
Application Placement	soil		foliar	
Applied By	JLG		JLG	
Air Temperature Start, Stop	88.2	90.1 F	87	95.8 F
% Relative Humidity Start, Stop	62.3	62	54.6	71
Wind Velocity+Dir. Start	4	MPH E	NE	
Wind Velocity+Dir. Stop	3.7	MPH E	NE	
Wind Velocity+Dir. Max	9.3	MPH E	NE	
Soil Temperature	70	F	78	F
Soil Moisture	DRY		DAMP	
% Cloud Cover	85		20	

Crop Stage At Each Application				
	A		B	
Crop 1 Code, BBCH Scale	GLXMA	BSOY	GLXMA	BSOY
Stage Majority, Percent			V3	
Stage Minimum, Percent			V2	
Stage Maximum, Percent			V3	
Height Average			9	IN
Height Minimum, Maximum			6.5	11.5

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Pest Stage At Each Application		
	A	B
Pest 1 Code, Type, Scale	IPOSS W BBCH	IPOSS W BBCH
Density Average		1.875 FT2
Density Minimum, Maximum		1 6
Pest 2 Code, Type, Scale	ERICA W BBCH	ERICA W BBCH
Density Average		0.875 FT2
Density Minimum, Maximum		1 6
Pest 3 Code, Type, Scale	DIGSS W BBCH	DIGSS W BBCH
Density Average		0.25 FT2
Density Minimum, Maximum		1 1
Pest 4 Code, Type, Scale	ELEIN W BBCH	ELEIN W BBCH
Density Average		2.5 FT2
Density Minimum, Maximum		5 15
Pest 5 Code, Type, Scale	SORHA W BBCH	SORHA W BBCH
Density Average		1 FT2
Density Minimum, Maximum		1 7
Pest 6 Code, Type, Scale	AMBTR W BBCH	AMBTR W BBCH
Density Average		0.25 FT2
Density Minimum, Maximum		0 2

Application Equipment		
	A	B
Appl. Equipment	SPRAYBAC	SPRAYBC
Equipment Type	BACCAI	BACCAI
Operation Pressure	31 PSI	
Nozzle Type	XR11002	
Nozzle Spacing	10 IN	10 IN
Boom ID	RED TAPE	RED TAPE
Boom Height	18 IN	18 IN
Ground Speed	3 MPH	3 MPH
Application Amount	15 GAL/AC	15 GAL/AC
Mix Overage	952 mL	952 mL
Mix Size	2 L	2 L
Propellant	COMCO2	COMCO2

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Overlapping Residual Treatments in Soybean

Trial ID: 20-27_SOY-REC Location: UKREC Trial Year: 2020
 Protocol ID: NA20X0A028H & SYN Sales Investigator (Creator): Travis Legleiter
 Project ID: Study Director:
 Sponsor Contact:

Pest Type			W Weed		W Weed		W Weed		W Weed				W Weed	
Pest Code			DIGSA		IPOHE		AMARE		ACCOS				DIGSA	
Pest Name			large crabgrass		ivy-leaf mornin>		Redroot pigweed		Hop-hornbeam co>				large crabgrass	
Crop Type, Code	C GLXMA										C GLXMA			
Crop Scientific Name	Glycine max										Glycine max			
Crop Name	Soybean										Soybean			
Rating Date	7-2-2020		7-2-2020		7-2-2020		7-2-2020		7-2-2020		7-23-2020		7-23-2020	
Part Rated	PLANT C		PLANT P		PLANT P		PLANT P		PLANT P		PLANT C		PLANT P	
Rating Type	PHYGEN		CONTRO		CONTRO		CONTRO		CONTRO		PHYGEN		CONTRO	
Rating Unit	%		%		%		%		%		%		%	
Number of Subsamples	1		1		1		1		1		1		1	
Rating Timing														
Days After First/Last Applic.	24 24		24 24		24 24		24 24		24 24		45 16		45 16	
Trt-Eval Interval														
Days After Emergence														
ARM Action Codes			ET11		AL						AA			
Number of Decimals														
Trt Treatment	Rate	Appl												
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7					
1 Prefix	2 PT/A	A 101	0.0	95.0	97.0	90.0	100.0	0.0	100.0					
Tavium	56.5 FL OZ/A	B 209	0.0	90.0	50.0	100.0	95.0	2.0	100.0					
Roundup PowerMax	32 FL OZ/A	B 303	0.0	90.0	85.0	95.0	100.0	0.0	100.0					
CLASS ACT RIDION	1 % V/V	B 411	0.0	90.0	0.0	100.0	100.0	0.0	100.0					
OnTarget	0.5 % V/V	B												
		Mean =	0.0	91.3	24.6d	96.3	98.8	0.1d	100.0					
2 Broadaxe XC	22 FL OZ/A	A 102	0.0	100.0	100.0	97.0	97.0	0.0	100.0					
Tavium	56.5 FL OZ/A	B 208	0.0	95.0	100.0	100.0	100.0	2.0	100.0					
Roundup PowerMax	32 FL OZ/A	B 305	0.0	95.0	100.0	100.0	100.0	0.0	100.0					
CLASS ACT RIDION	1 % V/V	B 401	0.0	95.0	100.0	100.0	100.0	0.0	100.0					
OnTarget	0.5 % V/V	B												
		Mean =	0.0	96.3	100.0d	99.3	99.3	0.1d	100.0					
3 Boundary	1.5 PT/A	A 103	0.0	97.0	90.0	100.0	100.0	0.0	100.0					
Prefix	2 PT/A	B 210	0.0	90.0	70.0	100.0	100.0	5.0	100.0					
Roundup PowerMax	32 FL OZ/A	B 304	0.0	97.0	70.0	90.0	100.0	0.0	100.0					
Amsol AMS	2.5 % V/V	B 405	0.0	95.0	90.0	100.0	100.0	0.0	100.0					
		Mean =	0.0	94.8	79.4d	97.5	100.0	0.3d	100.0					
4 Trivence	8 OZ/A	A 104	0.0	99.0	100.0	100.0	99.0	0.0	100.0					
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 201	0.0	90.0	100.0	95.0	100.0	0.0	100.0					
Roundup PowerMax	32 FL OZ/A	B 308	0.0	97.0	100.0	100.0	100.0	0.0	100.0					
EverpreX	1 PT/A	B 409	0.0	100.0	90.0	100.0	100.0	0.0	100.0					
CLASS ACT RIDION	1 % V/V	B												
OnTarget	0.5 % V/V	B												
		Mean =	0.0	96.5	97.4d	98.8	99.8	0.0d	100.0					

d=Means are reported in de-transformed data units

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Pest Type Pest Code Pest Name Crop Type, Code Crop Scientific Name Crop Name Rating Date Part Rated Rating Type Rating Unit Number of Subsamples Rating Timing Days After First/Last Applic. Trt-Eval Interval Days After Emergence ARM Action Codes Number of Decimals		W Weed DIGSA large crabgrass	W Weed IPOHE ivy-leaf mornin>	W Weed AMARE Redroot pigweed	W Weed ACCOS Hop-hornbeam co>		W Weed DIGSA large crabgrass
		C GLXMA Glycine max Soybean				C GLXMA Glycine max Soybean	
		7-2-2020	7-2-2020	7-2-2020	7-2-2020	7-23-2020	7-23-2020
		PLANT C PHYGEN	PLANT P CONTRO	PLANT P CONTRO	PLANT P CONTRO	PLANT C PHYGEN	PLANT P CONTRO
		%	%	%	%	%	%
		1	1	1	1	1	1
		24 24	24 24	24 24	24 24	45 16	45 16
			ET11	AL		AA	
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code Plot	1	2	3	4	5
5 Surveil	3 OZ/A	A 105	0.0	80.0	90.0	100.0	100.0
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 202	0.0	80.0	90.0	100.0	100.0
Roundup PowerMax	32 FL OZ/A	B 306	0.0	80.0	95.0	100.0	100.0
EverpreX	1 PT/A	B 407	0.0	97.0	95.0	100.0	100.0
CLASS ACT RIDION	1 % V/V	B					
OnTarget	0.5 % V/V	B					
	Mean =		0.0	84.3	92.5d	97.5	100.0
6 Sonic	5 OZ/A	A 106	0.0	90.0	100.0	100.0	100.0
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 211	0.0	95.0	95.0	100.0	100.0
Roundup PowerMax	32 FL OZ/A	B 309	0.0	85.0	90.0	100.0	100.0
EverpreX	1 PT/A	B 404	0.0	85.0	90.0	95.0	100.0
CLASS ACT RIDION	1 % V/V	B					
OnTarget	0.5 % V/V	B					
	Mean =		0.0	88.8	93.7d	98.8	100.0
7 Authority Edge	7 FL OZ/A	A 107	0.0	93.0	100.0	100.0	100.0
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 205	0.0	90.0	99.0	100.0	100.0
Roundup PowerMax	32 FL OZ/A	B 311	0.0	90.0	97.0	100.0	100.0
Anthem Maxx	1 PT/A	B 406	0.0	96.0	95.0	100.0	100.0
CLASS ACT RIDION	1 % V/V	B					
OnTarget	0.5 % V/V	B					
	Mean =		0.0	92.3	97.7d	100.0	100.0
8 Authroity MTZ	14 OZ/A	A 108	0.0	95.0	100.0	100.0	100.0
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 204	0.0	90.0	100.0	100.0	100.0
Roundup PowerMax	32 FL OZ/A	B 301	0.0	80.0	100.0	90.0	100.0
Anthem Maxx	1 PT/A	B 408	0.0	90.0	90.0	100.0	100.0
CLASS ACT RIDION	1 % V/V	B					
OnTarget	0.5 % V/V	B					
	Mean =		0.0	88.8	97.4d	97.5	99.3

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University of Kentucky

Pest Type		W Weed	W Weed	W Weed	W Weed		W Weed		
Pest Code		DIGSA	IPHOE	AMARE	ACCOS		DIGSA		
Pest Name		large crabgrass	ivy-leaf mornin>	Redroot pigweed	Hop-hornbeam co>		large crabgrass		
Crop Type, Code	C GLXMA					C GLXMA			
Crop Scientific Name	Glycine max					Glycine max			
Crop Name	Soybean					Soybean			
Rating Date	7-2-2020	7-2-2020	7-2-2020	7-2-2020	7-2-2020	7-23-2020	7-23-2020		
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P		
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Rating Timing									
Days After First/Last Applic.	24 24	24 24	24 24	24 24	24 24	45 16	45 16		
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes		ET11	AL			AA			
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7
9 Zidua Pro	4.5 FL OZ/A	A 109	0.0	100.0	95.0	100.0	80.0	0.0	100.0
Engenia	12.8 FL OZ/A	B 207	0.0	99.0	100.0	100.0	97.0	0.0	100.0
Roundup PowerMax	32 FL OZ/A	B 310	0.0	95.0	96.0	100.0	100.0	0.0	100.0
Zidua	4 FL OZ/A	B 402	0.0	100.0	100.0	97.0	100.0	0.0	100.0
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
	Mean =		0.0	98.5	97.7d	99.3	94.3	0.0d	100.0
10 VALOR XLT	3 OZ/A	A 110	0.0	85.0	90.0	100.0	100.0	0.0	100.0
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 203	0.0	96.0	100.0	100.0	100.0	2.0	100.0
Roundup PowerMax	32 FL OZ/A	B 302	0.0	90.0	100.0	100.0	100.0	0.0	100.0
WARRANT	1.5 QT/A	B 410	0.0	95.0	90.0	100.0	100.0	0.0	100.0
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
	Mean =		0.0	91.5	94.9d	100.0	100.0	0.1d	100.0
11 Untreated		111	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		206	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		307	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		403	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Mean =		0.0	0.0	0.0d	0.0	0.0	0.0d	0.0

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Pest Type	W Weed	W Weed	W Weed		W Weed	W Weed	W Weed		
Pest Code	IPOHE	AMARE	ACCOS		DIGSA	IPOHE	AMARE		
Pest Name	ivy-leaf mornin>	Redroot pigweed	Hop-hornbeam co>		large crabgrass	ivy-leaf mornin>	Redroot pigweed		
Crop Type, Code				C GLXMA					
Crop Scientific Name				Glycine max					
Crop Name				Soybean					
Rating Date	7-23-2020	7-23-2020	7-23-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Rating Timing									
Days After First/Last Applic.	45 16	45 16	45 16	56 27	56 27	56 27	56 27		
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes									
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	8	9	10	11	12	13	14
1 Prefix	2 PT/A	A 101	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Tavium	56.5 FL OZ/A	B 209	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Roundup PowerMax	32 FL OZ/A	B 303	100.0	100.0	100.0	0.0	100.0	100.0	100.0
CLASS ACT RIDION	1 % V/V	B 411	95.0	100.0	100.0	0.0	100.0	100.0	100.0
OnTarget	0.5 % V/V	B							
		Mean =	98.8	100.0	100.0	0.0	100.0	100.0	100.0
2 Broadaxe XC	22 FL OZ/A	A 102	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Tavium	56.5 FL OZ/A	B 208	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Roundup PowerMax	32 FL OZ/A	B 305	100.0	100.0	100.0	0.0	100.0	100.0	100.0
CLASS ACT RIDION	1 % V/V	B 401	100.0	100.0	100.0	0.0	100.0	100.0	100.0
OnTarget	0.5 % V/V	B							
		Mean =	100.0	100.0	100.0	0.0	100.0	100.0	100.0
3 Boundary	1.5 PT/A	A 103	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Prefix	2 PT/A	B 210	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Roundup PowerMax	32 FL OZ/A	B 304	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Amsol AMS	2.5 % V/V	B 405	100.0	100.0	100.0	0.0	100.0	100.0	100.0
		Mean =	100.0	100.0	100.0	0.0	100.0	100.0	100.0
4 Trivence	8 OZ/A	A 104	95.0	100.0	100.0	0.0	100.0	100.0	100.0
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 201	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Roundup PowerMax	32 FL OZ/A	B 308	100.0	100.0	100.0	0.0	100.0	100.0	100.0
EverpreX	1 PT/A	B 409	100.0	100.0	100.0	0.0	100.0	100.0	100.0
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
		Mean =	98.8	100.0	100.0	0.0	100.0	100.0	100.0

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University of Kentucky

Pest Type	W Weed	W Weed	W Weed		W Weed	W Weed	W Weed		
Pest Code	IPOHE	AMARE	ACCOS		DIGSA	IPOHE	AMARE		
Pest Name	ivy-leaf mornin>	Redroot pigweed	Hop-hornbeam co>		large crabgrass	ivy-leaf mornin>	Redroot pigweed		
Crop Type, Code				C GLXMA					
Crop Scientific Name				Glycine max					
Crop Name				Soybean					
Rating Date	7-23-2020	7-23-2020	7-23-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Rating Timing									
Days After First/Last Applic.	45 16	45 16	45 16	56 27	56 27	56 27	56 27		
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes									
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	8	9	10	11	12	13	14
5 Surveil	3 OZ/A	A 105	97.0	100.0	100.0	0.0	100.0	100.0	100.0
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 202	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Roundup PowerMax	32 FL OZ/A	B 306	100.0	100.0	100.0	0.0	100.0	100.0	100.0
EverpreX	1 PT/A	B 407	100.0	100.0	100.0	0.0	100.0	100.0	100.0
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
		Mean =	99.3	100.0	100.0	0.0	100.0	100.0	100.0
6 Sonic	5 OZ/A	A 106	100.0	100.0	100.0	0.0	100.0	100.0	100.0
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 211	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Roundup PowerMax	32 FL OZ/A	B 309	100.0	100.0	100.0	0.0	100.0	100.0	100.0
EverpreX	1 PT/A	B 404	100.0	100.0	100.0	0.0	100.0	100.0	100.0
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
		Mean =	100.0	100.0	100.0	0.0	100.0	100.0	100.0
7 Authority Edge	7 FL OZ/A	A 107	100.0	100.0	100.0	0.0	100.0	100.0	100.0
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 205	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Roundup PowerMax	32 FL OZ/A	B 311	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Anthem Maxx	1 PT/A	B 406	100.0	100.0	100.0	0.0	100.0	100.0	100.0
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
		Mean =	100.0	100.0	100.0	0.0	100.0	100.0	100.0
8 Authroity MTZ	14 OZ/A	A 108	100.0	100.0	100.0	0.0	100.0	100.0	100.0
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 204	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Roundup PowerMax	32 FL OZ/A	B 301	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Anthem Maxx	1 PT/A	B 408	100.0	100.0	100.0	0.0	100.0	100.0	100.0
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
		Mean =	100.0	100.0	100.0	0.0	100.0	100.0	100.0

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University of Kentucky

Pest Type	W Weed	W Weed	W Weed		W Weed	W Weed	W Weed		
Pest Code	IPOHE	AMARE	ACCOS		DIGSA	IPOHE	AMARE		
Pest Name	ivy-leaf mornin>	Redroot pigweed	Hop-hornbeam co>		large crabgrass	ivy-leaf mornin>	Redroot pigweed		
Crop Type, Code				C GLXMA					
Crop Scientific Name				Glycine max					
Crop Name				Soybean					
Rating Date	7-23-2020	7-23-2020	7-23-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020		
Part Rated	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Rating Timing									
Days After First/Last Applic.	45 16	45 16	45 16	56 27	56 27	56 27	56 27		
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes									
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	8	9	10	11	12	13	14
9 Zidua Pro	4.5 FL OZ/A	A 109	97.0	100.0	100.0	0.0	100.0	100.0	100.0
Engenia	12.8 FL OZ/A	B 207	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Roundup PowerMax	32 FL OZ/A	B 310	100.0	100.0	100.0	0.0	100.0	97.0	100.0
Zidua	4 FL OZ/A	B 402	100.0	100.0	100.0	0.0	100.0	100.0	100.0
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
		Mean =	99.3	100.0	100.0	0.0	100.0	99.3	100.0
10 VALOR XLT	3 OZ/A	A 110	100.0	100.0	100.0	0.0	100.0	100.0	100.0
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 203	100.0	100.0	100.0	0.0	100.0	100.0	100.0
Roundup PowerMax	32 FL OZ/A	B 302	100.0	100.0	100.0	0.0	100.0	100.0	100.0
WARRANT	1.5 QT/A	B 410	95.0	100.0	100.0	0.0	100.0	100.0	100.0
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
		Mean =	98.8	100.0	100.0	0.0	100.0	100.0	100.0
11 Untreated		111	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		206	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		307	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		403	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Pest Type				W Weed					
Pest Code				ACCOS					
Pest Name				Hop-hornbeam co>					
Crop Type, Code				C GLXMA	C GLXMA	C GLXMA	C GLXMA	C GLXMA	C GLXMA
Crop Scientific Name				Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name				Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
Rating Date				8-3-2020	11-4-2020	11-4-2020	11-4-2020	11-4-2020	11-4-2020
Part Rated				PLANT P	PLANT C	PLANT C	PLANT C	PLANT C	PLANT C
Rating Type				CONTRO	LENGTH	WEIGHT	MOICON	WEITES	YIELD
Rating Unit				%	FT	LB	%	LB	BU
Number of Subsamples				1	1	1	1	1	1
Rating Timing									
Days After First/Last Applic.				56 27	149 120	149 120	149 120	149 120	149 120
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes					ET11		ET11	ET11	TY1
Number of Decimals									1
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot		15	16	17	18	19	20
1 Prefix	2 PT/A	A 101		100.0	27.00	11.370	11.30	51.60	64.2
Tavium	56.5 FL OZ/A	B 209		100.0	26.10	11.640	11.10	54.40	68.1
Roundup PowerMax	32 FL OZ/A	B 303		100.0	25.90	8.060	12.30	55.10	46.9
CLASS ACT RIDION	1 % V/V	B 411		100.0	26.50	8.160	11.00	54.50	47.1
OnTarget	0.5 % V/V	B							
		Mean =		100.0	26.38	9.808	11.43	53.90	56.6
2 Broadaxe XC	22 FL OZ/A	A 102		100.0	26.50	11.930	11.50	53.00	68.5
Tavium	56.5 FL OZ/A	B 208		100.0	26.10	10.760	11.00	52.90	63.0
Roundup PowerMax	32 FL OZ/A	B 305		100.0	25.90	9.330	11.60	54.70	54.7
CLASS ACT RIDION	1 % V/V	B 401		100.0	26.10	9.270	11.30	52.40	54.1
OnTarget	0.5 % V/V	B							
		Mean =		100.0	26.15	10.323	11.35	53.25	60.1
3 Boundary	1.5 PT/A	A 103		100.0	26.60	10.920	11.30	54.30	62.6
Prefix	2 PT/A	B 210		100.0	26.80	9.640	10.80	53.50	55.1
Roundup PowerMax	32 FL OZ/A	B 304		100.0	25.70	8.593*	11.59*	53.11*	50.1*
Amsol AMS	2.5 % V/V	B 405		100.0	25.90	7.460	12.50	52.10	43.3
		Mean =		100.0	26.25	9.153	11.55	53.25	52.8
4 Trivence	8 OZ/A	A 104		100.0	27.00	11.040	11.60	55.60	62.1
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 201		100.0	26.20	9.500	11.40	49.70	55.2
Roundup PowerMax	32 FL OZ/A	B 308		100.0	25.90	8.980	11.20	53.70	52.9
EverpreX	1 PT/A	B 409		100.0	26.70	9.930	11.10	53.30	56.8
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
		Mean =		100.0	26.45	9.863	11.33	53.08	56.8

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				W Weed ACCOS Hop-hornbeam co>						
Pest Type										
Pest Code										
Pest Name										
Crop Type, Code										
Crop Scientific Name										
Crop Name										
Rating Date										
Part Rated										
Rating Type										
Rating Unit										
Number of Subsamples										
Rating Timing										
Days After First/Last Applic.										
Trt-Eval Interval										
Days After Emergence										
ARM Action Codes										
Number of Decimals										
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code Plot		15	16	17	18	19	20	
5 Surveil	3 OZ/A	A 105		100.0	26.30	10.590	11.50	55.60	61.2	
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 202		100.0	26.60	10.880	11.50	53.00	62.2	
Roundup PowerMax	32 FL OZ/A	B 306		100.0	25.60	9.240	11.30	54.50	55.0	
EverpreX	1 PT/A	B 407		100.0	26.60	6.980	12.00	55.10	39.7	
CLASS ACT RIDION	1 % V/V	B								
OnTarget	0.5 % V/V	B								
		Mean =		100.0	26.28	9.423	11.58	54.55	54.5	
6 Sonic	5 OZ/A	A 106		100.0	26.40	11.110	11.50	54.90	64.0	
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 211		100.0	26.70	10.750	10.70	52.30	61.8	
Roundup PowerMax	32 FL OZ/A	B 309		100.0	26.30	10.820	10.90	52.60	63.0	
EverpreX	1 PT/A	B 404		100.0	26.10	9.452*	11.24*	52.98*	54.2*	
CLASS ACT RIDION	1 % V/V	B								
OnTarget	0.5 % V/V	B								
		Mean =		100.0	26.38	10.533	11.09	53.20	60.7	
7 Authority Edge	7 FL OZ/A	A 107		100.0	26.80	10.660	11.20	54.10	60.7	
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 205		100.0	26.30	10.285*	11.02*	52.63*	60.5*	
Roundup PowerMax	32 FL OZ/A	B 311		100.0	25.20	9.820	10.50	51.50	59.9	
Anthem Maxx	1 PT/A	B 406		100.0	26.20	9.260	11.90	53.40	53.5	
CLASS ACT RIDION	1 % V/V	B								
OnTarget	0.5 % V/V	B								
		Mean =		100.0	26.13	10.006	11.15	52.91	58.6	
8 Authroity MTZ	14 OZ/A	A 108		100.0	26.80	11.450	11.00	53.40	65.3	
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 204		100.0	25.90	9.680	11.30	54.80	57.0	
Roundup PowerMax	32 FL OZ/A	B 301		100.0	26.70	8.440	11.70	52.50	48.0	
Anthem Maxx	1 PT/A	B 408		100.0	26.80	9.680	11.60	54.70	54.9	
CLASS ACT RIDION	1 % V/V	B								
OnTarget	0.5 % V/V	B								
		Mean =		100.0	26.55	9.813	11.40	53.85	56.3	

d=Means are reported in de-transformed data units

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			W Weed ACCOS Hop-hornbeam co>	C GLXMA Glycine max Soybean	C GLXMA Glycine max Soybean	C GLXMA Glycine max Soybean	C GLXMA Glycine max Soybean	C GLXMA Glycine max Soybean
Pest Type								
Pest Code								
Pest Name								
Crop Type, Code								
Crop Scientific Name								
Crop Name								
Rating Date			8-3-2020	11-4-2020	11-4-2020	11-4-2020	11-4-2020	11-4-2020
Part Rated			PLANT P	PLANT C	PLANT C	PLANT C	PLANT C	PLANT C
Rating Type			CONTRO	LENGTH	WEIGHT	MOICON	WEITES	YIELD
Rating Unit			%	FT	LB	%	LB	BU
Number of Subsamples			1	1	1	1	1	1
Rating Timing								
Days After First/Last Applic.			56 27	149 120	149 120	149 120	149 120	149 120
Trt-Eval Interval								
Days After Emergence								
ARM Action Codes				ET11		ET11	ET11	TY1
Number of Decimals								1
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	15	16	17	18	19	20
9 Zidua Pro	4.5 FL OZ/A	A 109	100.0	26.80	12.680	10.90	54.30	72.4
Engenia	12.8 FL OZ/A	B 207	100.0	24.90	10.808*	10.79*	52.89*	63.2*
Roundup PowerMax	32 FL OZ/A	B 310	100.0	26.00	9.830	10.90	53.90	57.9
Zidua	4 FL OZ/A	B 402	100.0	25.90	8.800	11.10	51.60	51.9
CLASS ACT RIDION	1 % V/V	B						
OnTarget	0.5 % V/V	B						
	Mean =		100.0	25.90	10.530	10.92	53.17	61.3
10 VALOR XLT	3 OZ/A	A 110	100.0	26.20	10.460	10.50	53.50	61.4
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B 203	100.0	26.10	7.880	12.00	55.00	45.7
Roundup PowerMax	32 FL OZ/A	B 302	100.0	26.60	9.850	11.40	50.90	56.4
WARRANT	1.5 QT/A	B 410	100.0	27.20	9.790	10.80	51.70	55.2
CLASS ACT RIDION	1 % V/V	B						
OnTarget	0.5 % V/V	B						
	Mean =		100.0	26.53	9.495	11.18	52.78	54.6
11 Untreated		111	0.0	23.30	4.220	15.80	54.50	26.2
		206	0.0	26.30	2.680	14.00	55.60	15.1
		307	0.0	26.30	2.310	18.10	48.40	12.4
		403	0.0	26.70	0.760	13.70	19.00	4.2
	Mean =		0.0	25.65	2.493	15.40	44.38	14.5

d=Means are reported in de-transformed data units

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Pest Type		W Weed DIGSA	W Weed IPOHE	W Weed AMARE	W Weed ACCOS		W Weed DIGSA	W Weed IPOHE		
Pest Code		large crabgrass	ivy-leaf mornin>	Redroot pigweed	Hop-hornbeam co>		large crabgrass	ivy-leaf mornin>		
Pest Name										
Crop Type, Code	C GLXMA					C GLXMA				
Crop Scientific Name	Glycine max					Glycine max				
Crop Name	Soybean					Soybean				
Rating Date	7-2-2020	7-2-2020	7-2-2020	7-2-2020	7-2-2020	7-23-2020	7-23-2020	7-23-2020		
Part Rated	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P		
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1		
Rating Timing										
Days After First/Last Applic.	24 24	24 24	24 24	24 24	24 24	45 16	45 16	45 16		
Trt-Eval Interval										
Days After Emergence										
ARM Action Codes		ET11	AL			AA				
Number of Decimals										
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	1	2	3	4	5	6		
8 Authroity MTZ	14 OZ/A	A	0.0 a	88.8 ab	97.4 a	97.5 a	99.3 a	2.8 a	100.0 a	100.0 a
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B								
Roundup PowerMax	32 FL OZ/A	B								
Anthem Maxx	1 PT/A	B								
CLASS ACT RIDION	1 % V/V	B								
OnTarget	0.5 % V/V	B								
9 Zidua Pro	4.5 FL OZ/A	A	0.0 a	98.5 a	97.7 a	99.3 a	94.3 a	0.0 b	100.0 a	99.3 a
Engenia	12.8 FL OZ/A	B								
Roundup PowerMax	32 FL OZ/A	B								
Zidua	4 FL OZ/A	B								
CLASS ACT RIDION	1 % V/V	B								
OnTarget	0.5 % V/V	B								
10 VALOR XLT	3 OZ/A	A	0.0 a	91.5 ab	94.9 a	100.0 a	100.0 a	0.1 ab	100.0 a	98.8 a
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B								
Roundup PowerMax	32 FL OZ/A	B								
WARRANT	1.5 QT/A	B								
CLASS ACT RIDION	1 % V/V	B								
OnTarget	0.5 % V/V	B								
11 Untreated			0.0 a	0.0	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b
LSD P=.05				6.48	40.59 - 61.93	4.80	4.40	1.61 - 2.31		2.04
Standard Deviation			0.00	4.46	0.29t	3.32	3.05	3.83t	0.00	1.41
CV			0.0	4.84	16.35t	3.71	3.38	153.18t	0.0	1.56
Levene's F			0.00	0.385	1.645	0.713	1.525	0.784	0.00	0.626
Levene's Prob(F)			0.00*	0.933	0.137	0.706	0.175	0.644	0.00*	0.781
Skewness				-0.7468	-2.4895*	-2.8896*	-2.8917*	1.535*	-2.9475*	-2.9355*
Kurtosis				-0.15	4.4593*	6.7812*	6.77*	0.6098	7.0044*	6.9591*
Replicate F			0.000	1.941	1.068	0.420	1.118	1.597	0.000	1.687
Replicate Prob(F)			1.0000	0.1468	0.3773	0.7402	0.3572	0.2107	1.0000	0.1908
Treatment F			0.000	3.778	17.940	320.237	385.971	3.272	0.000	1809.347
Treatment Prob(F)			1.0000	0.0035	0.0001	0.0001	0.0001	0.0057	1.0000	0.0001

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Pest Type	W Weed AMARE	W Weed ACCOS		W Weed DIGSA	W Weed IPOHE	W Weed AMARE	W Weed ACCOS
Pest Code	Redroot pigweed	Hop-hornbeam co>		large crabgrass	ivy-leaf mornin>	Redroot pigweed	Hop-hornbeam co>
Pest Name			C GLXMA Glycine max Soybean				
Crop Type, Code							
Crop Scientific Name							
Crop Name							
Rating Date	7-23-2020	7-23-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020
Part Rated	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1	1
Rating Timing							
Days After First/Last Applic.	45 16	45 16	56 27	56 27	56 27	56 27	56 27
Trt-Eval Interval							
Days After Emergence							
ARM Action Codes							
Number of Decimals							
Trt Treatment							
No. Name	9	10	11	12	13	14	15
Rate							
Rate Unit							
Appl Code							
1 Prefix	2 PT/A	A					
Tavium	56.5 FL OZ/A	B					
Roundup PowerMax	32 FL OZ/A	B					
	100.0 a	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	AMARE	ACCOS		DIGSA	IPOHE	AMARE	ACCOS		
Pest Name	Redroot pigweed	Hop-hornbeam co>		large crabgrass	ivy-leaf mornin>	Redroot pigweed	Hop-hornbeam co>		
Crop Type, Code			C GLXMA						
Crop Scientific Name			Glycine max						
Crop Name			Soybean						
Rating Date	7-23-2020	7-23-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020		
Part Rated	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Rating Timing									
Days After First/Last Applic.	45 16	45 16	56 27	56 27	56 27	56 27	56 27		
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes									
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	9	10	11	12	13	14	15
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
2 Broadaxe XC	22 FL OZ/A	A	100.0 a	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a
Tavium	56.5 FL OZ/A	B							
Roundup PowerMax	32 FL OZ/A	B							
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
3 Boundary	1.5 PT/A	A	100.0 a	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a
Prefix	2 PT/A	B							
Roundup PowerMax	32 FL OZ/A	B							
Amsol AMS	2.5 % V/V	B							
4 Trivence	8 OZ/A	A	100.0 a	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B							
Roundup PowerMax	32 FL OZ/A	B							
EverpreX	1 PT/A	B							
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
5 Surveil	3 OZ/A	A	100.0 a	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B							
Roundup PowerMax	32 FL OZ/A	B							
EverpreX	1 PT/A	B							
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
6 Sonic	5 OZ/A	A	100.0 a	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B							
Roundup PowerMax	32 FL OZ/A	B							
EverpreX	1 PT/A	B							
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
7 Authority Edge	7 FL OZ/A	A	100.0 a	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B							
Roundup PowerMax	32 FL OZ/A	B							
Anthem Maxx	1 PT/A	B							
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	AMARE	ACCOS		DIGSA	IPOHE	AMARE	ACCOS		
Pest Name	Redroot pigweed	Hop-hornbeam co>		large crabgrass	ivy-leaf mornin>	Redroot pigweed	Hop-hornbeam co>		
Crop Type, Code			C GLXMA						
Crop Scientific Name			Glycine max						
Crop Name			Soybean						
Rating Date	7-23-2020	7-23-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020	8-3-2020		
Part Rated	PLANT P	PLANT P	PLANT C	PLANT P	PLANT P	PLANT P	PLANT P		
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Rating Timing									
Days After First/Last Applic.	45 16	45 16	56 27	56 27	56 27	56 27	56 27		
Trt-Eval Interval									
Days After Emergence									
ARM Action Codes									
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	9	10	11	12	13	14	15
8 Authroity MTZ	14 OZ/A	A	100.0 a	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B							
Roundup PowerMax	32 FL OZ/A	B							
Anthem Maxx	1 PT/A	B							
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
9 Zidua Pro	4.5 FL OZ/A	A	100.0 a	100.0 a	0.0 a	100.0 a	99.3 a	100.0 a	100.0 a
Engenia	12.8 FL OZ/A	B							
Roundup PowerMax	32 FL OZ/A	B							
Zidua	4 FL OZ/A	B							
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
10 VALOR XLT	3 OZ/A	A	100.0 a	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B							
Roundup PowerMax	32 FL OZ/A	B							
WARRANT	1.5 QT/A	B							
CLASS ACT RIDION	1 % V/V	B							
OnTarget	0.5 % V/V	B							
11 Untreated			0.0 b	0.0 b	0.0 a	0.0 b	0.0 b	0.0 b	0.0 b
LSD P=.05			.	.	.	.	0.65	.	.
Standard Deviation			0.00	0.00	0.00	0.00	0.45	0.00	0.00
CV			0.0	0.0	0.0	0.0	0.5	0.0	0.0
Levene's F			0.00	0.00	0.00	0.00	0.00	0.00	0.00
Levene's Prob(F)			0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Skewness			-2.9475*	-2.9475*	.	-2.9475*	-2.9462*	-2.9475*	-2.9475*
Kurtosis			7.0044*	7.0044*	.	7.0044*	6.9995*	7.0044*	7.0044*
Replicate F			0.000	0.000	0.000	0.000	1.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	0.4064	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000	17752.113	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	0.0001	1.0000	1.0000

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Pest Type					
Pest Code					
Pest Name					
Crop Type, Code	C GLXMA	C GLXMA	C GLXMA	C GLXMA	C GLXMA
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean
Rating Date	11-4-2020	11-4-2020	11-4-2020	11-4-2020	11-4-2020
Part Rated	PLANT C	PLANT C	PLANT C	PLANT C	PLANT C
Rating Type	LENGTH	WEIGHT	MOICON	WEITES	YIELD
Rating Unit	FT	LB	%	LB	BU
Number of Subsamples	1	1	1	1	1
Rating Timing					
Days After First/Last Applic.	149 120	149 120	149 120	149 120	149 120
Trt-Eval Interval					
Days After Emergence					
ARM Action Codes	ET11		ET11	ET11	TY1
Number of Decimals					1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	16	17	18
1 Prefix	2 PT/A	A	26.38 a	9.808 a	11.43 a
Tavium	56.5 FL OZ/A	B			53.90 a
Roundup PowerMax	32 FL OZ/A	B			56.6 a

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Pest Type			C GLXMA	C GLXMA	C GLXMA	C GLXMA	C GLXMA	
Pest Code			Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	
Pest Name			Soybean	Soybean	Soybean	Soybean	Soybean	
Crop Type, Code			11-4-2020	11-4-2020	11-4-2020	11-4-2020	11-4-2020	
Crop Scientific Name			PLANT C	PLANT C	PLANT C	PLANT C	PLANT C	
Crop Name			LENGTH	WEIGHT	MOICON	WEITES	YIELD	
Rating Date			FT	LB	%	LB	BU	
Part Rated			1	1	1	1	1	
Rating Type								
Rating Unit								
Number of Subsamples								
Rating Timing								
Days After First/Last Applic.			149 120	149 120	149 120	149 120	149 120	
Trt-Eval Interval								
Days After Emergence								
ARM Action Codes			ET11		ET11	ET11	TY1	
Number of Decimals							1	
Trt No.	Treatment Name	Rate	Appl Code	16	17	18	19	20
	CLASS ACT RIDION	1 % V/V	B					
	OnTarget	0.5 % V/V	B					
2	Broadaxe XC	22 FL OZ/A	A	26.15 a	10.323 a	11.35 a	53.25 a	60.1 a
	Tavium	56.5 FL OZ/A	B					
	Roundup PowerMax	32 FL OZ/A	B					
	CLASS ACT RIDION	1 % V/V	B					
	OnTarget	0.5 % V/V	B					
3	Boundary	1.5 PT/A	A	26.25 a	9.153 a	11.55 a	53.25 a	52.8 a
	Prefix	2 PT/A	B					
	Roundup PowerMax	32 FL OZ/A	B					
	Amsol AMS	2.5 % V/V	B					
4	Trivence	8 OZ/A	A	26.45 a	9.863 a	11.33 a	53.08 a	56.8 a
	XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B					
	Roundup PowerMax	32 FL OZ/A	B					
	EverpreX	1 PT/A	B					
	CLASS ACT RIDION	1 % V/V	B					
	OnTarget	0.5 % V/V	B					
5	Surveil	3 OZ/A	A	26.28 a	9.423 a	11.58 a	54.55 a	54.5 a
	XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B					
	Roundup PowerMax	32 FL OZ/A	B					
	EverpreX	1 PT/A	B					
	CLASS ACT RIDION	1 % V/V	B					
	OnTarget	0.5 % V/V	B					
6	Sonic	5 OZ/A	A	26.38 a	10.533 a	11.09 a	53.20 a	60.7 a
	XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B					
	Roundup PowerMax	32 FL OZ/A	B					
	EverpreX	1 PT/A	B					
	CLASS ACT RIDION	1 % V/V	B					
	OnTarget	0.5 % V/V	B					
7	Authority Edge	7 FL OZ/A	A	26.13 a	10.006 a	11.15 a	52.91 a	58.6 a
	XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B					
	Roundup PowerMax	32 FL OZ/A	B					
	Anthem Maxx	1 PT/A	B					
	CLASS ACT RIDION	1 % V/V	B					
	OnTarget	0.5 % V/V	B					

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Pest Type					
Pest Code					
Pest Name					
Crop Type, Code	C GLXMA	C GLXMA	C GLXMA	C GLXMA	C GLXMA
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean
Rating Date	11-4-2020	11-4-2020	11-4-2020	11-4-2020	11-4-2020
Part Rated	PLANT C	PLANT C	PLANT C	PLANT C	PLANT C
Rating Type	LENGTH	WEIGHT	MOICON	WEITES	YIELD
Rating Unit	FT	LB	%	LB	BU
Number of Subsamples	1	1	1	1	1
Rating Timing					
Days After First/Last Applic.	149 120	149 120	149 120	149 120	149 120
Trt-Eval Interval					
Days After Emergence					
ARM Action Codes	ET11		ET11	ET11	TY1
Number of Decimals					1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	16	17	18
8 Authroity MTZ	14 OZ/A	A	26.55 a	9.813 a	11.40 a
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B			53.85 a
Roundup PowerMax	32 FL OZ/A	B			56.3 a
Anthem Maxx	1 PT/A	B			
CLASS ACT RIDION	1 % V/V	B			
OnTarget	0.5 % V/V	B			
9 Zidua Pro	4.5 FL OZ/A	A	25.90 a	10.530 a	10.92 a
Engenia	12.8 FL OZ/A	B			53.17 a
Roundup PowerMax	32 FL OZ/A	B			61.3 a
Zidua	4 FL OZ/A	B			
CLASS ACT RIDION	1 % V/V	B			
OnTarget	0.5 % V/V	B			
10 VALOR XLT	3 OZ/A	A	26.53 a	9.495 a	11.18 a
XTENDIMAX WITH VAPORGRIP	22 FL OZ/A	B			52.78 a
Roundup PowerMax	32 FL OZ/A	B			54.6 a
WARRANT	1.5 QT/A	B			
CLASS ACT RIDION	1 % V/V	B			
OnTarget	0.5 % V/V	B			
11 Untreated			25.65	2.493 b	15.40
LSD P=.05			0.647	1.3513	0.734
Standard Deviation			0.446	0.9297	0.502
CV			1.7	10.08	4.44
Levene's F			0.529	1.023	0.983
Levene's Prob(F)			0.842	0.449	0.477
Skewness			-0.6199	-1.8201*	0.5499
Kurtosis			0.6615	3.3237*	0.3783
Replicate F			4.105	14.503	0.658
Replicate Prob(F)			0.0160	0.0001	0.5863
Treatment F			0.812	23.954	0.691
Treatment Prob(F)			0.6101	0.0001	0.7100
					0.490
					0.8664
					0.0001

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Corn variety test Dekalb

Trial ID: 20-28 Location: LEXINGTON, KY Trial Year: 2020
 Protocol ID: 20-28 Investigator (Creator): Sara Carter
 Project ID: Study Director: Sara Carter
 Sponsor Contact: Matt Livesay/Glen Murphy

Reps: 1 Plots: 15 by 130 feet											
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate Unit	Appl Timing	Appl Code	Appl. Amount	Mix Size	Amt Product to Measure	Rep 1
1	CORVUS	2.63		SC	5.6 FL OZ/A	PRE	A	18 GPA	3 L	7.292 mL/mx	101
	AATREX	4		F	1 LB AI/A	PRE	A	18 GPA	3 L	41.66 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	PRE	A	18 GPA	3 L	41.67 mL/mx	
	DELARO	325		SC	7 OZ/A	INF	A	18 GPA	3 L	9.115 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3	B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3	B	18 GPA	3 L	74.99 mL/mx	
DKC 59-82									15 GAL/AC -	482 seeds/1 pl=5x140 FT	
2	CORVUS	2.63		SC	5.6 FL OZ/A	PRE	A	18 GPA	3 L	7.292 mL/mx	102
	AATREX	4		F	16 OZ/A	PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	PRE	A	18 GPA	3 L	41.67 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3	B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3	B	18 GPA	3 L	74.99 mL/mx	
	DKC 59-82									15 GAL/AC -		482 seeds/1 pl=5x140 FT
3	CORVUS	2.63		SC	5.6 FL OZ/A	PRE	A	18 GPA	3 L	7.292 mL/mx	103
	AATREX	4		F	16 OZ/A	PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	PRE	A	18 GPA	3 L	41.67 mL/mx	
	DELARO	325		SC	7 OZ/A	INF	A	18 GPA	3 L	9.115 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3	B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3	B	18 GPA	3 L	74.99 mL/mx	
DKC 60-80									15 GAL/AC -	482 seeds/1 pl=5x140 FT	
4	CORVUS	2.63		SC	5.6 FL OZ/A	PRE	A	18 GPA	3 L	7.292 mL/mx	104
	AATREX	4		F	16 OZ/A	PRE	B	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	PRE	A	18 GPA	3 L	41.67 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3	B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3	B	18 GPA	3 L	74.99 mL/mx	
	DKC 60-80									15 GAL/AC -		482 seeds/1 pl=5x140 FT
5	CORVUS	2.63		SC	5.6 FL OZ/A	PRE	A	18 GPA	3 L	7.292 mL/mx	105
	AATREX	4		F	16 OZ/A	PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	PRE	A	18 GPA	3 L	41.67 mL/mx	
	DELARO	325		SC	7 OZ/A	INF	A	18 GPA	3 L	9.115 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3	B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3	B	18 GPA	3 L	74.99 mL/mx	
DKC 60-88									15 GAL/AC -	482 seeds/1 pl=5x140 FT	
6	CORVUS	2.63		SC	5.6 FL OZ/A	PRE	A	18 GPA	3 L	7.292 mL/mx	106
	AATREX	4		F	16 OZ/A	PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	PRE	A	18 GPA	3 L	41.67 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3	B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3	B	18 GPA	3 L	74.99 mL/mx	
	DKC 60-88									15 GAL/AC -	

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Reps: 1 Plots: 15 by 130 feet

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate	Rate Unit	Appl Timing	Appl Code	Appl. Amount	Mix Size	Amt Product to Measure	Rep 1
7	CORVUS	2.63		SC	5.6 FL OZ/A	PRE	A		18 GPA	3 L	7.292 mL/mx	107
	AATREX	4		F	16 OZ/A	PRE	A		18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	PRE	A		18 GPA	3 L	41.67 mL/mx	
	DELARO	325		SC	7 OZ/A	INF	A		18 GPA	3 L	9.115 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3	B		18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3	B		18 GPA	3 L	74.99 mL/mx	
1077 AM										15 GAL/AC -	482 seeds/1 pl=5x140 FT	
8	CORVUS	2.63		SC	5.6 FL OZ/A	PRE	A		18 GPA	3 L	7.292 mL/mx	108
	AATREX	4		F	16 OZ/A	V3	A		18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	PRE	A		18 GPA	3 L	41.67 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3	B		18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3	B		18 GPA	3 L	74.99 mL/mx	
	1077 AM										15 GAL/AC -		482 seeds/1 pl=5x140 FT
9	CORVUS	2.63		SC	5.6 FL OZ/A	PRE	A		18 GPA	3 L	7.292 mL/mx	109
	AATREX	4		F	16 OZ/A	PRE	B		18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	PRE	A		18 GPA	3 L	41.67 mL/mx	
	DELARO	325		SC	7 OZ/A	INF	A		18 GPA	3 L	9.115 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3	B		18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3	B		18 GPA	3 L	74.99 mL/mx	
DKC 61-41										15 GAL/AC -	482 seeds/1 pl=5x140 FT	
10	CORVUS	2.63		SC	5.6 FL OZ/A	PRE	A		18 GPA	3 L	7.292 mL/mx	110
	AATREX	4		F	16 OZ/A	PRE	A		18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	PRE	A		18 GPA	3 L	41.67 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3	B		18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3	B		18 GPA	3 L	74.99 mL/mx	
	DKC 61-41										15 GAL/AC -		482 seeds/1 pl=5x140 FT
11	CORVUS	2.63		SC	5.6 FL OZ/A	PRE	A		18 GPA	3 L	7.292 mL/mx	111
	AATREX	4		F	16 OZ/A	PRE	A		18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	PRE	A		18 GPA	3 L	41.67 mL/mx	
	DELARO	325		SC	7 OZ/A	INF	A		18 GPA	3 L	9.115 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3	B		18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3	B		18 GPA	3 L	74.99 mL/mx	
DKC 62-53										15 GAL/AC -	482 seeds/1 pl=5x140 FT	
12	CORVUS	2.63		SC	5.6 FL OZ/A	PRE	A		18 GPA	3 L	7.292 mL/mx	112
	AATREX	4		F	16 OZ/A	PRE	A		18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	PRE	A		18 GPA	3 L	41.67 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3	B		18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3	B		18 GPA	3 L	74.99 mL/mx	
	DKC 62-53										15 GAL/AC -	

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Reps: 1 Plots: 15 by 130 feet

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate	Rate Unit	Appl Timing	Appl Code	Appl. Amount	Mix Size	Amt Product to Measure	Rep 1
13	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	113
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	DELARO	325		SC	7 OZ/A		INF	A	18 GPA	3 L	9.115 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
DKC 63-57										15 GAL/AC -	482 seeds/1 pl=5x140 FT	
14	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	114
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
	DKC 63-57										15 GAL/AC -		482 seeds/1 pl=5x140 FT
15	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	115
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	DELARO	325		SC	7 OZ/A		INF	A	18 GPA	3 L	9.115 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
DKC 63-91										15 GAL/AC -	482 seeds/1 pl=5x140 FT	
16	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	116
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
	DKC 63-91										15 GAL/AC -		482 seeds/1 pl=5x140 FT
17	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	117
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	DELARO	325		SC	7 OZ/A		INF	A	18 GPA	3 L	9.115 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
DKC 64-35										15 GAL/AC -	482 seeds/1 pl=5x140 FT	
18	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	118
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
	DKC 64-35										15 GAL/AC -	

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Reps: 1 Plots: 15 by 130 feet

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate	Rate Unit	Appl Timing	Appl Code	Appl. Amount	Mix Size	Amt Product to Measure	Rep 1
19	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	119
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	DELARO	325		SC	7 OZ/A		INF	A	18 GPA	3 L	9.115 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
1464 AML										15 GAL/AC -	482 seeds/1 pl=5x140 FT	
20	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	120
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
	1464 AML										15 GAL/AC -		482 seeds/1 pl=5x140 FT
21	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	121
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	DELARO	325		SC	7 OZ/A		INF	A	18 GPA	3 L	9.115 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
DKC 65-95										15 GAL/AC -	482 seeds/1 pl=5x140 FT	
22	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	122
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
	DKC 65-95										15 GAL/AC -		482 seeds/1 pl=5x140 FT
23	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	123
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	DELARO	325		SC	7 OZ/A		INF	A	18 GPA	3 L	9.115 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
DKC 65-99										15 GAL/AC -	482 seeds/1 pl=5x140 FT	
24	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	124
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
	DKC 95-99										15 GAL/AC -	

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Reps: 1

Plots: 15 by 130 feet

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate	Rate Unit	Appl Timing	Appl Code	Appl. Amount	Mix Size	Amt Product to Measure	Rep 1
25	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	125
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	DELARO	325		SC	7 OZ/A		INF	A	18 GPA	3 L	9.115 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
DKC 66-18									15 GAL/AC	-	482 seeds/1 pl=5x140 FT	
26	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	126
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
	DKC 66-18									15 GAL/AC	-		482 seeds/1 pl=5x140 FT
27	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	127
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	DELARO	325		SC	7 OZ/A		INF	A	18 GPA	3 L	9.115 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
DKC 67-94									15 GAL/AC	-	482 seeds/1 pl=5x140 FT	
28	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	128
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
	DKC 67-94									15 GAL/AC	-		482 seeds/1 pl=5x140 FT
29	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	129
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	DELARO	325		SC	7 OZ/A		INF	A	18 GPA	3 L	9.115 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
DKC 67-44									15 GAL/AC	-	482 seeds/1 pl=5x140 FT	
30	CORVUS	2.63		SC	5.6 FL OZ/A		PRE	A	18 GPA	3 L	7.292 mL/mx	130
	AATREX	4		F	16 OZ/A		PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A		PRE	A	18 GPA	3 L	41.67 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3		B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3		B	18 GPA	3 L	74.99 mL/mx	
	DKC 67-44									15 GAL/AC	-	

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Reps: 1		Plots: 15 by 130 feet									
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate Unit	Appl Timing	Appl Code	Appl. Amount	Mix Size	Amt Product to Measure	Rep 1
31	CORVUS	2.63		SC	5.6 FL OZ/A	PRE	A	18 GPA	3 L	7.292 mL/mx	131
	AATREX	4		F	16 OZ/A	PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	PRE	A	18 GPA	3 L	41.67 mL/mx	
	DELARO	325		SC	7 OZ/A	INF	A	18 GPA	3 L	9.115 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3	B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3	B	18 GPA	3 L	74.99 mL/mx	
DKC 69-99									15 GAL/AC -	482 seeds/1 pl=5x140 FT	
32	CORVUS	2.63		SC	5.6 FL OZ/A	PRE	A	18 GPA	3 L	7.292 mL/mx	132
	AATREX	4		F	16 OZ/A	PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	PRE	A	18 GPA	3 L	41.67 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3	B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3	B	18 GPA	3 L	74.99 mL/mx	
	DKC 69-99									15 GAL/AC -		482 seeds/1 pl=5x140 FT
33	CORVUS	2.63		SC	5.6 FL OZ/A	PRE	A	18 GPA	3 L	7.292 mL/mx	133
	AATREX	4		F	16 OZ/A	PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	PRE	A	18 GPA	3 L	41.67 mL/mx	
	DELARO	325		SC	7 OZ/A	INF	A	18 GPA	3 L	9.115 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3	B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3	B	18 GPA	3 L	74.99 mL/mx	
DKC 70-27									15 GAL/AC -	482 seeds/1 pl=5x140 FT	
34	CORVUS	2.63		SC	5.6 FL OZ/A	PRE	A	18 GPA	3 L	7.292 mL/mx	134
	AATREX	4		F	16 OZ/A	PRE	A	18 GPA	3 L	20.83 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	PRE	A	18 GPA	3 L	41.67 mL/mx	
	ROUNDUP POWERMAX	4.5		SL	32 FL OZ/A	V3	B	18 GPA	3 L	41.67 mL/mx	
	AMS			L	2.5 % V/V	V3	B	18 GPA	3 L	74.99 mL/mx	
	DKC 70-27									15 GAL/AC -		482 seeds/1 pl=5x140 FT

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
309.896	mL	CORVUS	2.63		SC	
911.452	mL	AATREX	4		F	
3,541.662	mL	ROUNDUP POWERMAX	4.5		SL	
193.685	mL	DELARO	325		SC	
3,187.152	mL	AMS			L	
1,205	seed	DKC 59-82				
1,205	seed	DKC 60-80				
1,205	seed	DKC 60-88				
1,205	seed	1077 AM				
1,205	seed	DKC 61-41				
1,205	seed	DKC 62-53				

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Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
1,205	seed	DKC 63-57				
1,205	seed	DKC 63-91				
1,205	seed	DKC 64-35				
1,205	seed	1464 AML				
1,205	seed	DKC 65-95				
603	seed	DKC 65-99				
603	seed	DKC 95-99				
1,205	seed	DKC 66-18				
1,205	seed	DKC 67-94				
1,205	seed	DKC 67-44				
1,205	seed	DKC 69-99				
1,205	seed	DKC 70-27				

* 'Per area' calculations based on 1 replicates of 5 by 140 FT 'Plot' experimental units (area of one treatment).

* 'Per area' calculations based on application amount= 18 GPA, mix size= 3 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 18 GPA, mix size= 3 L.

General Trial Information

Study Director: Sara Carter **Title:** Research Specialist
Investigator: Sara Carter **Title:** Research Specialist

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

ARM Trial Created On: 6-15-2020
Initiation Date: 5-26-2020
Completion Date: 11-2-2020

Trial Location

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

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Role: STYDIR study director
Study Director: Sara Carter **Title:** Research Specialist
Organization: University of Kentucky
Address 1: 105 Plant Science Building
City: Lexington, KY **E-mail:** sara.carter@uky.edu
Postal Code: 40546-0312

Role: INVEST investigator
Investigator: Sara Carter **Title:** Research Specialist
Organization: UNIVERSITY OF KENTUCKY
Address 1: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914 **Mobile No.:** 859-559-6710
E-mail: sara.carter@uky.edu
City: LEXINGTON, KY **Postal Code:** 40546-0312

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Role: SPONSR sponsor
Sponsor: Matt Livesay/Glen Murphy

Crop Description

Crop 1: C ZEAMX Zea mays Corn
Stage Scale: BBCH
Variety: see trt list
Planting Date: 5-26-2020 **Planting Rate:** 30000 S/A
Depth: 1.5 IN
Rows per Plot: 6 **Planting Method:** PLANTD planted
Row Spacing: 30 IN **Planting Equipment:** FE field equipment
Seed Bed: MEDIUM medium
Soil Temperature: 70 F **Soil Moisture:** WET wet
Emergence Date: 6-1-2020
Harvest Date: 11-2-2020 **Harvest Equipment:** MASSEY FERGUSON 8XP
Harvested Width: 5 FT
Harvested Length: 140 FT
% Standard Moisture: 15.5

Site and Design

Treated Plot Width: 15 FT **Site Type:** FIELD field
Treated Plot Length: 130 FT
Treated Plot Area: 1950.0 FT2 **Treatments:** 34 **Tillage Type:** NOTILL no-till
Replications: 1 **Study Design:** RAOBL Randomized Complete Block (RCB)

Soil Description

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

Application Description

	A	B
Application Date	5-27-2020	7-7-2020
Appl. Start Time	5:00 PM	4:00 PM
Appl. Stop Time	6:00 PM	5:00 PM
Application Method	SPRAY	SPRAY
Application Timing	PRE	V3
Application Placement	BROFOL	BROFOL
Applied By	SARA	SARA
Air Temperature Start, Stop	77	92
% Relative Humidity Start, Stop	85	60
Wind Velocity+Dir. Start	4 MPH SE	1 MPH SW
Soil Temperature	72 F	79 F
Soil Moisture	WET	WET
% Cloud Cover	60	30
Next Moisture Occurred On	5-29-2020	7-8-2020

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Crop Stage At Each Application		
	A	B
Crop 1 Code, BBCH Scale	ZEAMX BCOR	ZEAMX BCOR
Days after Emergence	-5	36
Height Average		14 IN

Application Equipment		
	A	B
Appl. Equipment	ATV	ATV
Equipment Type	ALTEVE	ALTEVE
Operation Pressure	30 PSI	30 PSI
Nozzle Type	FLAFAI	FLAFAI
Nozzle Size	TTI 003	TTI 003
Nozzle Spacing	20 IN	20 IN
Boom Length	10 FT	10 FT
Boom Height	20 IN	20 IN
Ground Speed	4 MPH	4 MPH
Carrier	WATER	WATER
Application Amount	18 GPA	18 GPA
Propellant	CO2	CO2

Pest Type			
Pest Code			
Pest Name			
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX
Crop Scientific Name	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn
Rating Date	11-2-2020	11-2-2020	11-2-2020
Part Rated			
Rating Type	YIELD	MOICON	YIELD
Rating Unit	lb/plot	%	BU
Number of Subsamples	1	1	1
Rating Timing			
Days After First/Last Applic.	159 118	159 118	159 118
Trt-Eval Interval	159 DA-A	159 DA-A	159 DA-A
Days After Emergence	154 DE-1	154 DE-1	154 DE-1
ARM Action Codes			TY1
Number of Decimals			1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code Plot	
			1 2 3
1 CORVUS	5.6 FL OZ/A A	101	173.30 23.30 174.8
AATREX	1 LB AI/A A		
ROUNDUP POWERMAX	32 FL OZ/A A		
DELARO	7 OZ/A A		
ROUNDUP POWERMAX	32 FL OZ/A B		
AMS	2.5 % V/V B		
DKC 59-82			
Mean =			173.30 23.30 174.8

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Pest Type					
Pest Code					
Pest Name					
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX		
Crop Scientific Name	Zea mays	Zea mays	Zea mays		
Crop Name	Corn	Corn	Corn		
Rating Date	11-2-2020	11-2-2020	11-2-2020		
Part Rated					
Rating Type	YIELD	MOICON	YIELD		
Rating Unit	lb/plot	%	BU		
Number of Subsamples	1	1	1		
Rating Timing					
Days After First/Last Applic.	159 118	159 118	159 118		
Trt-Eval Interval	159 DA-A	159 DA-A	159 DA-A		
Days After Emergence	154 DE-1	154 DE-1	154 DE-1		
ARM Action Codes			TY1		
Number of Decimals			1		
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	1	2	3
2 CORVUS	5.6 FL OZ/A A	102	178.20	23.30	179.7
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 59-82					
	Mean =		178.20	23.30	179.7
3 CORVUS	5.6 FL OZ/A A	103	193.10	23.90	193.2
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
DELARO	7 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 60-80					
	Mean =		193.10	23.90	193.2
4 CORVUS	5.6 FL OZ/A A	104	177.40	22.20	181.5
AATREX	16 OZ/A B				
ROUNDUP POWERMAX	32 FL OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 60-80					
	Mean =		177.40	22.20	181.5
5 CORVUS	5.6 FL OZ/A A	105	188.80	23.80	189.2
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
DELARO	7 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 60-88					
	Mean =		188.80	23.80	189.2

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Pest Type				C ZEAMX	C ZEAMX	C ZEAMX
Pest Code						
Pest Name						
Crop Type, Code				Zea mays	Zea mays	Zea mays
Crop Scientific Name				Corn	Corn	Corn
Crop Name						
Rating Date				11-2-2020	11-2-2020	11-2-2020
Part Rated						
Rating Type				YIELD	MOICON	YIELD
Rating Unit				lb/plot	%	BU
Number of Subsamples				1	1	1
Rating Timing						
Days After First/Last Applic.				159 118	159 118	159 118
Trt-Eval Interval				159 DA-A	159 DA-A	159 DA-A
Days After Emergence				154 DE-1	154 DE-1	154 DE-1
ARM Action Codes						TY1
Number of Decimals						1
Trt	Treatment	Rate	Appl			
No.	Name	Rate Unit	Code Plot	1	2	3
6	CORVUS	5.6 FL OZ/A	A 106	192.00	21.40	198.5
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 60-88					
			Mean =	192.00	21.40	198.5
7	CORVUS	5.6 FL OZ/A	A 107	181.40	21.80	186.5
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	DELARO	7 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	1077 AM					
			Mean =	181.40	21.80	186.5
8	CORVUS	5.6 FL OZ/A	A 108	155.00	19.20	164.7
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	1077 AM					
			Mean =	155.00	19.20	164.7
9	CORVUS	5.6 FL OZ/A	A 109	167.80	18.30	180.3
	AATREX	16 OZ/A	B			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	DELARO	7 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 61-41					
			Mean =	167.80	18.30	180.3

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Pest Type					
Pest Code					
Pest Name					
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX		
Crop Scientific Name	Zea mays	Zea mays	Zea mays		
Crop Name	Corn	Corn	Corn		
Rating Date	11-2-2020	11-2-2020	11-2-2020		
Part Rated					
Rating Type	YIELD	MOICON	YIELD		
Rating Unit	lb/plot	%	BU		
Number of Subsamples	1	1	1		
Rating Timing					
Days After First/Last Applic.	159 118	159 118	159 118		
Trt-Eval Interval	159 DA-A	159 DA-A	159 DA-A		
Days After Emergence	154 DE-1	154 DE-1	154 DE-1		
ARM Action Codes			TY1		
Number of Decimals			1		
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	1	2	3
10 CORVUS	5.6 FL OZ/A A	110	190.80	17.10	208.0
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 61-41					
	Mean =		190.80	17.10	208.0
11 CORVUS	5.6 FL OZ/A A	111	197.70	23.10	199.9
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
DELARO	7 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 62-53					
	Mean =		197.70	23.10	199.9
12 CORVUS	5.6 FL OZ/A A	112	199.60	23.30	201.3
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 62-53					
	Mean =		199.60	23.30	201.3
13 CORVUS	5.6 FL OZ/A A	113	204.40	23.80	204.8
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
DELARO	7 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 63-57					
	Mean =		204.40	23.80	204.8

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Pest Type					
Pest Code					
Pest Name					
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX		
Crop Scientific Name	Zea mays	Zea mays	Zea mays		
Crop Name	Corn	Corn	Corn		
Rating Date	11-2-2020	11-2-2020	11-2-2020		
Part Rated					
Rating Type	YIELD	MOICON	YIELD		
Rating Unit	lb/plot	%	BU		
Number of Subsamples	1	1	1		
Rating Timing					
Days After First/Last Applic.	159 118	159 118	159 118		
Trt-Eval Interval	159 DA-A	159 DA-A	159 DA-A		
Days After Emergence	154 DE-1	154 DE-1	154 DE-1		
ARM Action Codes			TY1		
Number of Decimals			1		
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	1	2	3
14 CORVUS	5.6 FL OZ/A A	114	213.30	22.80	216.5
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 63-57					
	Mean =		213.30	22.80	216.5
15 CORVUS	5.6 FL OZ/A A	115	205.90	21.70	212.0
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
DELARO	7 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 63-91					
	Mean =		205.90	21.70	212.0
16 CORVUS	5.6 FL OZ/A A	116	215.10	21.50	222.1
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 63-91					
	Mean =		215.10	21.50	222.1
17 CORVUS	5.6 FL OZ/A A	117	192.60	23.90	192.7
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
DELARO	7 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 64-35					
	Mean =		192.60	23.90	192.7

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Pest Type						
Pest Code						
Pest Name						
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX			
Crop Scientific Name	Zea mays	Zea mays	Zea mays			
Crop Name	Corn	Corn	Corn			
Rating Date	11-2-2020	11-2-2020	11-2-2020			
Part Rated						
Rating Type	YIELD	MOICON	YIELD			
Rating Unit	lb/plot	%	BU			
Number of Subsamples	1	1	1			
Rating Timing						
Days After First/Last Applic.	159 118	159 118	159 118			
Trt-Eval Interval	159 DA-A	159 DA-A	159 DA-A			
Days After Emergence	154 DE-1	154 DE-1	154 DE-1			
ARM Action Codes			TY1			
Number of Decimals			1			
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	1	2	3	
18 CORVUS	5.6 FL OZ/A A	118	206.50	22.90	209.4	
AATREX	16 OZ/A A					
ROUNDUP POWERMAX	32 FL OZ/A A					
ROUNDUP POWERMAX	32 FL OZ/A B					
AMS	2.5 % V/V B					
DKC 64-35						
	Mean =		206.50	22.90	209.4	
19 CORVUS	5.6 FL OZ/A A	119	201.60	15.70	223.5	
AATREX	16 OZ/A A					
ROUNDUP POWERMAX	32 FL OZ/A A					
DELARO	7 OZ/A A					
ROUNDUP POWERMAX	32 FL OZ/A B					
AMS	2.5 % V/V B					
1464 AML						
	Mean =		201.60	15.70	223.5	
20 CORVUS	5.6 FL OZ/A A	120	199.80	24.20	199.2	
AATREX	16 OZ/A A					
ROUNDUP POWERMAX	32 FL OZ/A A					
ROUNDUP POWERMAX	32 FL OZ/A B					
AMS	2.5 % V/V B					
1464 AML						
	Mean =		199.80	24.20	199.2	
21 CORVUS	5.6 FL OZ/A A	121	209.10	23.40	210.6	
AATREX	16 OZ/A A					
ROUNDUP POWERMAX	32 FL OZ/A A					
DELARO	7 OZ/A A					
ROUNDUP POWERMAX	32 FL OZ/A B					
AMS	2.5 % V/V B					
DKC 65-95						
	Mean =		209.10	23.40	210.6	

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Pest Type					
Pest Code					
Pest Name					
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX		
Crop Scientific Name	Zea mays	Zea mays	Zea mays		
Crop Name	Corn	Corn	Corn		
Rating Date	11-2-2020	11-2-2020	11-2-2020		
Part Rated					
Rating Type	YIELD	MOICON	YIELD		
Rating Unit	lb/plot	%	BU		
Number of Subsamples	1	1	1		
Rating Timing					
Days After First/Last Applic.	159 118	159 118	159 118		
Trt-Eval Interval	159 DA-A	159 DA-A	159 DA-A		
Days After Emergence	154 DE-1	154 DE-1	154 DE-1		
ARM Action Codes			TY1		
Number of Decimals			1		
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	1	2	3
22 CORVUS	5.6 FL OZ/A A	122	223.20	23.10	225.7
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 65-95					
	Mean =		223.20	23.10	225.7
23 CORVUS	5.6 FL OZ/A A	123	238.30	24.00	238.2
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
DELARO	7 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 65-99					
	Mean =		238.30	24.00	238.2
24 CORVUS	5.6 FL OZ/A A	124	249.50	23.90	249.7
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 95-99					
	Mean =		249.50	23.90	249.7
25 CORVUS	5.6 FL OZ/A A	125	201.90	24.80	199.7
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
DELARO	7 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 66-18					
	Mean =		201.90	24.80	199.7

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Pest Type					
Pest Code					
Pest Name					
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX		
Crop Scientific Name	Zea mays	Zea mays	Zea mays		
Crop Name	Corn	Corn	Corn		
Rating Date	11-2-2020	11-2-2020	11-2-2020		
Part Rated					
Rating Type	YIELD	MOICON	YIELD		
Rating Unit	lb/plot	%	BU		
Number of Subsamples	1	1	1		
Rating Timing					
Days After First/Last Applic.	159 118	159 118	159 118		
Trt-Eval Interval	159 DA-A	159 DA-A	159 DA-A		
Days After Emergence	154 DE-1	154 DE-1	154 DE-1		
ARM Action Codes			TY1		
Number of Decimals			1		
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	1	2	3
26 CORVUS	5.6 FL OZ/A A	126	211.80	26.90	203.6
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 66-18					
	Mean =		211.80	26.90	203.6
27 CORVUS	5.6 FL OZ/A A	127	224.20	24.80	221.7
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
DELARO	7 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 67-94					
	Mean =		224.20	24.80	221.7
28 CORVUS	5.6 FL OZ/A A	128	247.30	25.20	243.3
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 67-94					
	Mean =		247.30	25.20	243.3
29 CORVUS	5.6 FL OZ/A A	129	210.00	23.20	212.1
AATREX	16 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A A				
DELARO	7 OZ/A A				
ROUNDUP POWERMAX	32 FL OZ/A B				
AMS	2.5 % V/V B				
DKC 67-44					
	Mean =		210.00	23.20	212.1

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Pest Type				C ZEAMX	C ZEAMX	C ZEAMX
Pest Code						
Pest Name						
Crop Type, Code				C ZEAMX	C ZEAMX	C ZEAMX
Crop Scientific Name				Zea mays	Zea mays	Zea mays
Crop Name				Corn	Corn	Corn
Rating Date				11-2-2020	11-2-2020	11-2-2020
Part Rated						
Rating Type				YIELD	MOICON	YIELD
Rating Unit				lb/plot	%	BU
Number of Subsamples				1	1	1
Rating Timing						
Days After First/Last Applic.				159 118	159 118	159 118
Trt-Eval Interval				159 DA-A	159 DA-A	159 DA-A
Days After Emergence				154 DE-1	154 DE-1	154 DE-1
ARM Action Codes						TY1
Number of Decimals						1
Trt	Treatment	Rate	Appl			
No.	Name	Rate Unit	Code Plot	1	2	3
30	CORVUS	5.6 FL OZ/A	A 130	214.60	23.50	215.9
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 67-44					
			Mean =	214.60	23.50	215.9
31	CORVUS	5.6 FL OZ/A	A 131	170.00	21.80	174.8
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	DELARO	7 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 69-99					
			Mean =	170.00	21.80	174.8
32	CORVUS	5.6 FL OZ/A	A 132	146.00	22.10	149.6
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 69-99					
			Mean =	146.00	22.10	149.6
33	CORVUS	5.6 FL OZ/A	A 133	117.50	20.90	122.2
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	DELARO	7 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 70-27					
			Mean =	117.50	20.90	122.2

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Pest Type			
Pest Code			
Pest Name			
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX
Crop Scientific Name	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn
Rating Date	11-2-2020	11-2-2020	11-2-2020
Part Rated			
Rating Type	YIELD	MOICON	YIELD
Rating Unit	lb/plot	%	BU
Number of Subsamples	1	1	1
Rating Timing			
Days After First/Last Applic.	159 118	159 118	159 118
Trt-Eval Interval	159 DA-A	159 DA-A	159 DA-A
Days After Emergence	154 DE-1	154 DE-1	154 DE-1
ARM Action Codes			TY1
Number of Decimals			1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code Plot	
			1 2 3
34 CORVUS	5.6 FL OZ/A A	134	122.20 21.80 125.7
AATREX	16 OZ/A A		
ROUNDUP POWERMAX	32 FL OZ/A A		
ROUNDUP POWERMAX	32 FL OZ/A B		
AMS	2.5 % V/V B		
DKC 70-27			
	Mean =		122.20 21.80 125.7

Crop Type, Code
C = EPPO species (Bayer) codes
ZEAMX, BCOR, Zea mays, Corn = US

Rating Type
YIELD = yield
MOICON = moisture content

Rating Unit
lb/plot = pounds per plot
% = percent
BU = bushel

ARM Action Codes
TY1 = 1.111225*[1]*(100-[2])/84.5

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Pest Type				
Pest Code				
Pest Name				
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX	
Crop Scientific Name	Zea mays	Zea mays	Zea mays	
Crop Name	Corn	Corn	Corn	
Rating Date	11-2-2020	11-2-2020	11-2-2020	
Part Rated				
Rating Type	YIELD	MOICON	YIELD	
Rating Unit	lb/plot	%	BU	
Number of Subsamples	1	1	1	
Rating Timing				
Days After First/Last Applic.	159 118	159 118	159 118	
Trt-Eval Interval	159 DA-A	159 DA-A	159 DA-A	
Days After Emergence	154 DE-1	154 DE-1	154 DE-1	
ARM Action Codes			TY1	
Number of Decimals			1	
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	1	2
1 CORVUS	5.6 FL OZ/A A		173.30	23.30
AATREX	1 LB AI/A A			
ROUNDUP POWERMAX	32 FL OZ/A A			
DELARO	7 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A B			
AMS	2.5 % V/V B			
DKC 59-82				174.8
2 CORVUS	5.6 FL OZ/A A		178.20	23.30
AATREX	16 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A B			
AMS	2.5 % V/V B			
DKC 59-82				179.7
3 CORVUS	5.6 FL OZ/A A		193.10	23.90
AATREX	16 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A A			
DELARO	7 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A B			
AMS	2.5 % V/V B			
DKC 60-80				193.2
4 CORVUS	5.6 FL OZ/A A		177.40	22.20
AATREX	16 OZ/A B			
ROUNDUP POWERMAX	32 FL OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A B			
AMS	2.5 % V/V B			
DKC 60-80				181.5
5 CORVUS	5.6 FL OZ/A A		188.80	23.80
AATREX	16 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A A			
DELARO	7 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A B			
AMS	2.5 % V/V B			
DKC 60-88				189.2

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Pest Type				
Pest Code				
Pest Name				
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX	
Crop Scientific Name	Zea mays	Zea mays	Zea mays	
Crop Name	Corn	Corn	Corn	
Rating Date	11-2-2020	11-2-2020	11-2-2020	
Part Rated				
Rating Type	YIELD	MOICON	YIELD	
Rating Unit	lb/plot	%	BU	
Number of Subsamples	1	1	1	
Rating Timing				
Days After First/Last Applic.	159 118	159 118	159 118	
Trt-Eval Interval	159 DA-A	159 DA-A	159 DA-A	
Days After Emergence	154 DE-1	154 DE-1	154 DE-1	
ARM Action Codes			TY1	
Number of Decimals			1	
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	1	2
			3	
6 CORVUS	5.6 FL OZ/A A		192.00	21.40
AATREX	16 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A B			
AMS	2.5 % V/V B			
DKC 60-88				
7 CORVUS	5.6 FL OZ/A A		181.40	21.80
AATREX	16 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A A			
DELARO	7 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A B			
AMS	2.5 % V/V B			
1077 AM				
8 CORVUS	5.6 FL OZ/A A		155.00	19.20
AATREX	16 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A B			
AMS	2.5 % V/V B			
1077 AM				
9 CORVUS	5.6 FL OZ/A A		167.80	18.30
AATREX	16 OZ/A B			
ROUNDUP POWERMAX	32 FL OZ/A A			
DELARO	7 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A B			
AMS	2.5 % V/V B			
DKC 61-41				
10 CORVUS	5.6 FL OZ/A A		190.80	17.10
AATREX	16 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A B			
AMS	2.5 % V/V B			
DKC 61-41				

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Pest Type				C ZEAMX	C ZEAMX	C ZEAMX
Pest Code						
Pest Name						
Crop Type, Code				C ZEAMX	C ZEAMX	C ZEAMX
Crop Scientific Name				Zea mays	Zea mays	Zea mays
Crop Name				Corn	Corn	Corn
Rating Date				11-2-2020	11-2-2020	11-2-2020
Part Rated						
Rating Type				YIELD	MOICON	YIELD
Rating Unit				lb/plot	%	BU
Number of Subsamples				1	1	1
Rating Timing						
Days After First/Last Applic.				159 118	159 118	159 118
Trt-Eval Interval				159 DA-A	159 DA-A	159 DA-A
Days After Emergence				154 DE-1	154 DE-1	154 DE-1
ARM Action Codes						TY1
Number of Decimals						1
Trt No.	Treatment Name	Rate	Appl Code	1	2	3
		Rate Unit				
11	CORVUS	5.6 FL OZ/A	A	197.70	23.10	199.9
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	DELARO	7 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 62-53					
12	CORVUS	5.6 FL OZ/A	A	199.60	23.30	201.3
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 62-53					
13	CORVUS	5.6 FL OZ/A	A	204.40	23.80	204.8
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	DELARO	7 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 63-57					
14	CORVUS	5.6 FL OZ/A	A	213.30	22.80	216.5
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 63-57					
15	CORVUS	5.6 FL OZ/A	A	205.90	21.70	212.0
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	DELARO	7 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 63-91					

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Pest Type				C ZEAMX	C ZEAMX	C ZEAMX
Pest Code						
Pest Name						
Crop Type, Code				Zea mays	Zea mays	Zea mays
Crop Scientific Name				Corn	Corn	Corn
Crop Name						
Rating Date				11-2-2020	11-2-2020	11-2-2020
Part Rated						
Rating Type				YIELD	MOICON	YIELD
Rating Unit				lb/plot	%	BU
Number of Subsamples				1	1	1
Rating Timing						
Days After First/Last Applic.				159 118	159 118	159 118
Trt-Eval Interval				159 DA-A	159 DA-A	159 DA-A
Days After Emergence				154 DE-1	154 DE-1	154 DE-1
ARM Action Codes						TY1
Number of Decimals						1
Trt No.	Treatment Name	Rate	Appl Code	1	2	3
		Rate Unit				
16	CORVUS	5.6 FL OZ/A	A	215.10	21.50	222.1
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 63-91					
17	CORVUS	5.6 FL OZ/A	A	192.60	23.90	192.7
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	DELARO	7 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 64-35					
18	CORVUS	5.6 FL OZ/A	A	206.50	22.90	209.4
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 64-35					
19	CORVUS	5.6 FL OZ/A	A	201.60	15.70	223.5
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	DELARO	7 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	1464 AML					
20	CORVUS	5.6 FL OZ/A	A	199.80	24.20	199.2
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	1464 AML					

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Trt No.	Treatment Name	Rate	Unit	Appl Code	1	2	3
21	CORVUS AATREX ROUNDUP POWERMAX DELARO ROUNDUP POWERMAX AMS DKC 65-95	5.6 16 32 7 32 2.5	FL OZ/A OZ/A FL OZ/A OZ/A FL OZ/A % V/V	A A A A B B	209.10	23.40	210.6
22	CORVUS AATREX ROUNDUP POWERMAX ROUNDUP POWERMAX AMS DKC 65-95	5.6 16 32 32 2.5	FL OZ/A OZ/A FL OZ/A FL OZ/A % V/V	A A A B B	223.20	23.10	225.7
23	CORVUS AATREX ROUNDUP POWERMAX DELARO ROUNDUP POWERMAX AMS DKC 65-99	5.6 16 32 7 32 2.5	FL OZ/A OZ/A FL OZ/A OZ/A FL OZ/A % V/V	A A A A B B	238.30	24.00	238.2
24	CORVUS AATREX ROUNDUP POWERMAX ROUNDUP POWERMAX AMS DKC 95-99	5.6 16 32 32 2.5	FL OZ/A OZ/A FL OZ/A FL OZ/A % V/V	A A A B B	249.50	23.90	249.7
25	CORVUS AATREX ROUNDUP POWERMAX DELARO ROUNDUP POWERMAX AMS DKC 66-18	5.6 16 32 7 32 2.5	FL OZ/A OZ/A FL OZ/A OZ/A FL OZ/A % V/V	A A A A B B	201.90	24.80	199.7

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Pest Type				C ZEAMX	C ZEAMX	C ZEAMX
Pest Code						
Pest Name						
Crop Type, Code				Zea mays	Zea mays	Zea mays
Crop Scientific Name				Corn	Corn	Corn
Crop Name						
Rating Date				11-2-2020	11-2-2020	11-2-2020
Part Rated						
Rating Type				YIELD	MOICON	YIELD
Rating Unit				lb/plot	%	BU
Number of Subsamples				1	1	1
Rating Timing						
Days After First/Last Applic.				159 118	159 118	159 118
Trt-Eval Interval				159 DA-A	159 DA-A	159 DA-A
Days After Emergence				154 DE-1	154 DE-1	154 DE-1
ARM Action Codes						TY1
Number of Decimals						1
Trt No.	Treatment Name	Rate	Appl Code	1	2	3
		Rate Unit				
26	CORVUS	5.6 FL OZ/A	A	211.80	26.90	203.6
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 66-18					
27	CORVUS	5.6 FL OZ/A	A	224.20	24.80	221.7
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	DELARO	7 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 67-94					
28	CORVUS	5.6 FL OZ/A	A	247.30	25.20	243.3
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 67-94					
29	CORVUS	5.6 FL OZ/A	A	210.00	23.20	212.1
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	DELARO	7 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 67-44					
30	CORVUS	5.6 FL OZ/A	A	214.60	23.50	215.9
	AATREX	16 OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	A			
	ROUNDUP POWERMAX	32 FL OZ/A	B			
	AMS	2.5 % V/V	B			
	DKC 67-44					

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Pest Type				
Pest Code				
Pest Name				
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX	
Crop Scientific Name	Zea mays	Zea mays	Zea mays	
Crop Name	Corn	Corn	Corn	
Rating Date	11-2-2020	11-2-2020	11-2-2020	
Part Rated				
Rating Type	YIELD	MOICON	YIELD	
Rating Unit	lb/plot	%	BU	
Number of Subsamples	1	1	1	
Rating Timing				
Days After First/Last Applic.	159 118	159 118	159 118	
Trt-Eval Interval	159 DA-A	159 DA-A	159 DA-A	
Days After Emergence	154 DE-1	154 DE-1	154 DE-1	
ARM Action Codes			TY1	
Number of Decimals			1	
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	1	2
31 CORVUS	5.6 FL OZ/A A		170.00	21.80
AATREX	16 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A A			
DELARO	7 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A B			
AMS	2.5 % V/V B			
DKC 69-99				174.8
32 CORVUS	5.6 FL OZ/A A		146.00	22.10
AATREX	16 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A B			
AMS	2.5 % V/V B			
DKC 69-99				149.6
33 CORVUS	5.6 FL OZ/A A		117.50	20.90
AATREX	16 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A A			
DELARO	7 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A B			
AMS	2.5 % V/V B			
DKC 70-27				122.2
34 CORVUS	5.6 FL OZ/A A		122.20	21.80
AATREX	16 OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A A			
ROUNDUP POWERMAX	32 FL OZ/A B			
AMS	2.5 % V/V B			
DKC 70-27				125.7
LSD P=.05			.	.
Standard Deviation			.	.
CV			.	.
Levene's F			.	.
Levene's Prob(F)			.	.
Skewness			-0.7157	-1.29*
Kurtosis			1.017	2.3731*
				-0.8486*
				1.2179

Crop Type, Code

C = EPPO species (Bayer) codes

ZEAMX, BCOR, Zea mays, Corn = US

Rating Type

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YIELD = yield

MOICON = moisture content

Rating Unit

lb/plot = pounds per plot

% = percent

BU = bushel

ARM Action Codes

TY1 = $1.111225*[1]*(100-[2])/84.5$

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SOYBEAN SYSTEMS TRIAL

Trial ID: 20-29 Location: LEXINGTON, KY Trial Year: 2020
 Protocol ID: 20-29 Investigator (Creator): Sara Carter
 Project ID: Study Director: Sara Carter
 Sponsor Contact: Matt Livesay/Glen Murphy

Reps: 1 Plots: 15 by 135 feet

Appl. Amount: 15 GAL/AC

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate Unit	Appl Timing	Appl Code	Mix Size	Amt Product to Measure	Rep 1
1	ROUNDUP WeatherMAX	4.5	SL		32 FL OZ/A	PRE	A	3 L	50.0 mL/mx	101
	XTENDIMAX	2.9	SL		22 FL OZ/A	PRE	A	3 L	34.37 mL/mx	
	METRIBUZIN	75	DF		0.5 LB/A	PRE	A	3 L	11.98 g/mx	
	ROUNDUP WeatherMAX	4.5	SL		32 FL OZ/A	EP	B	3 L	50.0 mL/mx	
	XTENDIMAX	2.9	SL		22 FL OZ/A	EP	B	3 L	34.37 mL/mx	
	WARRANT	3	CS		3 PT/A	EP	B	3 L	75.0 mL/mx	
	ag39x0							-	2169 seeds/1 pl	
2	ROUNDUP WeatherMAX	4.5	SL		32 FL OZ/A	PRE	A	3 L	50.0 mL/mx	102
	XTENDIMAX	2.9	SL		22 FL OZ/A	PRE	A	3 L	34.37 mL/mx	
	METRIBUZIN	75	DF		0.5 LB/A	PRE	A	3 L	11.98 g/mx	
	ROUNDUP WeatherMAX	4.5	SL		32 FL OZ/A	EP	B	3 L	50.0 mL/mx	
	XTENDIMAX	2.9	SL		22 FL OZ/A	EP	B	3 L	34.37 mL/mx	
	WARRANT	3	CS		3 PT/A	EP	B	3 L	75.0 mL/mx	
	ag43x0							-	2169 seeds/1 pl	
3	ROUNDUP WeatherMAX	4.5	SL		32 FL OZ/A	PRE	A	3 L	50.0 mL/mx	103
	XTENDIMAX	2.9	SL		22 FL OZ/A	PRE	A	3 L	34.37 mL/mx	
	METRIBUZIN	75	DF		0.5 LB/A	PRE	A	3 L	11.98 g/mx	
	ROUNDUP WeatherMAX	4.5	SL		32 FL OZ/A	EP	B	3 L	50.0 mL/mx	
	XTENDIMAX	2.9	SL		22 FL OZ/A	EP	B	3 L	34.37 mL/mx	
	WARRANT	3	CS		3 PT/A	EP	B	3 L	75.0 mL/mx	
	ag46x0							-	2169 seeds/1 pl	
4	ENLIST DUO	4	SL		40 FL OZ/A	PRE	A	3 L	62.5 mL/mx	104
	METRIBUZIN	75	DF		0.5 LB/A	PRE	A	3 L	11.98 g/mx	
	ENLIST DUO	4	SL		40 FL OZ/A	EP	B	3 L	62.5 mL/mx	
	WARRANT	3	CS		3 PT/A	EP	B	3 L	75.0 mL/mx	
	39t73e							-	2169 seeds/1 pl	
5	ENLIST DUO	4	SL		40 FL OZ/A	PRE	A	3 L	62.5 mL/mx	105
	METRIBUZIN	75	DF		0.5 LB/A	PRE	A	3 L	11.98 g/mx	
	ENLIST DUO	4	SL		40 FL OZ/A	EP	B	3 L	62.5 mL/mx	
	WARRANT	3	CS		3 PT/A	EP	B	3 L	75.0 mL/mx	
	41t07e							-	2169 seeds/1 pl	
6	ENLIST DUO	4	SL		40 FL OZ/A	PRE	A	3 L	62.5 mL/mx	106
	METRIBUZIN	75	DF		0.5 LB/A	PRE	A	3 L	11.98 g/mx	
	ENLIST DUO	4	SL		40 FL OZ/A	EP	B	3 L	62.5 mL/mx	
	WARRANT	3	CS		3 PT/A	EP	B	3 L	75.0 mL/mx	
	48t22e							-	2169 seeds/1 pl	

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

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Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
375.000	mL	ROUNDUP WeatherMAX	4.5		SL	
257.812	mL	XTENDIMAX	2.9		SL	
89.869	g	METRIBUZIN	75		DF	
562.500	mL	WARRANT	3		CS	
2,712	seed	ag39x0				
2,712	seed	ag43x0				
2,712	seed	ag46x0				
468.750	mL	ENLIST DUO	4		SL	
2,712	seed	39t73e				
2,712	seed	41t07e				
2,712	seed	48t22e				

* 'Per area' calculations based on 1 replicates of 5 by 135, 15 by 135 feet 'Plot' experimental units (area of one treatment).

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 3 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

General Trial Information

Study Director: Sara Carter **Title:** Research Specialist
Investigator: Sara Carter **Title:** Research Specialist

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

ARM Trial Created On: 5-11-2020

Initiation Date: 6-2-2020 **Planned Completion Date:** 10-12-2020

Completion Date: 11-2-2020

Trial Location

City: Lexington **Country:** USA United States
State/Prov.: Kentucky
Postal Code: 40511

Latitude of LL Corner °: 38.115622 N
Longitude of LL Corner °: -84.484033 W

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Role: STYDIR study director
Study Director: Sara Carter **Title:** Research Specialist

Organization: University of Kentucky
Address 1: 105 Plant Science Building

City: Lexington, KY

E-mail: sara.carter@uky.edu
Postal Code: 40546-0312

Role: INVEST investigator
Investigator: Sara Carter **Title:** Research Specialist

Organization: UNIVERSITY OF KENTUCKY

Address 1: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914 **Mobile No.:** 859-559-6710

E-mail: sara.carter@uky.edu

City: LEXINGTON, KY

Postal Code: 40546-0312

University of Kentucky

Role: SPONSR sponsor
Sponsor: Matt Livesay/Glen Murphy

Crop Description	
Crop 1: C GLXMA Glycine max Soybean	BBCH Scale: BSOY
Variety: see trt list	Stage Scale: BBCH
Planting Date: 6-2-2020	Planting Rate: 140000 S/A
Depth: 1.25 IN	
Rows per Plot: 6	Planting Method: PLANTD planted
Row Spacing: 30 IN	Planting Equipment: FE field equipment
	Seed Bed: SMOOTH smooth
	Harvested Width: 5 FT
% Standard Moisture: 13	Harvested Length: 135 FT

Pest Description	
Pest 1 Type: W Code: AMBTR Ambrosia trifida	Stage Scale: BBCH
Common Name: Giant ragweed	
Crop: 1 GLXMA	
Pest 2 Type: W Code: IPOSS Ipomoea sp.	Stage Scale: BBCH
Common Name: Morning glory	
Crop: 1 GLXMA	
Pest 3 Type: W Code: SETFA Setaria faberi	Stage Scale: BBCH
Common Name: Giant foxtail	
Crop: 1 GLXMA	

Site and Design	
Treated Plot Width: 15 FT	Site Type: FIELD field
Treated Plot Length: 135 FT	
Treated Plot Area: 2025.0 FT2	Treatments: 6
Replications: 1	Tillage Type: NOTILL no-till
	Study Design: RACOB� Randomized Complete Block (RCB)

Application Description		
	A	B
Application Date	6-2-2020	7-9-2020
Interval to Prev. Appl.		37 DAYS
Application Method	spray	spray
Application Timing	pre	ep
Application Placement	brofol	brofol

Crop Stage At Each Application		
	A	B
Crop 1 Code, BBCH Scale	GLXMA BSOY	GLXMA BSOY
Height Average		12 in

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Pest Stage At Each Application		
	A	B
Pest 1 Code, Type, Scale	AMBTR W BBCH	AMBTR W BBCH
Height Average	2 in	4 in
Crop Part Attacked, Code	GLXMA	GLXMA
Pest 2 Code, Type, Scale	IPOSS W BBCH	IPOSS W BBCH
Height Average	1 in	3 in
Crop Part Attacked, Code	GLXMA	GLXMA
Pest 3 Code, Type, Scale	SETFA W BBCH	SETFA W BBCH
Height Average	2 in	4 in
Crop Part Attacked, Code	GLXMA	GLXMA

		W Weed AMBTR Giant ragweed	W Weed IPOSS Morning glory	W Weed SETFA Giant foxtail		W Weed AMBTR Giant ragweed	W Weed IPOSS Morning glory	W Weed SETFA Giant foxtail	
Pest Type									
Pest Code									
Pest Name									
Crop Type, Code	C GLXMA				C GLXMA				C GLXMA
Crop Scientific Name	Glycine max				Glycine max				Glycine max
Crop Name	Soybean				Soybean				Soybean
Rating Date	7-29-2020	7-29-2020	7-29-2020	7-29-2020	11-2-2020	11-2-2020	11-2-2020	11-2-2020	11-2-2020
Part Rated									
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYSTU	CONTRO	CONTRO	CONTRO	YIELD
Rating Unit	0-10	0-100	0-100	0-100	0-10	0-100	0-100	0-100	lb/plot
Number of Subsamples	1	1	1	1	1	1	1	1	1
Rating Timing	A1	A1	A1	A1	A1	A1	A1	A1	
Days After First/Last Applic.	57 20	57 20	57 20	57 20	153 116	153 116	153 116	153 116	153 116
Trt-Eval Interval	57 DA-A	57 DA-A	57 DA-A	57 DA-A	153 DA-A	153 DA-A	153 DA-A	153 DA-A	
Days After Emergence									
ARM Action Codes									
Number of Decimals									
Trt Treatment	Rate								
No. Name	Rate Unit	1	2	3	4	5	6	7	8
	Code Plot								
1 ROUNDUP WeatherMAX	32 FL OZ/A A	2.0	95.0	95.0	95.0	0.0	90.0	90.0	95.0
XTENDIMAX	22 FL OZ/A A								
METRIBUZIN	0.5 LB/A A								
ROUNDUP WeatherMAX	32 FL OZ/A B								
XTENDIMAX	22 FL OZ/A B								
WARRANT	3 PT/A B								
ag39x0									
	Mean =	2.0	95.0	95.0	95.0	0.0	90.0	90.0	95.0
2 ROUNDUP WeatherMAX	32 FL OZ/A A	2.0	95.0	95.0	95.0	0.0	90.0	90.0	95.0
XTENDIMAX	22 FL OZ/A A								
METRIBUZIN	0.5 LB/A A								
ROUNDUP WeatherMAX	32 FL OZ/A B								
XTENDIMAX	22 FL OZ/A B								
WARRANT	3 PT/A B								
ag43x0									
	Mean =	2.0	95.0	95.0	95.0	0.0	90.0	90.0	95.0

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Pest Type		W Weed AMBTR	W Weed IPOSS	W Weed SETFA		W Weed AMBTR	W Weed IPOSS	W Weed SETFA			
Pest Code		Giant ragweed	Morning glory	Giant foxtail		Giant ragweed	Morning glory	Giant foxtail			
Pest Name											
Crop Type, Code	C GLXMA				C GLXMA				C GLXMA		
Crop Scientific Name	Glycine max				Glycine max				Glycine max		
Crop Name	Soybean				Soybean				Soybean		
Rating Date	7-29-2020	7-29-2020	7-29-2020	7-29-2020	11-2-2020	11-2-2020	11-2-2020	11-2-2020	11-2-2020		
Part Rated											
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYSTU	CONTRO	CONTRO	CONTRO	YIELD		
Rating Unit	0-10	0-100	0-100	0-100	0-10	0-100	0-100	0-100	lb/plot		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Rating Timing	A1	A1	A1	A1	A1	A1	A1	A1			
Days After First/Last Applic.	57 20	57 20	57 20	57 20	153 116	153 116	153 116	153 116	153 116		
Trt-Eval Interval	57 DA-A	57 DA-A	57 DA-A	57 DA-A	153 DA-A	153 DA-A	153 DA-A	153 DA-A			
Days After Emergence											
ARM Action Codes											
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7	8	9
3 ROUNDUP WeatherMAX XTENDIMAX METRIBUZIN ROUNDUP WeatherMAX XTENDIMAX WARRANT ag46x0	32 FL OZ/A A 22 FL OZ/A A 0.5 LB/A A 32 FL OZ/A B 22 FL OZ/A B 3 PT/A B	103	2.0	95.0	95.0	95.0	0.0	90.0	90.0	95.0	57.820
		Mean =	2.0	95.0	95.0	95.0	0.0	90.0	90.0	95.0	57.820
4 ENLIST DUO METRIBUZIN ENLIST DUO WARRANT 39t73e	40 FL OZ/A A 0.5 LB/A A 40 FL OZ/A B 3 PT/A B	104	5.0	95.0	95.0	95.0	0.0	90.0	90.0	95.0	47.390
		Mean =	5.0	95.0	95.0	95.0	0.0	90.0	90.0	95.0	47.390
5 ENLIST DUO METRIBUZIN ENLIST DUO WARRANT 41t07e	40 FL OZ/A A 0.5 LB/A A 40 FL OZ/A B 3 PT/A B	105	5.0	95.0	95.0	95.0	0.0	90.0	90.0	95.0	44.530
		Mean =	5.0	95.0	95.0	95.0	0.0	90.0	90.0	95.0	44.530
6 ENLIST DUO METRIBUZIN ENLIST DUO WARRANT 48t22e	40 FL OZ/A A 0.5 LB/A A 40 FL OZ/A B 3 PT/A B	106	5.0	95.0	95.0	95.0	0.0	90.0	90.0	95.0	45.310
		Mean =	5.0	95.0	95.0	95.0	0.0	90.0	90.0	95.0	45.310

Pest Type				
Pest Code				
Pest Name				
Crop Type, Code	C GLXMA	C GLXMA		
Crop Scientific Name	Glycine max	Glycine max		
Crop Name	Soybean	Soybean		
Rating Date	11-2-2020	11-2-2020		
Part Rated				
Rating Type	MOICON	YIELD		
Rating Unit	%	BU		
Number of Subsamples	1	1		
Rating Timing				
Days After First/Last Applic.	153 116	153 116		
Trt-Eval Interval				
Days After Emergence				
ARM Action Codes		TY1		
Number of Decimals		1		
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	10	11
1 ROUNDUP WeatherMAX	32 FL OZ/A A	101	14.20	61.2
XTENDIMAX	22 FL OZ/A A			
METRIBUZIN	0.5 LB/A A			
ROUNDUP WeatherMAX	32 FL OZ/A B			
XTENDIMAX	22 FL OZ/A B			
WARRANT	3 PT/A B			
ag39x0				
	Mean =		14.20	61.2
2 ROUNDUP WeatherMAX	32 FL OZ/A A	102	13.30	60.9
XTENDIMAX	22 FL OZ/A A			
METRIBUZIN	0.5 LB/A A			
ROUNDUP WeatherMAX	32 FL OZ/A B			
XTENDIMAX	22 FL OZ/A B			
WARRANT	3 PT/A B			
ag43x0				
	Mean =		13.30	60.9

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Pest Type				
Pest Code				
Pest Name				
Crop Type, Code	C GLXMA	C GLXMA		
Crop Scientific Name	Glycine max	Glycine max		
Crop Name	Soybean	Soybean		
Rating Date	11-2-2020	11-2-2020		
Part Rated				
Rating Type	MOICON	YIELD		
Rating Unit	%	BU		
Number of Subsamples	1	1		
Rating Timing				
Days After First/Last Applic.	153 116	153 116		
Trt-Eval Interval				
Days After Emergence				
ARM Action Codes		TY1		
Number of Decimals		1		
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	10	11
3 ROUNDUP WeatherMAX	32 FL OZ/A A	103	13.50	61.8
XTENDIMAX	22 FL OZ/A A			
METRIBUZIN	0.5 LB/A A			
ROUNDUP WeatherMAX	32 FL OZ/A B			
XTENDIMAX	22 FL OZ/A B			
WARRANT	3 PT/A B			
ag46x0				
	Mean =		13.50	61.8
4 ENLIST DUO	40 FL OZ/A A	104	13.80	50.5
METRIBUZIN	0.5 LB/A A			
ENLIST DUO	40 FL OZ/A B			
WARRANT	3 PT/A B			
39t73e				
	Mean =		13.80	50.5
5 ENLIST DUO	40 FL OZ/A A	105	14.40	47.1
METRIBUZIN	0.5 LB/A A			
ENLIST DUO	40 FL OZ/A B			
WARRANT	3 PT/A B			
41t07e				
	Mean =		14.40	47.1
6 ENLIST DUO	40 FL OZ/A A	106	13.50	48.5
METRIBUZIN	0.5 LB/A A			
ENLIST DUO	40 FL OZ/A B			
WARRANT	3 PT/A B			
48t22e				
	Mean =		13.50	48.5

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Pest Type		W Weed AMBTR	W Weed IPOSS	W Weed SETFA		W Weed AMBTR	W Weed IPOSS	W Weed SETFA				
Pest Code		Giant ragweed	Morning glory	Giant foxtail		Giant ragweed	Morning glory	Giant foxtail				
Pest Name												
Crop Type, Code	C GLXMA				C GLXMA				C GLXMA	C GLXMA		
Crop Scientific Name	Glycine max				Glycine max				Glycine max	Glycine max		
Crop Name	Soybean				Soybean				Soybean	Soybean		
Rating Date	7-29-2020	7-29-2020	7-29-2020	7-29-2020	11-2-2020	11-2-2020	11-2-2020	11-2-2020	11-2-2020	11-2-2020	11-2-2020	
Part Rated												
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYSTU	CONTRO	CONTRO	CONTRO		YIELD	MOICON	
Rating Unit	0-10	0-100	0-100	0-100	0-10	0-100	0-100	0-100		lb/plot	%	
Number of Subsamples	1	1	1	1	1	1	1	1		1	1	
Rating Timing	A1	A1	A1	A1	A1	A1	A1	A1				
Days After First/Last Applic.	57 20	57 20	57 20	57 20	153 116	153 116	153 116	153 116		153 116	153 116	
Trt-Eval Interval	57 DA-A	57 DA-A	57 DA-A	57 DA-A	153 DA-A	153 DA-A	153 DA-A	153 DA-A				
Days After Emergence												
ARM Action Codes												
Number of Decimals												
Trt Treatment	Rate	Appl										
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8	9	10
2 ROUNDUP WeatherMAX XTENDIMAX METRIBUZIN ROUNDUP WeatherMAX XTENDIMAX WARRANT ag43x0	32 FL OZ/A A 22 FL OZ/A A 0.5 LB/A A 32 FL OZ/A B 22 FL OZ/A B 3 PT/A B	A A A B B B	2.0	95.0	95.0	95.0	0.0	90.0	90.0	95.0	56.850	13.30
3 ROUNDUP WeatherMAX XTENDIMAX METRIBUZIN ROUNDUP WeatherMAX XTENDIMAX WARRANT ag46x0	32 FL OZ/A A 22 FL OZ/A A 0.5 LB/A A 32 FL OZ/A B 22 FL OZ/A B 3 PT/A B	A A A B B B	2.0	95.0	95.0	95.0	0.0	90.0	90.0	95.0	57.820	13.50
4 ENLIST DUO METRIBUZIN ENLIST DUO WARRANT 39t73e	40 FL OZ/A A 0.5 LB/A A 40 FL OZ/A B 3 PT/A B	A A B B	5.0	95.0	95.0	95.0	0.0	90.0	90.0	95.0	47.390	13.80
5 ENLIST DUO METRIBUZIN ENLIST DUO WARRANT 41t07e	40 FL OZ/A A 0.5 LB/A A 40 FL OZ/A B 3 PT/A B	A A B B	5.0	95.0	95.0	95.0	0.0	90.0	90.0	95.0	44.530	14.40
6 ENLIST DUO METRIBUZIN ENLIST DUO WARRANT 48t22e	40 FL OZ/A A 0.5 LB/A A 40 FL OZ/A B 3 PT/A B	A A B B	5.0	95.0	95.0	95.0	0.0	90.0	90.0	95.0	45.310	13.50
LSD P=.05		
Standard Deviation		
CV		
Levene's F		
Levene's Prob(F)		
Skewness			0.0	-0.0714	0.5391
Kurtosis			-3.3333	-3.0903	-1.5368

Pest Type			
Pest Code			
Pest Name			
Crop Type, Code		C	GLXMA
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Rating Date		11-2-2020	
Part Rated			
Rating Type		YIELD	
Rating Unit		BU	
Number of Subsamples		1	
Rating Timing			
Days After First/Last Applic.		153	116
Trt-Eval Interval			
Days After Emergence			
ARM Action Codes		TY1	
Number of Decimals		1	
Trt No.	Treatment	Rate	Appl
	Name	Rate Unit	Code
			11
1	ROUNDUP WeatherMAX	32 FL OZ/A	A
	XTENDIMAX	22 FL OZ/A	A
	METRIBUZIN	0.5 LB/A	A
	ROUNDUP WeatherMAX	32 FL OZ/A	B
	XTENDIMAX	22 FL OZ/A	B
	WARRANT	3 PT/A	B
	ag39x0		
			61.2

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Pest Type			
Pest Code			
Pest Name			
Crop Type, Code		C	GLXMA
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Rating Date		11-2-2020	
Part Rated			
Rating Type		YIELD	
Rating Unit		BU	
Number of Subsamples		1	
Rating Timing			
Days After First/Last Applic.		153	116
Trt-Eval Interval			
Days After Emergence			
ARM Action Codes		TY1	
Number of Decimals		1	
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	11
2 ROUNDUP WeatherMAX	32 FL OZ/A	A	60.9
XTENDIMAX	22 FL OZ/A	A	
METRIBUZIN	0.5 LB/A	A	
ROUNDUP WeatherMAX	32 FL OZ/A	B	
XTENDIMAX	22 FL OZ/A	B	
WARRANT	3 PT/A	B	
ag43x0			
3 ROUNDUP WeatherMAX	32 FL OZ/A	A	61.8
XTENDIMAX	22 FL OZ/A	A	
METRIBUZIN	0.5 LB/A	A	
ROUNDUP WeatherMAX	32 FL OZ/A	B	
XTENDIMAX	22 FL OZ/A	B	
WARRANT	3 PT/A	B	
ag46x0			
4 ENLIST DUO	40 FL OZ/A	A	50.5
METRIBUZIN	0.5 LB/A	A	
ENLIST DUO	40 FL OZ/A	B	
WARRANT	3 PT/A	B	
39t73e			
5 ENLIST DUO	40 FL OZ/A	A	47.1
METRIBUZIN	0.5 LB/A	A	
ENLIST DUO	40 FL OZ/A	B	
WARRANT	3 PT/A	B	
41t07e			
6 ENLIST DUO	40 FL OZ/A	A	48.5
METRIBUZIN	0.5 LB/A	A	
ENLIST DUO	40 FL OZ/A	B	
WARRANT	3 PT/A	B	
48t22e			
LSD P=.05			.
Standard Deviation			.
CV			.
Levene's F			.
Levene's Prob(F)			.
Skewness			-0.0868
Kurtosis			-3.0554

University of Kentucky

SOYBEAN SYSTEMS TRIAL

Trial ID: 20-29 Location: LEXINGTON, KY Trial Year: 2020
 Protocol ID: 20-29 Investigator (Creator): Sara Carter
 Project ID: Study Director: Sara Carter
 Sponsor Contact: Matt Livesay/Glen Murphy

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

AMBTR, Ambrosia trifida, Giant ragweed = US

IPOSS, Ipomoea sp., Morning glory = US

SETFA, Setaria faberi, Giant foxtail = US

Crop Type, Code

C = EPPO species (Bayer) codes

GLXMA, BSOY, Glycine max, Soybean = US

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

PHYSTU = phytotoxicity - stunting

YIELD = yield

MOICON = moisture content

Rating Unit

0-10 = 0-10 index/scale

0-100 = 0-100 index/scale-percent

lb/plot = pounds per plot

% = percent

BU = bushel

Rating Timing

A1 = 1st Assessment According to Trial Schedule

ARM Action Codes

TY1 = $1.075556 \cdot [9] \cdot (100 - [10]) / 87$

University of Kentucky

Industrial Hemp

Trial ID: Hemp2020 Location: LEXINGTON, KY Trial Year: 2020
 Protocol ID: Hemp2020 Investigator (Creator): Sara Carter
 Project ID: Study Director: Sara Carter
 Sponsor Contact: Paul David

Reps: 4 Plots: 16 by 15 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 4 plots; minimum=1.2514 L)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	Weedy Check									101	207	308	410
2	Weed free check									102	208	307	401
3	Sonalan	3	LBA/GAL	EC	2	PT/A	PPI	A	33.33 mL/mx	103	204	305	409
4	Sonalan	3	LBA/GAL	EC	3	PT/A	PPI	A	50.0 mL/mx	104	210	301	405
5	SPARTAN	4		F	4.5	OZ/A	PRE	B	4.687 mL/mx	105	202	310	406
6	SPARTAN	4		F	9	OZ/A	PRE	B	9.375 mL/mx	106	201	311	403
7	DUAL II MAGNUM	7.64		EC	1	PT/A	PRE	B	16.67 mL/mx	107	206	303	408
8	DUAL II MAGNUM	7.64		EC	1.33	PT/A	PRE	B	22.17 mL/mx	108	211	304	402
9	SELECT MAX	0.97		EC	16	OZ/A	POST	C	16.67 mL/mx	109	205	306	411
10	SELECT MAX COC	0.97		EC L	16 1	OZ/A % V/V	POST POST	C C	16.67 mL/mx 20.0 mL/mx	110	209	302	404
11	SELECT MAX NIS	0.97		EC L	16 0.25	OZ/A % V/V	POST POST	C C	16.67 mL/mx 4.999 mL/mx	111	203	309	407

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
104.167	mL	Sonalan	3	LBA/GAL	EC	
17.578	mL	SPARTAN	4		F	
48.542	mL	DUAL II MAGNUM	7.64		EC	
62.500	mL	SELECT MAX	.97		EC	
24.997	mL	COC			L	
6.249	mL	NIS			L	

* 'Per area' calculations based on application amount= 15 GPA, mix size= 2 L (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GPA, mix size= 2 L.

General Trial Information

Study Director: Sara Carter **Title:** Research Specialist

Investigator: Sara Carter **Title:** Research Specialist

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

ARM Trial Created On: 6-1-2020

Initiation Date: 6-3-2020

Completion Date: 10-20-2020

University of Kentucky

Trial Location

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

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Role: STYDIR study director
Study Director: Sara Carter **Title:** Research Specialist
Organization: University of Kentucky
Address 1: 105 Plant Science Building
City: Lexington, KY **E-mail:** sara.carter@uky.edu
Postal Code: 40546-0312

Role: INVEST investigator
Investigator: Sara Carter **Title:** Research Specialist
Organization: UNIVERSITY OF KENTUCKY
Address 1: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-559-6710 **Mobile No.:** 859-559-6710
City: LEXINGTON, KY **E-mail:** sara.carter@uky.edu
Postal Code: 40546-0312

Role: SPONSR sponsor
Sponsor: Paul David

Crop Description

Crop 1: C CNISS Cannabis sp. Hemp

Stage Scale: BBCH

Variety: BaOx
Attributes: clone
Planting Date: 6-4-2020 **Planting Rate:** 20 P/PLOT
Rows per Plot: 2 **Planting Method:** TRAMAC transplanted - machine
Row Spacing: 30 IN **Planting Equipment:** MT transplanter, mechanical
Soil Temperature: 71 F **Seed Bed:** SMOOTH smooth
Harvest Date: 10-9-2020 **Soil Moisture:** GOOD good
Harvest Equipment: Hand

Crop 2: C CNISS Cannabis sp. Hemp

Stage Scale: BBCH

Variety: X95
Planting Date: 6-4-2020 **Planting Rate:** 30 LB/A
Depth: 0.25 IN
Rows per Plot: 6 **Planting Method:** DRILLE drilled
Row Spacing: 15 IN **Planting Equipment:** PD plot drilling machine
Soil Temperature: 71 F **Seed Bed:** SMOOTH smooth
Emergence Date: 6-8-2020 **Soil Moisture:** GOOD good

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Pest Description

Pest 1 Type: W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed **Stage Scale:** BBCH
Crop: 1 CNISS

Pest 2 Type: W **Code:** IPOSS Ipomoea sp.
Common Name: Morning glory **Stage Scale:** BBCH
Crop: 1 CNISS

Pest 3 Type: W **Code:** DIGSA Digitaria sanguinalis
Common Name: large crabgrass **Stage Scale:** BBCH

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

Site and Design

Treated Plot Width: 16 FT **Site Type:** FIELD field
Treated Plot Length: 15 FT
Treated Plot Area: 240.0 FT2 **Treatments:** 11 **Tillage Type:** CONTIL conventional-till
Replications: 4 **Study Design:** RACOB� Randomized Complete Block (RCB)

Soil Description

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

Weather Conditions

Overall Moisture Conditions: WEWEDR wet-wet-dry
Closest Weather Station: Spindletop **Distance:** 1.25 mi

Application Description

	A	B	C
Application Date	6-3-2020	6-3-2020	7-2-2020
Appl. Start Time	7:30 AM	7:45 AM	2:30 PM
Appl. Stop Time	7:45 AM	8:15 AM	2:45 PM
Application Method	SPRINC	SPRAY	SPRAY
Application Timing	PPI	PRE	POST
Application Placement	BROSOI	BROSOI	BROFOL
Applied By	SARA	SARA	SARA
Air Temperature Start, Stop	72 F	73 F	87 F
% Relative Humidity Start, Stop	50	50	45
Wind Velocity+Dir. Start	3 MPH SW	3 MPH SW	5 MPH ENE
Soil Temperature	70 F	70 F	73 F
Soil Moisture	NORMAL	NORMAL	WET
Soil Surface Condition	SMOOTH	SMOOTH	SMOOTH
% Cloud Cover	10	10	50
Next Moisture Occurred On	6-4-2020	6-4-2020	7-6-2020

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Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale	CNISS BDIC	CNISS BDIC	CNISS BDIC
Height Average			10 IN
Crop 2 Code, BBCH Scale	CNISS BDIC	CNISS BDIC	CNISS BDIC
Days after Emergence	-5	-5	24
Height Average			6 IN

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale	AMBTR W BBCH	AMBTR W BBCH	AMBTR W BBCH
Height Average			4 IN
Crop Part Attacked, Code	CNISS	CNISS	CNISS
Pest 2 Code, Type, Scale	IPOSS W BBCH	IPOSS W BBCH	IPOSS W BBCH
Height Average			2 IN
Crop Part Attacked, Code	CNISS	CNISS	CNISS
Pest 3 Code, Type, Scale	DIGSA W BBCH	DIGSA W BBCH	DIGSA W BBCH
Height Average			3 IN
Pest 4 Code, Type, Scale	SETFA W BBCH	SETFA W BBCH	SETFA W BBCH
Height Average			6 IN

Application Equipment

	A	B	C
Appl. Equipment	BACKPACK	BACKPACK	BACKPACK
Equipment Type	BELSPR	BELSPR	BELSPR
Operation Pressure	30 PSI	30 PSI	30 PSI
Nozzle Type	FLAT FAN	FLAT FAN	FLAT FAN
Nozzle Size	8002 DG	8002 DG	8002 DG
Nozzle Spacing	20 IN	20 IN	20 IN
Boom ID	5-TIP	5-TIP	5-TIP
Boom Length	8.5 FT	8.5 FT	8.5 FT
Boom Height	30 IN	30 IN	30 IN
Ground Speed	4 MPH	4 MPH	4 MPH
Carrier	WATER	WATER	WATER
Application Amount	15 GPA	15 GPA	15 GPA
Mix Size	2 liters	2 liters	2 liters
Propellant	CO2	CO2	CO2

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Industrial Hemp

Trial ID: Hemp2020 Location: LEXINGTON, KY Trial Year: 2020
 Protocol ID: Hemp2020 Investigator (Creator): Sara Carter
 Project ID: Study Director: Sara Carter
 Sponsor Contact: Paul David

Pest Type	C CNISS		W Weed	W Weed	W Weed	W Weed	C CNISS		W Weed											
Pest Code	Cannabis sp.		AMBTR	IPOSS	DIGSA	SETFA	Cannabis sp.		AMBTR											
Pest Name	Hemp		Giant ragweed	Morning glory	large crabgrass	Giant foxtail	Hemp		Giant ragweed											
Crop Type, Code	Hemp						Hemp													
Crop Scientific Name	Cannabis sp.						Cannabis sp.													
Crop Name	Hemp						Hemp													
Rating Date	6-19-2020	6-19-2020	6-19-2020	6-19-2020	6-19-2020	6-19-2020	7-2-2020	7-2-2020	7-2-2020											
Part Rated	PLANT C	PLANT C					PLANT C	PLANT C												
Rating Type	PHYGEN	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN	CONTRO											
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100											
Number of Subsamples	1	1	1	1	1	1	1	1	1											
Rating Timing	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP											
Days After First/Last Applic.	16 16	16 16	16 16	16 16	16 16	16 16	29 29	29 29	29 29											
Trt-Eval Interval	16 DA-A	16 DA-A					29 DA-A	29 DA-A												
Days After Emergence																				
ARM Action Codes	AL			AA		AA	AS													
Number of Decimals																				
Trt Treatment	Rate	Appl	1		2		3		4		5		6		7		8		9	
No. Name	Rate	Unit Code Plot	1		2		3		4		5		6		7		8		9	
1 Weedy Check		101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		207	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		308	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		410	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0d	0.0	0.0	0.0	0.0d	0.0d	0.0d	0.0	0.0d	0.0	0.0d	0.0	0.0d	0.0	0.0	0.0	0.0	0.0
2 Weed free check		102	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0
		208	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0
		307	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0
		401	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0
		Mean =	0.0d	0.0	100.0	100.0d	100.0d	100.0d	100.0	100.0	100.0	100.0	0.0d	0.0	0.0	0.0	0.0	0.0	100.0	100.0
3 Sonalan	2 PT/A	A 103	5.0	0.0	50.0	80.0	90.0	80.0	5.0	0.0	60.0									60.0
		204	5.0	0.0	90.0	80.0	90.0	90.0	5.0	0.0	95.0									95.0
		305	0.0	0.0	50.0	60.0	95.0	95.0	0.0	0.0	65.0									65.0
		409	0.0	0.0	90.0	80.0	95.0	95.0	0.0	0.0	90.0									90.0
		Mean =	1.4d	0.0	70.0	75.4d	92.7d	90.0	1.8d	0.0	77.5									77.5
4 Sonalan	3 PT/A	A 104	5.0	0.0	90.0	80.0	75.0	80.0	5.0	0.0	90.0									90.0
		210	30.0	0.0	50.0	90.0	80.0	75.0	10.0	0.0	65.0									65.0
		301	20.0	5.0	40.0	80.0	90.0	85.0	10.0	5.0	50.0									50.0
		405	5.0	0.0	80.0	80.0	90.0	85.0	5.0	0.0	85.0									85.0
		Mean =	11.4d	1.3	65.0	82.8d	84.3d	81.3	7.3d	1.3	72.5									72.5
5 SPARTAN	4.5 OZ/A	B 105	0.0	0.0	80.0	85.0	85.0	80.0	0.0	0.0	80.0									80.0
		202	0.0	0.0	80.0	90.0	85.0	85.0	0.0	0.0	80.0									80.0
		310	5.0	0.0	95.0	90.0	60.0	55.0	5.0	0.0	95.0									95.0
		406	5.0	0.0	80.0	40.0	60.0	65.0	5.0	0.0	80.0									80.0
		Mean =	1.4d	0.0	83.8	78.5d	73.5d	71.3	1.8d	0.0	83.8									83.8

d=Means are reported in de-transformed data units

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Pest Type			W Weed AMBTR	W Weed IPOSS	W Weed DIGSA	W Weed SETFA			W Weed AMBTR		
Pest Code			Giant ragweed	Morning glory	large crabgrass	Giant foxtail			Giant ragweed		
Pest Name											
Crop Type, Code	C CNISS	C CNISS									
Crop Scientific Name	Cannabis sp.	Cannabis sp.									
Crop Name	Hemp	Hemp									
Rating Date	6-19-2020	6-19-2020	6-19-2020	6-19-2020	6-19-2020	6-19-2020	6-19-2020	7-2-2020	7-2-2020		
Part Rated	PLANT C	PLANT C						PLANT C	PLANT C		
Rating Type	PHYGEN	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN		
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Rating Timing	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP		
Days After First/Last Applic.	16 16	16 16	16 16	16 16	16 16	16 16	16 16	29 29	29 29		
Trt-Eval Interval	16 DA-A	16 DA-A						29 DA-A	29 DA-A		
Days After Emergence											
ARM Action Codes	AL			AA		AA		AS			
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7	8	9
6 SPARTAN	9 OZ/A	B 106	0.0	0.0	85.0	95.0	70.0	65.0	0.0	0.0	80.0
		201	0.0	0.0	80.0	90.0	85.0	80.0	0.0	0.0	85.0
		311	0.0	0.0	95.0	95.0	85.0	80.0	0.0	0.0	95.0
		403	5.0	0.0	90.0	95.0	50.0	55.0	5.0	0.0	90.0
		Mean =	0.6d	0.0	87.5	93.9d	73.6d	70.0	0.7d	0.0	87.5
7 DUAL II MAGNUM	1 PT/A	B 107	0.0	0.0	50.0	95.0	85.0	75.0	0.0	0.0	50.0
		206	10.0	0.0	50.0	95.0	85.0	65.0	10.0	0.0	50.0
		303	0.0	0.0	60.0	80.0	95.0	95.0	0.0	0.0	70.0
		408	0.0	0.0	50.0	80.0	90.0	85.0	0.0	0.0	50.0
		Mean =	0.8d	0.0	52.5	88.6d	89.1d	80.0	1.3d	0.0	55.0
8 DUAL II MAGNUM	1.33 PT/A	B 108	0.0	0.0	10.0	90.0	85.0	75.0	0.0	0.0	25.0
		211	50.0	10.0	70.0	90.0	90.0	90.0	15.0	5.0	65.0
		304	5.0	0.0	85.0	70.0	95.0	90.0	5.0	0.0	45.0
		402	20.0	0.0	30.0	90.0	90.0	90.0	10.0	0.0	30.0
		Mean =	8.0d	2.5	48.8	85.8d	90.3d	86.3	6.0d	1.3	41.3
9 SELECT MAX	16 OZ/A	C 109	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		205	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		306	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		411	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0d	0.0	0.0	0.0d	0.0d	0.0	0.0d	0.0	0.0
10 SELECT MAX	16 OZ/A	C 110	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COC	1 % V/V	C 209	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		302	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		404	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0d	0.0	0.0	0.0d	0.0d	0.0	0.0d	0.0	0.0
11 SELECT MAX	16 OZ/A	C 111	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NIS	0.25 % V/V	C 203	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		309	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		407	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0d	0.0	0.0	0.0d	0.0d	0.0	0.0d	0.0	0.0

d=Means are reported in de-transformed data units

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Pest Type	W Weed	W Weed	W Weed			W Weed	W Weed	W Weed	W Weed		
Pest Code	IPOSS	DIGSA	SETFA			AMBTR	IPOSS	DIGSA	SETFA		
Pest Name	Morning glory	large crabgrass	Giant foxtail			Giant ragweed	Morning glory	large crabgrass	Giant foxtail		
Crop Type, Code				C CNISS	C CNISS						
Crop Scientific Name				Cannabis sp.	Cannabis sp.						
Crop Name				Hemp	Hemp						
Rating Date	7-2-2020	7-2-2020	7-2-2020	7-16-2020	7-16-2020	7-16-2020	7-16-2020	7-16-2020	7-16-2020		
Part Rated				PLANT C	PLANT C						
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Rating Timing	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP		
Days After First/Last Applic.	29 29	29 29	29 29	43 14	43 14	43 14	43 14	43 14	43 14		
Trt-Eval Interval				43 DA-A	43 DA-A						
Days After Emergence											
ARM Action Codes		AA						AA			
Number of Decimals											
Trt Treatment	Rate	Appl									
No. Name	Rate Unit	Code Plot	10	11	12	13	14	15	16	17	18
1 Weedy Check			101 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			207 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			308 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			410 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			Mean = 0.0	0.0d	0.0	0.0	0.0	0.0	0.0	0.0d	0.0
2 Weed free check			102 100.0	100.0	100.0	0.0	0.0	100.0	100.0	100.0	100.0
			208 100.0	100.0	100.0	0.0	0.0	100.0	100.0	100.0	100.0
			307 100.0	100.0	100.0	0.0	0.0	100.0	100.0	100.0	100.0
			401 100.0	100.0	100.0	0.0	0.0	100.0	100.0	100.0	100.0
			Mean = 100.0	100.0d	100.0	0.0	0.0	100.0	100.0	100.0d	100.0
3 Sonalan	2 PT/A	A	103 80.0	85.0	80.0	5.0	0.0	45.0	65.0	85.0	80.0
			204 80.0	80.0	90.0	5.0	0.0	55.0	65.0	80.0	90.0
			305 60.0	85.0	95.0	0.0	0.0	45.0	60.0	85.0	95.0
			409 80.0	85.0	95.0	0.0	0.0	55.0	65.0	85.0	95.0
			Mean = 75.0	83.8d	90.0	2.5	0.0	50.0	63.8	83.8d	90.0
4 Sonalan	3 PT/A	A	104 80.0	65.0	80.0	5.0	0.0	55.0	65.0	65.0	80.0
			210 90.0	80.0	75.0	5.0	0.0	45.0	65.0	80.0	75.0
			301 80.0	85.0	85.0	5.0	0.0	35.0	60.0	85.0	85.0
			405 80.0	80.0	85.0	5.0	0.0	45.0	50.0	80.0	85.0
			Mean = 82.5	77.9d	81.3	5.0	0.0	45.0	60.0	77.9d	81.3
5 SPARTAN	4.5 OZ/A	B	105 75.0	85.0	80.0	0.0	0.0	45.0	55.0	85.0	80.0
			202 70.0	80.0	75.0	0.0	0.0	45.0	50.0	80.0	75.0
			310 90.0	60.0	55.0	5.0	0.0	55.0	55.0	60.0	55.0
			406 40.0	60.0	65.0	5.0	0.0	45.0	40.0	60.0	65.0
			Mean = 68.8	72.0d	68.8	2.5	0.0	47.5	50.0	72.0d	68.8

d=Means are reported in de-transformed data units

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Pest Type Pest Code Pest Name Crop Type, Code Crop Scientific Name Crop Name Rating Date Part Rated Rating Type Rating Unit Number of Subsamples Rating Timing Days After First/Last Applic. Trt-Eval Interval Days After Emergence ARM Action Codes Number of Decimals	W Weed IPOSS Morning glory	W Weed DIGSA large crabgrass	W Weed SETFA Giant foxtail			W Weed AMBTR Giant ragweed	W Weed IPOSS Morning glory	W Weed DIGSA large crabgrass	W Weed SETFA Giant foxtail
	7-2-2020	7-2-2020	7-2-2020	C CNISS Cannabis sp. Hemp	C CNISS Cannabis sp. Hemp	7-16-2020	7-16-2020	7-16-2020	7-16-2020
	CONTRO	CONTRO	CONTRO	PLANT C PHYGEN	PLANT C PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO
	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100
	1	1	1	1	1	1	1	1	1
	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP
	29 29	29 29	29 29	43 14 43 DA-A	43 14 43 DA-A	43 14	43 14	43 14	43 14
		AA						AA	
Trt Treatment No. Name Rate Appl Code Plot	10	11	12	13	14	15	16	17	18
6 SPARTAN 9 OZ/A B 106 201 311 403 Mean =	95.0 65.0 95.0 95.0 87.5	70.0 65.0 85.0 50.0 68.2d	65.0 55.0 80.0 55.0 63.8	0.0 0.0 0.0 5.0 1.3	0.0 0.0 0.0 0.0 0.0	45.0 45.0 45.0 55.0 47.5	65.0 65.0 60.0 60.0 62.5	70.0 65.0 85.0 50.0 68.2d	65.0 55.0 80.0 55.0 63.8
7 DUAL II MAGNUM 1 PT/A B 107 206 303 408 Mean =	95.0 95.0 80.0 80.0 87.5	85.0 85.0 95.0 90.0 89.1d	75.0 65.0 95.0 85.0 80.0	0.0 5.0 0.0 0.0 1.3	0.0 0.0 0.0 0.0 0.0	50.0 50.0 60.0 50.0 52.5	65.0 60.0 70.0 65.0 65.0	85.0 85.0 95.0 90.0 89.1d	75.0 65.0 95.0 85.0 80.0
8 DUAL II MAGNUM 1.33 PT/A B 108 211 304 402 Mean =	90.0 90.0 70.0 90.0 85.0	85.0 90.0 95.0 90.0 90.3d	75.0 90.0 90.0 90.0 86.3	0.0 5.0 0.0 5.0 2.5	0.0 5.0 0.0 0.0 1.3	25.0 45.0 45.0 30.0 36.3	65.0 65.0 65.0 65.0 65.0	85.0 90.0 95.0 90.0 90.3d	75.0 90.0 90.0 90.0 86.3
9 SELECT MAX 16 OZ/A C 109 205 306 411 Mean =	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0d	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	85.0 85.0 85.0 85.0 85.0d	85.0 85.0 85.0 85.0 85.0
10 SELECT MAX COC 16 OZ/A C 1 % V/V C 110 209 302 404 Mean =	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0d	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	85.0 85.0 85.0 85.0 85.0d	85.0 85.0 85.0 85.0 85.0
11 SELECT MAX NIS 16 OZ/A C 0.25 % V/V C 111 203 309 407 Mean =	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0d	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	85.0 85.0 85.0 85.0 85.0d	85.0 85.0 85.0 85.0 85.0

d=Means are reported in de-transformed data units

University of Kentucky

Pest Type			W Weed AMBTR	W Weed IPOSS	W Weed DIGSA	W Weed SETFA			
Pest Code			Giant ragweed	Morning glory	large crabgrass	Giant foxtail			
Pest Name									
Crop Type, Code	C CNISS	C CNISS							
Crop Scientific Name	Cannabis sp.	Cannabis sp.							
Crop Name	Hemp	Hemp							
Rating Date	7-30-2020	7-30-2020	7-30-2020	7-30-2020	7-30-2020	7-30-2020			
Part Rated	PLANT C	PLANT C							
Rating Type	PHYGEN	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100			
Number of Subsamples	1	1	1	1	1	1	1		
Rating Timing	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP			
Days After First/Last Applic.	57 28	57 28	57 28	57 28	57 28	57 28			
Trt-Eval Interval	57 DA-A	57 DA-A							
Days After Emergence									
ARM Action Codes					AA				
Number of Decimals									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	19	20	21	22	23	24	25
1 Weedy Check		101	0.0	0.0	0.0	0.0	0.0	0.0	
		207	0.0	0.0	0.0	0.0	0.0	0.0	
		308	0.0	0.0	0.0	0.0	0.0	0.0	
		410	0.0	0.0	0.0	0.0	0.0	0.0	
		Mean =	0.0	0.0	0.0	0.0	0.0d	0.0	
2 Weed free check		102	0.0	0.0	100.0	100.0	100.0	100.0	
		208	0.0	0.0	100.0	100.0	100.0	100.0	
		307	0.0	0.0	100.0	100.0	100.0	100.0	
		401	0.0	0.0	100.0	100.0	100.0	100.0	
		Mean =	0.0	0.0	100.0	100.0	100.0d	100.0	
3 Sonalan	2 PT/A	A 103	0.0	0.0	45.0	65.0	85.0	80.0	
		204	0.0	0.0	55.0	65.0	80.0	90.0	
		305	0.0	0.0	45.0	60.0	85.0	95.0	
		409	0.0	0.0	55.0	65.0	85.0	95.0	
		Mean =	0.0	0.0	50.0	63.8	83.8d	90.0	
4 Sonalan	3 PT/A	A 104	0.0	0.0	55.0	65.0	65.0	80.0	
		210	0.0	0.0	45.0	65.0	80.0	75.0	
		301	0.0	0.0	35.0	60.0	85.0	85.0	
		405	0.0	0.0	45.0	50.0	80.0	85.0	
		Mean =	0.0	0.0	45.0	60.0	77.9d	81.3	
5 SPARTAN	4.5 OZ/A	B 105	0.0	0.0	45.0	55.0	85.0	80.0	
		202	0.0	0.0	45.0	50.0	80.0	75.0	
		310	0.0	0.0	55.0	55.0	60.0	55.0	
		406	0.0	0.0	45.0	40.0	60.0	65.0	
		Mean =	0.0	0.0	47.5	50.0	72.0d	68.8	

d=Means are reported in de-transformed data units

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Pest Type								
Pest Code			W Weed AMBTR	W Weed IPOSS	W Weed DIGSA	W Weed SETFA		
Pest Name			Giant ragweed	Morning glory	large crabgrass	Giant foxtail		
Crop Type, Code	C CNISS	C CNISS						
Crop Scientific Name	Cannabis sp.	Cannabis sp.						
Crop Name	Hemp	Hemp						
Rating Date	7-30-2020	7-30-2020	7-30-2020	7-30-2020	7-30-2020	7-30-2020		
Part Rated	PLANT C	PLANT C						
Rating Type	PHYGEN	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100		
Number of Subsamples	1	1	1	1	1	1		1
Rating Timing	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP		
Days After First/Last Applic.	57 28	57 28	57 28	57 28	57 28	57 28		
Trt-Eval Interval	57 DA-A	57 DA-A						
Days After Emergence								
ARM Action Codes					AA			
Number of Decimals								
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	19	20	21	22	23	24
6 SPARTAN	9 OZ/A	B 106	0.0	0.0	45.0	65.0	70.0	65.0
		201	0.0	0.0	45.0	65.0	65.0	55.0
		311	0.0	0.0	45.0	60.0	85.0	80.0
		403	0.0	0.0	55.0	60.0	50.0	55.0
		Mean =	0.0	0.0	47.5	62.5	68.2d	63.8
7 DUAL II MAGNUM	1 PT/A	B 107	0.0	0.0	50.0	65.0	85.0	75.0
		206	0.0	0.0	50.0	60.0	85.0	65.0
		303	0.0	0.0	60.0	70.0	95.0	95.0
		408	0.0	0.0	50.0	65.0	90.0	85.0
		Mean =	0.0	0.0	52.5	65.0	89.1d	80.0
8 DUAL II MAGNUM	1.33 PT/A	B 108	0.0	0.0	25.0	65.0	90.0	75.0
		211	0.0	0.0	45.0	65.0	90.0	90.0
		304	0.0	0.0	45.0	65.0	95.0	90.0
		402	0.0	0.0	30.0	65.0	90.0	90.0
		Mean =	0.0	0.0	36.3	65.0	91.4d	86.3
9 SELECT MAX	16 OZ/A	C 109	0.0	0.0	0.0	0.0	95.0	95.0
		205	0.0	0.0	0.0	0.0	95.0	95.0
		306	0.0	0.0	0.0	0.0	95.0	95.0
		411	0.0	0.0	0.0	0.0	95.0	95.0
		Mean =	0.0	0.0	0.0	0.0	95.0d	95.0
10 SELECT MAX	16 OZ/A	C 110	0.0	0.0	0.0	0.0	95.0	95.0
COC	1 % V/V	C 209	0.0	0.0	0.0	0.0	95.0	95.0
		302	0.0	0.0	0.0	0.0	95.0	95.0
		404	0.0	0.0	0.0	0.0	95.0	95.0
		Mean =	0.0	0.0	0.0	0.0	95.0d	95.0
11 SELECT MAX	16 OZ/A	C 111	0.0	0.0	0.0	0.0	95.0	95.0
NIS	0.25 % V/V	C 203	0.0	0.0	0.0	0.0	95.0	95.0
		309	0.0	0.0	0.0	0.0	95.0	95.0
		407	0.0	0.0	0.0	0.0	95.0	95.0
		Mean =	0.0	0.0	0.0	0.0	95.0d	95.0

d=Means are reported in de-transformed data units

University of Kentucky

Industrial Hemp

Trial ID: Hemp2020 Location: LEXINGTON, KY Trial Year: 2020
 Protocol ID: Hemp2020 Investigator (Creator): Sara Carter
 Project ID: Study Director: Sara Carter
 Sponsor Contact: Paul David

Pest Type
 W, Weed = Weed or volunteer crop
Pest Code
 AMBTR, Ambrosia trifida, Giant ragweed = US
 IPOSS, Ipomoea sp., Morning glory = US
 DIGSA, Digitaria sanguinalis, large crabgrass = US
 SETFA, Setaria faberi, Giant foxtail = US
Crop Type, Code
 C = EPPO species (Bayer) codes
 CNISS, BDIC, Cannabis sp., Hemp = US
Part Rated
 PLANT = plant
 C = Crop is Part Rated
Rating Type
 PHYGEN = phytotoxicity - general / injury
 CONTRO = control / burndown or knockdown
Rating Unit
 0-100 = 0-100 index/scale-percent
ARM Action Codes
 AL = Automatic log transformation of X+1
 AA = Automatic arcsine square root % transformation
 AS = Automatic square root transformation of X+0.5

Pest Type			W Weed AMBTR Giant ragweed	W Weed IPOSS Morning glory	W Weed DIGSA large crabgrass	W Weed SETFA Giant foxtail			W Weed AMBTR Giant ragweed	W Weed IPOSS Morning glory		
Pest Code	C CNISS	C CNISS					C CNISS	C CNISS				
Pest Name	Cannabis sp.	Cannabis sp.					Cannabis sp.	Cannabis sp.				
Crop Type, Code												
Crop Scientific Name	Hemp	Hemp					Hemp	Hemp				
Rating Date	6-19-2020	6-19-2020	6-19-2020	6-19-2020	6-19-2020	6-19-2020	7-2-2020	7-2-2020	7-2-2020	7-2-2020		
Part Rated	PLANT C	PLANT C					PLANT C	PLANT C				
Rating Type	PHYGEN	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN	CONTRO	CONTRO		
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100		
Number of Subsamples	1	1	1	1	1	1	1	1	1	1		
Rating Timing	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP		
Days After First/Last Applic.	16 16	16 16	16 16	16 16	16 16	16 16	29 29	29 29	29 29	29 29		
Trt-Eval Interval	16 DA-A	16 DA-A					29 DA-A	29 DA-A				
Days After Emergence												
ARM Action Codes	AL			AA	AA		AS					
Number of Decimals												
Trt Treatment	Rate	Appl										
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8	9	10
1 Weedy Check			0.0 c	0.0 a	0.0 d	0.0 d	0.0 d	0.0 d	0.0 c	0.0 a	0.0 d	0.0 c
2 Weed free check			0.0 c	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a	0.0 c	0.0 a	100.0 a	100.0 a
3 Sonalan	2 PT/A	A	1.4 bc	0.0 a	70.0 bc	75.4 c	92.7 b	90.0 ab	1.8 abc	0.0 a	77.5 b	75.0 b
4 Sonalan	3 PT/A	A	11.4 a	1.3 a	65.0 bc	82.8 bc	84.3 bc	81.3 bc	7.3 a	1.3 a	72.5 b	82.5 ab
5 SPARTAN	4.5 OZ/A	B	1.4 bc	0.0 a	83.8 ab	78.5 c	73.5 c	71.3 c	1.8 abc	0.0 a	83.8 ab	68.8 b
6 SPARTAN	9 OZ/A	B	0.6 c	0.0 a	87.5 ab	93.9 b	73.6 c	70.0 c	0.7 bc	0.0 a	87.5 ab	87.5 ab
7 DUAL II MAGNUM	1 PT/A	B	0.8 bc	0.0 a	52.5 c	88.6 bc	89.1 b	80.0 bc	1.3 abc	0.0 a	55.0 c	87.5 ab
8 DUAL II MAGNUM	1.33 PT/A	B	8.0 ab	2.5 a	48.8 c	85.8 bc	90.3 b	86.3 b	6.0 ab	1.3 a	41.3 c	85.0 ab

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Pest Type			W Weed AMBTR	W Weed IPOSS	W Weed DIGSA	W Weed SETFA			W Weed AMBTR	W Weed IPOSS		
Pest Code			Giant ragweed	Morning glory	large crabgrass	Giant foxtail			Giant ragweed	Morning glory		
Pest Name												
Crop Type, Code	C CNISS	C CNISS										
Crop Scientific Name	Cannabis sp.	Cannabis sp.										
Crop Name	Hemp	Hemp										
Rating Date	6-19-2020	6-19-2020	6-19-2020	6-19-2020	6-19-2020	6-19-2020	7-2-2020	7-2-2020	7-2-2020	7-2-2020		
Part Rated	PLANT C	PLANT C					PLANT C	PLANT C				
Rating Type	PHYGEN	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN	CONTRO	CONTRO		
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100		
Number of Subsamples	1	1	1	1	1	1	1	1	1	1		
Rating Timing	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP		
Days After First/Last Applic.	16 16	16 16	16 16	16 16	16 16	16 16	29 29	29 29	29 29	29 29		
Trt-Eval Interval	16 DA-A	16 DA-A					29 DA-A	29 DA-A				
Days After Emergence												
ARM Action Codes	AL			AA		AA		AS				
Number of Decimals												
Trt Treatment	Rate	Appl										
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8	9	10
9 SELECT MAX	16 OZ/A	C	0.0 c	0.0 a	0.0 d	0.0 d	0.0 d	0.0 d	0.0 c	0.0 a	0.0 d	0.0 c
10 SELECT MAX COC	16 OZ/A 1 % V/V	C C	0.0 c	0.0 a	0.0 d	0.0 d	0.0 d	0.0 d	0.0 c	0.0 a	0.0 d	0.0 c
11 SELECT MAX NIS	16 OZ/A 0.25 % V/V	C C	0.0 c	0.0 a	0.0 d	0.0 d	0.0 d	0.0 d	0.0 c	0.0 a	0.0 d	0.0 c
LSD P=.05	3.67 - 8.68		2.47	22.16	2.31 - 11.78	1.66 - 10.49	11.21	3.57 - 4.86	1.56	15.29	13.86	
Standard Deviation	0.36t		1.71	15.35	6.06t	5.12t	7.77	0.75t	1.08	10.59	9.60	
CV	121.94t		500.96	33.27	13.55t	11.46t	14.76	57.0t	476.79	22.51	18.01	
Levene's F	3.246		0.92	20.929	1.366	8.407	5.363	2.449	0.00	5.668	1.362	
Levene's Prob(F)	0.005*		0.527	0.001*	0.239	0.001*	0.001*	0.026*	0.00*	0.001*	0.241	
Skewness	1.4068*		5.2368*	-0.0371	-0.3776	-0.3814	-0.4044	1.2563*	4.5199*	-0.0895	-0.3988	
Kurtosis	0.762		28.3454*	-1.7237*	-1.675*	-1.6697*	-1.7087*	0.1058	19.3061*	-1.6977*	-1.7351*	
Replicate F	1.445		0.714	0.312	1.532	0.860	0.537	1.280	0.645	0.439	0.467	
Replicate Prob(F)	0.2492		0.5512	0.8166	0.2265	0.4726	0.6605	0.2991	0.5921	0.7267	0.7078	
Treatment F	4.641		0.896	26.343	143.573	201.834	119.842	4.100	0.871	58.179	80.083	
Treatment Prob(F)	0.0005		0.5480	0.0001	0.0001	0.0001	0.0001	0.0013	0.5690	0.0001	0.0001	

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Pest Type	W Weed DIGSA	W Weed SETFA			W Weed AMBTR	W Weed IPOSS	W Weed DIGSA	W Weed SETFA					
Pest Code	large crabgrass	Giant foxtail			Giant ragweed	Morning glory	large crabgrass	Giant foxtail					
Pest Name													
Crop Type, Code			C CNISS	C CNISS					C CNISS	C CNISS			
Crop Scientific Name			Cannabis sp.	Cannabis sp.					Cannabis sp.	Cannabis sp.			
Crop Name			Hemp	Hemp					Hemp	Hemp			
Rating Date	7-2-2020	7-2-2020	7-16-2020	7-16-2020	7-16-2020	7-16-2020	7-16-2020	7-16-2020	7-30-2020	7-30-2020			
Part Rated			PLANT C	PLANT C					PLANT C	PLANT C			
Rating Type	CONTRO	CONTRO	PHYGEN	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN			
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100			
Number of Subsamples	1	1	1	1	1	1	1	1	1	1			
Rating Timing	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP			
Days After First/Last Applic.	29 29	29 29	43 14	43 14	43 14	43 14	43 14	43 14	57 28	57 28			
Trt-Eval Interval			43 DA-A	43 DA-A					57 DA-A	57 DA-A			
Days After Emergence													
ARM Action Codes	AA						AA						
Number of Decimals													
Trt No.	Treatment Name	Rate	Appl Code	11	12	13	14	15	16	17	18	19	20
Rate Unit													
1	Weedy Check			0.0 e	0.0 d	0.0 b	0.0 a	0.0 d	0.0 d	0.0 e	0.0 d	0.0 a	0.0 a
2	Weed free check			100.0 a	100.0 a	0.0 b	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a	0.0 a	0.0 a
3	Sonalan	2 PT/A	A	83.8 bc	90.0 ab	2.5 ab	0.0 a	50.0 b	63.8 b	83.8 bc	90.0 ab	0.0 a	0.0 a
4	Sonalan	3 PT/A	A	77.9 cd	81.3 b	5.0 a	0.0 a	45.0 b	60.0 b	77.9 bcd	81.3 b	0.0 a	0.0 a
5	SPARTAN	4.5 OZ/A	B	72.0 d	68.8 c	2.5 ab	0.0 a	47.5 b	50.0 c	72.0 cd	68.8 c	0.0 a	0.0 a
6	SPARTAN	9 OZ/A	B	68.2 d	63.8 c	1.3 ab	0.0 a	47.5 b	62.5 b	68.2 d	63.8 c	0.0 a	0.0 a
7	DUAL II MAGNUM	1 PT/A	B	89.1 b	80.0 b	1.3 ab	0.0 a	52.5 b	65.0 b	89.1 b	80.0 b	0.0 a	0.0 a
8	DUAL II MAGNUM	1.33 PT/A	B	90.3 b	86.3 b	2.5 ab	1.3 a	36.3 c	65.0 b	90.3 b	86.3 ab	0.0 a	0.0 a

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Pest Type	W Weed DIGSA large crabgrass	W Weed SETFA Giant foxtail	C CNISS Cannabis sp. Hemp	C CNISS Cannabis sp. Hemp	W Weed AMBTR Giant ragweed	W Weed IPOSS Morning glory	W Weed DIGSA large crabgrass	W Weed SETFA Giant foxtail	C CNISS Cannabis sp. Hemp	C CNISS Cannabis sp. Hemp		
Pest Code												
Pest Name												
Crop Type, Code												
Crop Scientific Name												
Crop Name												
Rating Date	7-2-2020	7-2-2020	7-16-2020	7-16-2020	7-16-2020	7-16-2020	7-16-2020	7-16-2020	7-30-2020	7-30-2020		
Part Rated												
Rating Type	CONTRO	CONTRO	PLANT C PHYGEN	PLANT C PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PLANT C PHYGEN	PLANT C PHYGEN		
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100		
Number of Subsamples	1	1	1	1	1	1	1	1	1	1		
Rating Timing	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP	2 WAP		
Days After First/Last Applic.	29 29	29 29	43 14	43 14	43 14	43 14	43 14	43 14	57 28	57 28		
Trt-Eval Interval			43 DA-A	43 DA-A					57 DA-A	57 DA-A		
Days After Emergence												
ARM Action Codes	AA						AA					
Number of Decimals												
Trt Treatment	Rate	Appl										
No. Name	Rate Unit	Code	11	12	13	14	15	16	17	18	19	20
9 SELECT MAX	16 OZ/A	C	0.0 e	0.0 d	0.0 b	0.0 a	0.0 d	0.0 d	85.0 bc	85.0 ab	0.0 a	0.0 a
10 SELECT MAX COC	16 OZ/A 1 % V/V	C C	0.0 e	0.0 d	0.0 b	0.0 a	0.0 d	0.0 d	85.0 bc	85.0 ab	0.0 a	0.0 a
11 SELECT MAX NIS	16 OZ/A 0.25 % V/V	C C	0.0 e	0.0 d	0.0 b	0.0 a	0.0 d	0.0 d	85.0 bc	85.0 ab	0.0 a	0.0 a
LSD P=.05	1.33 - 10.17		10.33	2.68	1.09	7.55	4.81	1.33 - 10.17	10.33	.	.	.
Standard Deviation	4.58t		7.15	1.86	0.75	5.23	3.33	4.58t	7.15	0.00	0.00	0.00
CV	10.61t		13.8	136.15	663.33	15.18	7.86	7.45t	9.53	0.0	0.0	0.0
Levene's F	4.204		3.538	4.50		3.175	2.729	4.204	3.538	0.00	0.00	0.00
Levene's Prob(F)	0.001*		0.003*	0.001*		0.006*	0.015*	0.001*	0.003*	0.00*	0.00*	0.00*
Skewness	-0.3381		-0.3698	1.057*	6.6333*	0.4609	-0.1472	-1.94*	-2.093*	.	.	.
Kurtosis	-1.6219*		-1.7005*	-0.927	44.0*	-0.3521	-1.3472	3.8349*	3.7974*	.	.	.
Replicate F	1.069		0.919	0.879	1.000	0.298	1.826	1.069	0.919	0.000	0.000	0.000
Replicate Prob(F)	0.3770		0.4438	0.4629	0.4064	0.8264	0.1637	0.3770	0.4438	1.0000	1.0000	1.0000
Treatment F	238.392		139.196	3.066	1.000	147.441	459.799	94.512	55.782	0.000	0.000	0.000
Treatment Prob(F)	0.0001		0.0001	0.0085	0.4654	0.0001	0.0001	0.0001	0.0001	1.0000	1.0000	1.0000

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Pest Type	W Weed	W Weed	W Weed	W Weed			
Pest Code	AMBTR	IPOSS	DIGSA	SETFA			
Pest Name	Giant ragweed	Morning glory	large crabgrass	Giant foxtail			
Crop Type, Code							
Crop Scientific Name							
Crop Name							
Rating Date	7-30-2020	7-30-2020	7-30-2020	7-30-2020			
Part Rated							
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	0-100	0-100	0-100	0-100			
Number of Subsamples	1	1	1	1	1		
Rating Timing	2 WAP	2 WAP	2 WAP	2 WAP			
Days After First/Last Applic.	57 28	57 28	57 28	57 28			
Trt-Eval Interval							
Days After Emergence							
ARM Action Codes			AA				
Number of Decimals							
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code	21	22	23	24	25
1 Weedy Check			0.0 d	0.0 d	0.0 f	0.0 d	
2 Weed free check			100.0 a	100.0 a	100.0 a	100.0 a	
3 Sonalan	2 PT/A	A	50.0 b	63.8 b	83.8 cd	90.0 ab	
4 Sonalan	3 PT/A	A	45.0 b	60.0 b	77.9 de	81.3 b	
5 SPARTAN	4.5 OZ/A	B	47.5 b	50.0 c	72.0 e	68.8 c	
6 SPARTAN	9 OZ/A	B	47.5 b	62.5 b	68.2 e	63.8 c	
7 DUAL II MAGNUM	1 PT/A	B	52.5 b	65.0 b	89.1 bc	80.0 b	
8 DUAL II MAGNUM	1.33 PT/A	B	36.3 c	65.0 b	91.4 bc	86.3 ab	

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Pest Type	W Weed	W Weed	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	DIGSA	SETFA	
Pest Name	Giant ragweed	Morning glory	large crabgrass	Giant foxtail	
Crop Type, Code					
Crop Scientific Name					
Crop Name					
Rating Date	7-30-2020	7-30-2020	7-30-2020	7-30-2020	
Part Rated					
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	
Rating Unit	0-100	0-100	0-100	0-100	
Number of Subsamples	1	1	1	1	1
Rating Timing	2 WAP	2 WAP	2 WAP	2 WAP	
Days After First/Last Applic.	57 28	57 28	57 28	57 28	
Trt-Eval Interval					
Days After Emergence					
ARM Action Codes			AA		
Number of Decimals					
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	21	22	23
9 SELECT MAX	16 OZ/A	C	0.0 d	0.0 d	95.0 b
10 SELECT MAX	16 OZ/A	C	0.0 d	0.0 d	95.0 b
COC	1 % V/V	C			95.0 ab
11 SELECT MAX	16 OZ/A	C	0.0 d	0.0 d	95.0 b
NIS	0.25 % V/V	C			95.0 ab
LSD P=.05	7.55	4.81	1.28 - 9.99	10.33	.
Standard Deviation	5.23	3.33	4.49t	7.15	.
CV	15.18	7.86	6.99t	9.2	.
Levene's F	3.175	2.729	4.272	3.538	.
Levene's Prob(F)	0.006*	0.015*	0.001*	0.003*	.
Skewness	0.4609	-0.1472	-1.9538*	-2.0077*	.
Kurtosis	-0.3521	-1.3472	3.513*	3.367*	.
Replicate F	0.298	1.826	1.064	0.919	
Replicate Prob(F)	0.8264	0.1637	0.3792	0.4438	
Treatment F	147.441	459.799	109.451	62.182	
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	

University of Kentucky

Industrial Hemp

Trial ID: Hemp2020 Location: LEXINGTON, KY Trial Year: 2020
Protocol ID: Hemp2020 Investigator (Creator): Sara Carter
Project ID: Study Director: Sara Carter
Sponsor Contact: Paul David

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

AMBTR, Ambrosia trifida, Giant ragweed = US

IPOSS, Ipomoea sp., Morning glory = US

DIGSA, Digitaria sanguinalis, large crabgrass = US

SETFA, Setaria faberi, Giant foxtail = US

Crop Type Code

C = EPPPO species (Bayer) codes

CNISS, BDIC, Cannabis sp., Hemp = US

Part Rated

PLANT = plant

C = Crop is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

Rating Unit

0-100 = 0-100 index/scale-percent

ARM Action Codes

AL = Automatic log transformation of X+1

AA = Automatic arcsine square root % transformation

AS = Automatic square root transformation of X+0.5