WEED SCIENCE

2013 Annual Research Report

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Introduction

Louisiana can be divided into several areas based on cropping systems, climatic conditions, soil types, and pH. These factors are important in selecting specific herbicides and rates and can directly affect herbicide efficacy, crop safety, and injury to rotational crops. South Louisiana has an abundance of weed species, some not commonly found in other areas of the state. Climatic conditions are favorable for prolific weed growth and subsequent competition with crops. Weed control programs including mechanical cultivation, crop rotation, and herbicides are used, but herbicides serve as the foundation for weed control programs. Steady progress has been made in the development of effective herbicides with crop safety. Research and extension personnel with the LSU AgCenter work cooperatively with agri-chemical companies to evaluate new herbicides and herbicide resistant crops for weed control and crop tolerance.

This progress report summarizes weed research conducted in sugarcane and soybeans during the 2013 growing season. Results of herbicide efficacy and crop tolerance studies are presented. Results are preliminary since evaluation of some of the herbicides is limited. Data presented in this report should not be considered as an endorsement or recommendation of any herbicide and should not be reproduced without permission. Registration by the Environmental Protection Agency is required before any herbicide can be legally used.

Rainfall data for the 2013 growing season are shown in Tables 1 (Ben Hur Research Farm) and 2 (Sugar Research Station). Herbicides and adjuvants evaluated are presented in Table 3. Weed species evaluated for control are presented in Table 4. Specific information on location, soil type, variety, row spacing, treatment date, sprayer type, etc. is presented for each experiment followed by a table of experimental results. Data were summarized and statistically analyzed using Agriculture Research Manager (ARM) by Gylling Data Management, Inc., Brookings, South Dakota. Control and crop injury ratings for all experiments are based on a scale of 0 to 100%, where 0 equals no control or crop injury and 100% equals complete control or crop injury. Injury ratings are based on chlorosis, necrosis, and stand and height reductions. Where appropriate, crop yields were obtained. Soybean yields are adjusted to 13% moisture. Miscellaneous abbreviations used in this report are shown in Table 5.

For additional information concerning research activities presented in this report contact James L. Griffin, School of Plant, Environmental, and Soil Sciences, 104 Sturgis Hall, Baton Rouge, LA 70803, (225) 578-1768, or by e-mail at jgriffin@agcenter.lsu.edu. This report is also available on the LSU AgCenter web site http://www.lsuagcenter.com/en/our_offices/departments/SPESS/Weed+Science/Weed+Science+Annual+Reports.htm

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BASF
DuPont
FMC
Helena Chemical Company
Monsanto Company
Summit Agro USA

Table 1. **Rainfall for the 2013 growing season (March - September) at the Central Research Station, Ben Hur Research Farm, Baton Rouge, LA.**

	Month						
Day	March	April	May	June	July	August	September
	inches						
1	-	0.01	-	-	-	-	-
2	-	0.23	0.98	-	-	0.97	-
3	-	1.34	0.06	-	0.55	-	0.05
4	-	-	-	-	-	-	-
5	-	-	-	-	0.08	-	0.03
6	-	-	-	0.54	-	-	0.14
7	-	-	-	0.01	0.31	-	-
8	-	-	-	0.02	0.01	-	-
9	-	-	-	0.44	0.04	1.20	-
10	0.33	-	3.20	-	-	-	-
11	1.18	0.69	0.76	-	1.26	0.19	-
12	-	0.01	-	-	-	0.01	-
13	-	0.14	-	-	-	3.09	1.89
14	-	1.47	-	-	0.21	0.75	-
15	-	0.04	-	-	0.08	-	-
16	-	-	-	-	0.12	-	-
17	-	-	-	-	-	-	-
18	-	0.33	-	-	0.26	-	-
19	-	0.06	-	0.32	-	-	0.59
20	0.02	-	-	0.63	-	0.61	-
21	-	0.01	-	-	0.30	-	4.36
22	0.01	-	-	1.55	0.15	0.01	-
23	0.01	-	-	-	-	-	-
24	-	2.09	-	0.19	-	-	0.03
25	-	-	-	-	-	0.03	0.01
26	-	-	-	-	0.78	0.29	-
27	-	-	-	-	0.80	0.01	-
28	-	0.33	-	-	-	-	-
29	-	0.01	-	1.06	-	-	-
30	-	0.72	-	-	-	-	0.39
31	1.10		-		-	-	
Total	2.65	7.48	5.00	4.76	4.95	7.16	7.49

Table 2. **Rainfall for the 2013 growing season (March - September) at the Sugar Research Station, St. Gabriel, LA.[1]**

	Month						
Day	March	April	May	June	July	August	September
	inches						
1	-	0.01	-	-	-	-	-
2		0.17	-	-	-	-	-
3		1.30	-	-	-	-	-
4	-	0.02	-	-	-	-	-
5	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-
9		-	-	-	-	-	-
10	0.09	-	-	-	-	-	-
11	0.72	0.87	-	-	-	-	-
12	-	-	-	-	-	-	-
13	-	0.08	-	-	-	-	-
14	-	1.56	-	-	-	-	-
15	-	0.02	-	-	-	-	-
16	-	0.01	-	-	-	-	-
17		-	-	-	-	-	-
18	-	0.41	-	-	-	-	-
19	-	0.02	-	-	-	-	-
20	0.04	-	-	-	-	-	-
21	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-
23	0.01	-	-	-	-	-	-
24	-	1.45	-	-	-	-	-
25	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-
27	-		-	-	-	-	-
28	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-
31	0.81		-		-	-	
Total	1.67	5.92	N/A	N/A	N/A	N/A	N/A

[1]Rainfall data was not available from May through September 2013.

Table 3. **Herbicides and adjuvants evaluated in soybeans and sugarcane.**

Trade name	Common name	Manufacturer
2, 4-D Amine 4	2,4-D dimethylamine salt	Nufarm
2,4-D Ester	2,4-D ester	-
Aatrex	atrazine	Syngenta
Abundit Extra	glyphosate	DuPont
Accent	nicosulfuron	DuPont
Agridex	crop oil concentrate	Helena
Aim	carfentrazone-ethyl	FMC
Anthem	atrazine + pyroxasulfone + fluthiacet-methyl	FMC
Asulox, Asulox XP	asulam	United Phosphorus Inc.
Atrazine	atrazine	DuPont
Authority Elite	sufentrazone + *S*-metolachlor	FMC
Authority MTZ	sulfentrazone + metribuzin	FMC
Bicep II Magnum	metolachlor + atrazine	Syngenta
Boundary	metolachlor + metribuzin	Syngenta
Brash	2,4-D + dicamba	Winfield Solutions
Cadet	fluthiacet	FMC
Callisto	mesotrione	Syngenta
Canopy DF	chlorimuron + metribuzin	DuPont
Canopy EX	chlorimuron-ethyl + tribenuron-methyl	DuPont
Capreno	tembotrione + thiencarbazone-methyl	Bayer Crop Science
Choice	ammonium sulfate	Loveland Products
Cinch	*S*-metolachlor	DuPont

Continued.

Table 3. **Continued.**

Trade name	Common name	Manufacturer
Cinch ATZ	atrazine + *S*-metolachlor	DuPont
Clarity	dicamba	BASF
Classic	chlorimuron-ethyl	DuPont
Command	clomazone	FMC
Corvus	isoxaflutole + thiencarbazone-methyl	Bayer Crop Science
Defol	sodium chlorate	Drexel
Diligent	rimsulfuron + chlorimuron + flumioxazin	DuPont
Direx	diuron	Griffin
Diuron	diuron	Agrisolutions
Distinct	difluenzopyr + dicamba	BASF
Dual Magnum	*S*-metolachlor	Syngenta
Dual II Magnum	*S*-metolachlor	Syngenta
DuPont K4	hexazinone + diuron	Syngenta
Engenia	dicamba	BASF
Enlite	chlorimuron + flumioxazin + thifensulfuron	DuPont
Envive	chlorimuron + flumioxazin + thifensulfuron	DuPont
Envoke	trifloxysulfuron – sodium	Syngenta
Eptam	EPTC	Gowan
Evik	ametryn	Syngenta
Express XP	tribenuron	Dupont
Fierce	flumioxazin + pyroxasulfone	Valent USA
FirstRate	cloransulam	Dow Agrosciences
Flexstar	fomesafen	Syngenta
Flexstar GT	glyphosate + fomesafen	Syngenta

Continued.

Table 3. **Continued.**

Trade name	Common name	Manufacturer
Gangster FR	cloransulam-methyl	FMC
Gangster V	flumioxazin	FMC
Gramoxone	paraquat	Syngenta
Gramoxone Inteon	paraquat	Syngenta
Halex GT	*S*-metolachor + glyphosate + mesotrione	Syngenta
Harmony GT	thifensulfuron	Dupont
Harness Extra	acetochlor + atrazine	Monsanto
Huskie	pyrasulfotole + bromoxinil	Bayer Crop Science
Ignite 280	glufosinate	Bayer Crop Science
Induce	nonionic surfactant	Helena
Karmex	diuron	DuPont
Karmex XP	diuron	DuPont
Latigo	2,4-D + dicamba (acid)	Helena
Laudis	tembotrione	Bayer CropScience
Lexar	*S*-metalochlor + atrazine + mesotrione	Syngenta
Liberty	glufosinate	Bayer CropScience
Lumax	metolachor + atrazine + mesotrione	Syngenta
Metri DF	metribuzin	United Phosphorus Inc.
Metribuzin	metribuzin	MANA,LovelandProducts
Mission	flazasulfuron	Summit Agro
MSO	methylated seed oil	Helena
Nicosulfuron	nicosulfuron	DuPont
Outlook	dimethenamid-P	BASF
Palisade	trinexapac ethyl	Syngenta

Continued.

Table 3. **Continued.**

Trade name	Common name	Manufacturer
Permit	halosulfuron	Gowan
Prefix	metolachlor + fomesafen	Syngenta
Prowl/Prowl H_2O	pendimethalin	BASF
Quest	ammonium sulfate	Helena
Resource	flumiclorac	Valent USA
Rimsulfuron	rimsulfuron	DuPont
Roundup Xtend	glyphosate + dicamba	Monsanto
Roundup OriginalMax	glyphosate	Monsanto
Roundup PowerMax	glyphosate	Monsanto
Roundup WeatherMax	glyphosate	Monsanto
Select 2EC	clethodim	Valent USA
Select Max	clethodim	Valent USA
Sencor	metribuzin	Bayer CropScience
Sequence	glyphosate + metolachlor	Syngenta
Sharpen	saflufenacil	BASF
Sinbar	terbacil	DuPont
SL-160	flazasulfuron	ISK Biosciences
Sodium Chlorate	-	Helena
Spartan	sulfentrazone	FMC
Synchrony XP	chlorimuron + thifensulfuron	Dupont
Touchdown	glyphosate	Syngenta
Touchdown Total	glyphosate	Syngenta
Treflan	trifluralin	Dow AgroSciences

Continued.

Table 3. **Continued.**

Trade name	Common name	Manufacturer
Tricor	metribuzin	United Phosphorus Inc.
Trycera	triclopyr acid	Helena
Ultra Blazer	acifluorfen	United Phosphorus Inc.
Unison	2,4-D acid	Helena
Valor SX	flumioxazin	Valent USA
Valor XLT	flumioxazin + chlorimuron ethyl	Valent USA
Velossa	hexazinone	Helena
Velpar	hexazinone	DuPont
Verdict	saflufenacil + dimethenamid-P	BASF
Vision	dicamba acid	Helena
Warrant	acetochlor (encapsulated)	Monsanto
Weedar 64	2,4-D dimethylamine salt	Nufarm
Weedmaster	2,4-D + dicamba	Nufarm
Xtendimax	dicamba	Monsanto
Yukon	halosulfuron + dicamba	Gowan
Zidua	pyroxasulfone	BASF

Table 4. Bayer codes and Latin names of weed species evaluated.

Common name	WSSA abbreviation	Scientific name
alligatorweed	ALRPH	*Alternanthera philoxeroides* (Mart.) Griseb.
amaranth	AMASS	*Amaranthus* species
annual bluegrass	POAAN	*Poa annua* L.
annual sedge	CYPCP	*Cyperus compressus* L.
barnyardgrass	ECHCG	*Echinochloa crus-galli* (L.) Beauv.
bermudagrass	CYNDA	*Cynodon dactylon* (L.) Pers.
broadleaf signalgrass	BRAPP	*Brachiaria platyphylla* (Griseb.) Nash
browntop millet	PANRA	*Panicum ramosum* (L.) Nguyen
buttercup species	RANSS	*Ranunculus* species
carpetweed	MOLVE	*Mollugo verticillata* L.
Carolina geranium	GERCA	*Geranium carolinianum* L.
common purslane	POROL	*Portulacca oleracea* L.
curly dock	RUMCR	*Rumex crispus* L.
cutleaf eveningprimrose	OEOLA	*Oenothera laciniata* Hill
cutleaf groundcherry	PHYAN	*Physalis angulata* L.
entireleaf morningglory	IPOHG	*Ipomoea hederacea* var. *integriuscula* Gray
fall panicum	PANDI	*Panicum dichotomiflorum* Michx.
foxtail	SETSP	*Setaria* species
goosegrass	ELEIN	*Eluecine indica*
groundcherry	PHYSS	*Physalis species*
henbit	LAMAM	*Lamium amplexicaule* L.
hemp sesbania	SEBEX	*Sesbania exaltata* (Raf.) Rybd. ex A. W. Hill
hophornbeam copperleaf	ACCOS	*Acalypha ostryifolia* Riddell
itchgrass	ROOEX	*Rottboellia cochinchinensis* (Lour.) Clayton

Continued.

Table 4. **Continued.**

Common name	WSSA abbreviation	Scientific name
ivyleaf morningglory	IPOHE	*Ipomoea hederacea* (L.) Jacq.
johnsongrass	SORHA	*Sorghum halepense* (L.) Pers.
jointvetch	AESSS	*Aeschynomene species*
large crabgrass	DIGSA	*Digitaria sanguinalis* (L.) Scop.
little barley	HORPU	*Hordeum pusillum* Nuttall.
medicago (clover)	MEDSS	*Medicago* species
morningglory species	IPOSS	*Ipomoea* species
mouseear chickweed	CERVU	*Cerastium vulgatum* L.
nutsedge	CYPSS	*Cyperus* species
Palmer amaranth	AMAPA	*Amaranthus palmeri* S. Watson
pitted morningglory	IPOLA	*Ipomoea lacunosa* L.
prickly sida	SIDSP	*Sida spinosa* L.
purple nutsedge	CYPRO	*Cyperus rotundus* L.
purslane speedwell	VERPG	*Veronica peregrina* L.
red morningglory	IPOCC	*Ipomoea coccinea* L.
red sprangletop	LEFFI	*Leptochloa panicea* (Retz.) Ohwi
redweed	MEOCO	*Melochia corchorifolia* L.
ryegrass, Italian	LOLMU	*Lolium perenne* L. *ssp. Multiflorum* (Lam.) *Husnot*
shepherd's purse	CAPBP	*Capsella bursa-pastoris (L.)* Medicus
sicklepod	CASOB	*Senna obtusifolia* L.
smallflower bittercress	CARPA	*Cardamine parviflora* L.
smallflower morningglory	IAQTA	*Jacquemontia tamnifolia* (L.) Griseb.
smellmelon	CUMMD	*Cucumis melo* L. var. *dudaim* Naud.

Continued.

Table 4. **Continued.**

Common name	WSSA abbreviation	Scientific name
spiny sowthistle	SONAS	*Sonchus asper* (L.) Hill
spotted burclover	MEDAB	*Medicago arabica* (L.) Huds.
spotted spurge	EPHMA	*Chamaesyce maculata* (L.) Small
spreading dayflower	COMDI	*Commelina diffusa* Burm. f.
Texasweed	CNPPA	*Caperonia palustris* L.
velvetleaf	ABUTH	*Abutilion theophrasti* Medik.
Virginia pepperweed	LEPVI	*Lepidium virginicum* L.
white clover	TRFRE	*Trifolium repens* L.
wild poinsettia	EPHHL	*Euphorbia heterophylla* L.
yellow nutsedge	CYPES	*Cyperus esculentus* L.

Table 5. **Miscellaneous abbreviations used in the weed control studies.**

ai/A	Active ingredient per acre
Amt	Amount
AS	Aqueous solution
AP	After planting
Bdcst	Broadcast application
bu/A	Bushels per acre
B/L	Broadleaf species
CEC	Cation Exchange Capacity
CO_2bkpk	CO_2-pressurized backpack sprayer
col	Collar
cot	Cotyledon
CV	Coefficient of variation
DAP	Days after planting
DAT	Days after treatment
DBP	Days before planting
DF	Dry flowable
DG	Dispersible granule
EC	Emulsifiable concentrate
F	Flowable
fb	Followed by
FF	Flat fan nozzle
Fm	Formulation
G	Granular
GPA	Gallons per acre
gr cover	Ground cover
Grow stg	Growth stage
ht	Height
ht/collr	Height to top visible collar
ht/lleaf	Height to tip of longest leaf
ht:node	Height to node ratio
in/col	Inches to last visible collar
in/lftp	Inches to tip of longest leaf
lbs	Pounds

Continued.

Table 5. **Continued.**

lb/A	Pounds of product per acre
lb ae/A	Pounds of acid equivalent per acre
lb ai/A	Pounds active ingredient per acre on broadcast basis
lb/bu	Pounds per bushel
lf	Leaf
L	Liquid
LSD	Least significant difference
ME	Micro-encapsulated
# noz	Number of nozzels
N/A	Not applicable
NAWF	Nodes above white flower
N/S/E/W	North/South/East/West (wind direction)
OM	Organic matter
oz/A	Ounces product per acre
p. cloudy	Partly cloudy
PDIR	Postemergence directed
plnt	Plant
popltn	Population
POST (x)	Postemergence overtop application (first, second, etc.
PPBD	Preplant burndown
PPI	Preplant soil incorporated
pr/A	Product per acre
PRE	Preemergence surface application
psi	Pounds per square inch pressure
R (x)	Refers to soybean growth stage e.g. R3=reproductive with one pod 3/16 of an inch long in the upper four nodes; corn growth stage R3=reproductive (milk stage) with kernel yellow on outside and milky white on inside
rep	Replication
SC	Soluble concentration
sq	Square
std	Standard
til	Tillers
trctrCA	Tractor compressed air
TRS	Theoretical recoverable sugar

Continued.

Table 5. **Continued.**

Trt No	Treatment number
TT	Turbo TeeJet
V (x)	Refers to soybean growth stage e.g. V4=vegetative with 3 fully expanded trifoliate leaves; corn growth stage e.g. V4=vegetative with 4 visible collars
VS	VisiFlow
v/v	Volume/volume basis
vin	Vining
WAE	Weeks after emergence
WAT	Weeks after treatment
WBP	Weeks before planting
WG	Water dispersible granule
WP	Wettable powder
wt/p	Weight per plant
wt/st	Weight per stem
w/w	Weight/weight basis
% emerg.	Percent panicle emergence

Itchgrass Control with Herbicides Applied PRE and POST

LSU AgCenter

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Experiment number	:	13SC07JG
Location	:	Henderson, LA
Experimental design	:	Randomized Complete Block
Number of reps	:	4
Plot size	:	6' x 20'
Row width/# per plot	:	72"/1
Soil type	:	N/A
OM (%)	:	N/A
pH	:	N/A
Planting date	:	N/A
Harvest date	:	N/A
Crop/Variety	:	N/A
Uniform std. treatment	:	N/A

Application type	:	PRE/POST A
Date applied (mm-dd-yy)	:	7-24-13
Time (hh:mm-hh:mm)	:	10:10-11:00am
Incorporation equipment	:	N/A
Incorporation depth	:	N/A
Air/Soil temperature (F)	:	80/87
Wind (mph/direction)	:	4-6/W
Relative humidity (%)	:	83
Soil/Leaf surface moist	:	dry/moist
Crop stage/height	:	N/A
Sprayer type/mph	:	CO_2bkpk/3.0
Nozzle type/size	:	FF/11002VS
Boom ht/#noz/spacing (in)	:	15"/4/18"
GPA/psi (at nozzle)	:	15/28
Applied by	:	Foster

Weed species	:	population per ft^2/height/# leaves
MEOCO	:	N/A/0-1"/1-2
CYPRO	:	N/A/3-5"/4-5
CYNDA	:	N/A/2"-running/N/A
ROOEX	:	N/A/1-5"/2-5

Rainfall (in.)			
0-24 hr/1-3 days	:	-- / --	
4-7 days/2nd week	:	-- / --	Rainfall of 0.5 inches was received on 7-27-13.
3rd week/4th week	:	-- / --	

Comments:

This experiment was initiated in a fallowed sugarcane field where itchgrass was emerged. For the PRE treatments (1-9), Roundup PowerMax at 23 oz/A was added to eliminate weeds that were present so residual activity of the herbicides could be determined. The POST treatments (10-14) were also applied to evaluate POST activity. Considerable variability in itchgrass population was noted for the experiment.

School of Plant, Environmental, and Soil Sciences

Itchgrass Control with Herbicides Applied PRE and POST

Trial ID:	13SC07JG
Location:	Henderson, LA
Trial Year:	2013
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	LSU AgCenter

Pest Type		W Weed	W Weed
Pest Code		ROOEX	ROOEX
Pest Scientific Name		Rottboellia ex>	Rottboellia ex>
Pest Name		Itchgrass	Itchgrass
Rating Date		Aug/5/2013	Aug/13/2013
Rating Type		Control	Control
Rating Unit		%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	67ab	74ab
2	Sharpen	2.85	SC	2	fl oz/a	0.0445	lb ai/a	PRE	A	64abc	75ab
3	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	PRE	A	80a	86a
4	Zidua	85	WG	3	oz wt/a	0.16	lb ai/a	PRE	A	76ab	74ab
5	Callisto	4	L	6	fl oz/a	0.188	lb ai/a	PRE	A	89a	89a
6	Callisto	4	L	7.7	fl oz/a	0.24	lb ai/a	PRE	A	90a	91a
7	Velpar	2	L	2	pt/a	0.5	lb ai/a	PRE	A	90a	93a
	Tricor	75	DF	2	lb/a	1.5	lb ai/a	PRE	A		
8	Prowl	3.3	EC	3	qt/a	2.48	lb ai/a	PRE	A	89a	91a
9	Tricor	75	DF	2	lb/a	1.5	lb ai/a	PRE	A	55a-d	76ab
10	Callisto	4	L	3	fl oz/a	0.094	lb ai/a	POST	B	25de	45bc
	NIS			0.25	% v/v	0.25	% v/v	POST	B		
11	Callisto	4	L	6	fl oz/a	0.188	lb ai/a	POST	B	30de	46bc
	NIS			0.25	% v/v	0.25	% v/v	POST	B		
12	Callisto	4	L	7.7	fl oz/a	0.24	lb ai/a	POST	B	19e	33c
	NIS			0.25	% v/v	0.25	% v/v	POST	B		
13	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	POST	B	34cde	45bc
	NIS			0.25	% v/v	0.25	% v/v	POST	B		
14	Zidua	85	WG	3	oz wt/a	0.16	lb ai/a	POST	B	45b-e	45bc
	NIS			0.25	% v/v	0.25	% v/v	POST	B		
15	Roundup PowerMax	4.5	SL	23	fl oz/a	0.81	lb ae/a	POST	B	73ab	84a

School of Plant, Environmental, and Soil Sciences

Itchgrass Control with Herbicides Applied PRE and POST

Trial ID:	13SC07JG
Location:	Henderson, LA
Trial Year:	2013
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ROOEX	ROOEX
Pest Scientific Name	Rottboellia ex>	Rottboellia ex>
Pest Name	Itchgrass	Itchgrass
Rating Date	Aug/5/2013	Aug/13/2013
Rating Type	Control	Control
Rating Unit	%	%
LSD (P=.05)	22.7	22.2
Standard Deviation	15.9	15.5
CV	25.84	22.28
Bartlett's X2	43.978	28.637
P(Bartlett's X2)	0.001*	0.012*
Skewness	-0.3471	-0.9093*
Kurtosis	-1.5923*	-0.6119
Replicate F	5.913	12.022
Replicate Prob(F)	0.0020	0.0001
Treatment F	10.188	7.257
Treatment Prob(F)	0.0001	0.0001

Sugarcane Tolerance Test

LSU AgCenter

School of Plant, Environmental, and Soil Sciences

Experiment number	13SC09JG
Location	Sugar Research Station – St. Gabriel, LA
Experimental design	Randomized Complete Block
Number of reps	3
Plot size	6’ x 40’
Row width/# per plot	72”/1
Soil type	silt loam
OM (%)	1.0
pH	5.9
Planting date	9-3-13
Harvest date	N/A
Crop/Variety	Sugarcane/HoCP 96-540
Uniform std. treatment	N/A

Application type	PRE A	POST B
Date applied (mm-dd-yy)	9-9-13	10-1-13
Time (hh:mm-hh:mm)	2:07-2:23pm	11:15-11:30am
Incorporation equipment	N/A	N/A
Incorporation depth	N/A	N/A
Air/Soil temperature (F)	89/88	83/76
Wind (mph/direction)	7-8/SE	5-6/SE
Relative humidity (%)	53	72
Soil/Leaf surface moist	dry/N/A	moist/dry
Crop stage/height	N/A	N/A
Sprayer type/mph	CO_2bkpk/3.0	CO_2bkpk/3.0
Nozzle type/size	FF/TTI11002	FF/TTI11002
Boom ht/#noz/spacing (in)	15”/4/18”	15”/4/18”
GPA/psi (at nozzle)	15/28	15/28
Applied by	Bauerle	Bauerle

Weed species	population per ft^2/height/# leaves	
SORHA	N/A	0-1/2-6”/4-6
PANRA	N/A	1-2/2-6”/5-10
ELEIN	N/A	0-1/3-5”/5-10
EPHHS	N/A	0-1/1-2”/3-6

Rainfall (in.)

0-24 hr/1-3 days	-- / --
4-7 days/2nd week	-- / --
3rd week/4th week	-- / --

The experimental area received 0.47” of rainfall on 9-13-13.

Comments:

School of Plant, Environmental, and Soil Sciences

Sugarcane Tolerance Test

Trial ID:	13SC09JG
Location:	St. Gabriel, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	LSU AgCenter

Crop Code										SACOR	SACOR
BBCH Scale										BGRM	BGRM
Crop Scientific Name										Saccharum offi>	Saccharum offi>
Crop Name										Ratoon sugarca>	Ratoon sugarca>
Rating Date										Sep/30/2013	Oct/2/2013
Rating Type										Injury	Avg Height
Rating Unit										%	inches
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Velossa	2.4	L	1.6	pt/a	0.48	lb ai/a	PRE	A	10a	44.9a
2	Zidua	85	DF	2	oz wt/a	0.106	lb ai/a	PRE	A	15a	41.4a
3	Sharpen	2.85	SC	2	fl oz/a	0.0445	lb ai/a	PRE	A	13a	41.1a
4	Sinbar	80	WP	2	lb/a	1.6	lb ai/a	PRE	A	15a	39.1a
5	Tricor	75	DF	2	lb/a	1.5	lb ai/a	PRE	A	5ab	45.7a
6	Velossa	2.4	L	1.6	pt/a	0.48	lb ai/a	POST	B	0b	42.9a
	Induce			0.25	% v/v	0.25	% v/v	POST	B		
LSD (P=.05)										7.5	7.52
Standard Deviation										4.1	4.13
CV										42.69	9.72
Bartlett's X2										0.676	2.551
P(Bartlett's X2)										0.954	0.769
Skewness										-0.2112	-0.4537
Kurtosis										-1.0653	-1.0147
Replicate F										1.290	0.160
Replicate Prob(F)										0.3173	0.8540
Treatment F										6.468	1.096
Treatment Prob(F)										0.0062	0.4196

School of Plant, Environmental, and Soil Sciences

Sugarcane Tolerance Test

Trial ID:	13SC09JG
Location:	St. Gabriel, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	LSU AgCenter

Crop Code	SACOR	SACOR
BBCH Scale	BGRM	BGRM
Crop Scientific Name	Saccharum offi>	Saccharum offi>
Crop Name	Ratoon sugarca>	Ratoon sugarca>
Rating Date	Oct/2/2013	Oct/29/2013
Rating Type	Shoot Count	Injury
Rating Unit	#	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	3	4
1	Velossa	2.4	L	1.6	pt/a	0.48	lb ai/a	PRE	A	113a	0a
2	Zidua	85	DF	2	oz wt/a	0.106	lb ai/a	PRE	A	111a	2a
3	Sharpen	2.85	SC	2	fl oz/a	0.0445	lb ai/a	PRE	A	93a	2a
4	Sinbar	80	WP	2	lb/a	1.6	lb ai/a	PRE	A	103a	8a
5	Tricor	75	DF	2	lb/a	1.5	lb ai/a	PRE	A	107a	0a
6	Velossa	2.4	L	1.6	pt/a	0.48	lb ai/a	POST	B	103a	10a
	Induce			0.25	% v/v	0.25	% v/v	POST	B		

LSD (P=.05)	19.6	11.9
Standard Deviation	10.7	6.6
CV	10.26	181.71
Bartlett's X2	2.309	4.688
P(Bartlett's X2)	0.805	0.196
Skewness	0.2196	1.9593*
Kurtosis	0.2112	2.9301*
Replicate F	0.860	0.226
Replicate Prob(F)	0.4521	0.8018
Treatment F	1.318	1.348
Treatment Prob(F)	0.3313	0.3207

Bermudagrass Control at Planting

LSU AgCenter

School of Plant, Environmental, and Soil Sciences

Experiment number	:	13SC11JG
Location	:	Sugar Research Station – St. Gabriel, LA
Experimental design	:	Randomized Complete Block
Number of reps	:	3
Plot size	:	6’ x 40’
Row width/# per plot	:	72”/1
Soil type	:	silt loam
OM (%)	:	1.0
pH	:	5.9
Planting date	:	N/A
Harvest date	:	N/A
Crop/Variety	:	N/A
Uniform std. treatment	:	Roundup PowerMax @ 22 oz/A applied on 9-10-13

Application type	:	PRE A
Date applied (mm-dd-yy)	:	9-10-13
Time (hh:mm-hh:mm)	:	12:30-1:05pm
Incorporation equipment	:	N/A
Incorporation depth	:	N/A
Air/Soil temperature (F)	:	91/90
Wind (mph/direction)	:	10-11/E
Relative humidity (%)	:	51
Soil/Leaf surface moist	:	dry/dry
Crop stage/height	:	N/A
Sprayer type/mph	:	CO_2bkpk/3.0
Nozzle type/size	:	FF/TTI11002
Boom ht/#noz/spacing (in)	:	15”/4/18”
GPA/psi (at nozzle)	:	15/28
Applied by	:	Bauerle

Weed species	:	population per ft^2/height/# leaves
N/A	:	

Rainfall (in.)		
0-24 hr/1-3 days	:	-- / --
4-7 days/2nd week	:	-- / --
3rd week/4th week	:	-- / --

The experimental area received 0.47” of rainfall on 9-13-13.

Comments:

School of Plant, Environmental, and Soil Sciences

Bermudagrass Control at Planting

Trial ID:	13SC11JG
Location:	St. Gabriel, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										CYNDA	CYNDA
Pest Scientific Name										Cynodon dactyl>	Cynodon dactyl>
Pest Name										Bermuda grass	Bermuda grass
Rating Date										Sep/30/2013	Oct/29/2013
Rating Type										Control	GroundCover
Rating Unit										%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Sinbar	80	WP	1	lb/a	0.8	lb ai/a	PRE	A	65ab	11a
2	Sinbar	80	WP	1.5	lb/a	1.2	lb ai/a	PRE	A	72ab	10a
3	Sinbar	80	WP	2	lb/a	1.6	lb ai/a	PRE	A	60ab	8a
4	Command	3	ME	3	pt/a	1.13	lb ai/a	PRE	A	85a	5a
	Direx	4	L	2.5	qt/a	2.5	lb ai/a	PRE	A		
5	Command	3	ME	3	pt/a	1.13	lb ai/a	PRE	A	87a	8a
	Tricor	75	DF	1	lb/a	0.75	lb ai/a	PRE	A		
6	Tricor	75	DF	3	lb/a	2.25	lb ai/a	PRE	A	60ab	12a
	Prowl	3.3	EC	2	qt/a	1.65	lb ai/a	PRE	A		
7	Tricor	75	DF	3	lb/a	2.25	lb ai/a	PRE	A	63ab	6a
8	Velpar	2	L	2	pt/a	0.5	lb ai/a	PRE	A	60ab	6a
	Tricor	75	DF	2	lb/a	1.5	lb ai/a	PRE	A		
9	Velpar	2	L	2	pt/a	0.5	lb ai/a	PRE	A	70ab	5a
	Direx	4	L	1.8	qt/a	1.8	lb ai/a	PRE	A		
10	Velossa	2.4	L	1.6	pt/a	0.48	lb ai/a	PRE	A	65ab	9a
	Tricor	75	DF	2	lb/a	1.5	lb ai/a	PRE	A		
11	Velossa	2.4	L	1.6	pt/a	0.48	lb ai/a	PRE	A	73ab	4a
	Direx	4	L	1.8	qt/a	1.8	lb ai/a	PRE	A		
12	Mission	25	DF	3	oz wt/a	0.047	lb ai/a	PRE	A	47b	10a
13	Mission	25	DF	3	oz wt/a	0.047	lb ai/a	PRE	A	58ab	11a
	Tricor	75	DF	1	lb/a	0.75	lb ai/a	PRE	A		
14	Prowl	3.3	EC	3	qt/a	2.48	lb ai/a	PRE	A	47b	15a
	Atrazine	4	L	32	fl oz/a	1	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Bermudagrass Control at Planting

Trial ID:	13SC11JG
Location:	St. Gabriel, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CYNDA	CYNDA
Pest Scientific Name	Cynodon dactyl>	Cynodon dactyl>
Pest Name	Bermuda grass	Bermuda grass
Rating Date	Sep/30/2013	Oct/29/2013
Rating Type	Control	GroundCover
Rating Unit	%	%
LSD (P=.05)	19.1	7.1
Standard Deviation	11.4	4.2
CV	17.51	49.78
Bartlett's X2	9.871	9.011
P(Bartlett's X2)	0.704	0.702
Skewness	-0.2761	0.4403
Kurtosis	-0.7091	-0.6583
Replicate F	10.335	1.296
Replicate Prob(F)	0.0005	0.2906
Treatment F	3.200	1.643
Treatment Prob(F)	0.0056	0.1362

Mid-South – Soybean Herbicide Programs

LSU AgCenter

School of Plant, Environmental, and Soil Sciences

Experiment number	13SB01JG
Location	Ben Hur Research Farm – Baton Rouge, LA
Experimental design	Randomized Complete Block
Number of reps	3
Plot size	11.25’ x 25’ (6’ x 25’ treated)
Row width/# per plot	15”/3
Soil type	clay loam
OM (%)	1.9
pH	6.3
Planting date	5-20-13
Harvest date	N/A
Crop/Variety	Soybean/Progeny P5711RY; HBK LL 4950
Uniform std. treatment	N/A

Application type	PRE A	POST B	POST C	POST D
Date applied (mm-dd-yy)	5-21-13	6-5-13	6-25-13	6-28-13
Time (hh:mm-hh:mm)	11:45-12:30pm	10:15-10:45am	9:00-9:30am	4:00-4:50pm
Incorporation equipment	N/A	N/A	N/A	N/A
Incorporation depth	N/A	N/A	N/A	N/A
Air/Soil temperature (F)	N/A	84/89	85/82	92/93
Wind (mph/direction)	N/A	5-7/E	5-6/SW	7-8/NW
Relative humidity (%)	N/A	68	70	50
Soil/Leaf surface moist	dry/N/A	dry/dry	dry/moist	dry/dry
Crop stage/height	N/A	V2/5-6”	N/A	N/A
Sprayer type/mph	CO_2bkpk/3.0	CO_2bkpk/3.0	CO_2bkpk/3.0	CO_2bkpk/3.0
Nozzle type/size	FF/TTI11002	FF/TTI11002	FF/TTI11002	FF/TTI11002
Boom ht/#noz/spacing (in)	15”/4/18”	15”/4/18”	15”/4/18”	15”/4/18”
GPA/psi (at nozzle)	15/28	15/28	15/28	15/28
Applied by	Copes	Bauerle	Foster	Foster

Weed species	population per ft^2/height/# leaves			
ECHCG	N/A	10-15/1-5”/1-4	N/A	N/A
IPOLA	N/A	2-5/1-3”/2-5	N/A	N/A
SEBEX	N/A	2-4/2-4”/2-5	N/A	N/A

Rainfall (in.)				
0-24 hr/1-3 days	-- / --	0.00/0.57	0.00/0.00	0.00/1.06
4-7 days/2nd week	0.05/1.07	0.44/0.32	1.06/0.99	0.63/1.62
3rd week/4th week	1.01/0.00	2.37/1.61	1.67/0.71	0.67/1.23

Comments:

School of Plant, Environmental, and Soil Sciences

Mid-South - Soybean Herbicide Programs

Trial ID:	13SB01JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Pest Type		W Weed	W Weed
Pest Code		ECHCG	IPOLA
Pest Scientific Name		Echinochloa cr>	Ipomoea lacuno>
Pest Name		Common barnyar>	Pitted morning>
Rating Date		Jun/4/2013	Jun/4/2013
Rating Type		Control	Control
Rating Unit		%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Roundup Ready									45c	40ab
	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
2	Roundup Ready									62b	45ab
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
3	Roundup Ready									92a	45ab
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A		
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
4	Roundup Ready									68b	50ab
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
5	Roundup Ready									95a	60a
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A		
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		

School of Plant, Environmental, and Soil Sciences

Mid-South - Soybean Herbicide Programs

Trial ID: 13SB01JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: DuPont

Pest Type										W Weed	W Weed
Pest Code										ECHCG	IPOLA
Pest Scientific Name										Echinochloa cr>	Ipomoea lacuno>
Pest Name										Common barnyar>	Pitted morning>
Rating Date										Jun/4/2013	Jun/4/2013
Rating Type										Control	Control
Rating Unit										%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
6	Roundup Ready									92a	47ab
	Zidua	85	DF	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
7	Roundup Ready Nontreated									0d	0c
8	Liberty Link									42c	55ab
	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B		
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D		
9	Liberty Link									47c	35b
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B		
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D		
10	Liberty Link									93a	48ab
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A		
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B		
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D		
11	Liberty Link									62b	45ab
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B		
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D		

School of Plant, Environmental, and Soil Sciences

Mid-South - Soybean Herbicide Programs

Trial ID: 13SB01JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: DuPont

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
	Pest Type									W Weed	W Weed
	Pest Code									ECHCG	IPOLA
	Pest Scientific Name									Echinochloa cr>	Ipomoea lacuno>
	Pest Name									Common barnyar>	Pitted morning>
	Rating Date									Jun/4/2013	Jun/4/2013
	Rating Type									Control	Control
	Rating Unit									%	%
12	Liberty Link									93a	45ab
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A		
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B		
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D		
13	Liberty Link									88a	37ab
	Zidua	85	DF	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	C		
14	Liberty Link Nontreated									0d	0c
	LSD (P=.05)									9.2	13.9
	Standard Deviation									5.5	8.3
	CV									8.71	21.09
	Bartlett's X2									18.507	3.703
	P(Bartlett's X2)									0.03*	0.978
	Skewness									-0.8076*	-1.0682*
	Kurtosis									-0.4602	0.5178
	Replicate F									0.932	1.483
	Replicate Prob(F)									0.4066	0.2456
	Treatment F									109.542	13.937
	Treatment Prob(F)									0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Mid-South - Soybean Herbicide Programs

Trial ID:	13SB01JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Pest Type	W Weed	W Weed
Pest Code	SIDSP	SEBEX
Pest Scientific Name	Sida spinosa	Sesbania exalt>
Pest Name	Prickly sida	Hemp sesbania
Rating Date	Jun/4/2013	Jun/4/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Roundup Ready									72cde	60bc
	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
2	Roundup Ready									82a-d	55bc
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
3	Roundup Ready									73b-e	63bc
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A		
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
4	Roundup Ready									85abc	73ab
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
5	Roundup Ready									88ab	85a
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A		
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		

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Mid-South - Soybean Herbicide Programs

Trial ID: 13SB01JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: DuPont

Pest Type												W Weed	W Weed
Pest Code												SIDSP	SEBEX
Pest Scientific Name												Sida spinosa	Sesbania exalt>
Pest Name												Prickly sida	Hemp sesbania
Rating Date												Jun/4/2013	Jun/4/2013
Rating Type												Control	Control
Rating Unit												%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
6	Roundup Ready											67e	45cd
	Zidua	85	DF	2.5	oz wt/a	0.133	lb ai/a	PRE	A				
7	Roundup Ready											0f	0e
	Nontreated												
8	Liberty Link											78a-e	55bc
	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A				
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B				
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B				
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D				
9	Liberty Link											85abc	50cd
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A				
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B				
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B				
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D				
10	Liberty Link											88ab	60bc
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A				
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A				
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B				
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B				
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D				
11	Liberty Link											87ab	85a
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A				
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B				
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B				
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D				

School of Plant, Environmental, and Soil Sciences

Mid-South - Soybean Herbicide Programs

Trial ID:	13SB01JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
	Pest Type									W Weed	W Weed
	Pest Code									SIDSP	SEBEX
	Pest Scientific Name									Sida spinosa	Sesbania exalt>
	Pest Name									Prickly sida	Hemp sesbania
	Rating Date									Jun/4/2013	Jun/4/2013
	Rating Type									Control	Control
	Rating Unit									%	%
12	Liberty Link									90a	80a
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A		
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B		
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D		
13	Liberty Link									68de	35d
	Zidua	85	DF	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	C		
14	Liberty Link									0f	0e
	Nontreated										
	LSD (P=.05)									9.6	13.0
	Standard Deviation									5.7	7.8
	CV									8.3	14.56
	Bartlett's X2									8.396	5.828
	P(Bartlett's X2)									0.59	0.83
	Skewness									-1.7445*	-0.7537*
	Kurtosis									1.6498*	-0.0839
	Replicate F									3.847	3.030
	Replicate Prob(F)									0.0344	0.0656
	Treatment F									83.506	36.036
	Treatment Prob(F)									0.0001	0.0001

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Mid-South - Soybean Herbicide Programs

Trial ID:	13SB01JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Pest Type	W Weed	W Weed
Pest Code	ECHCG	IPOLA
Pest Scientific Name	Echinochloa cr>	Ipomoea lacuno>
Pest Name	Common barnyar>	Pitted morning>
Rating Date	Jun/19/2013	Jun/19/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Roundup Ready									76b	89abc
	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
2	Roundup Ready									77b	90ab
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
3	Roundup Ready									94a	88abc
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A		
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
4	Roundup Ready									86a	90ab
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
5	Roundup Ready									95a	86abc
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A		
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
6	Roundup Ready									93a	67cd
	Zidua	85	DF	2.5	oz wt/a	0.133	lb ai/a	PRE	A		

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Mid-South - Soybean Herbicide Programs

Trial ID: 13SB01JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: DuPont

Pest Type											W Weed	W Weed
Pest Code											ECHCG	IPOLA
Pest Scientific Name											Echinochloa cr>	Ipomoea lacuno>
Pest Name											Common barnyar>	Pitted morning>
Rating Date											Jun/19/2013	Jun/19/2013
Rating Type											Control	Control
Rating Unit											%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
7	Roundup Ready Nontreated										0c	0e
8	Liberty Link										86a	94a
	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D			
9	Liberty Link										89a	78a-d
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D			
10	Liberty Link										94a	72bcd
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D			
11	Liberty Link										95a	71bcd
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D			
12	Liberty Link										95a	58d
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D			

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Mid-South - Soybean Herbicide Programs

Trial ID:	13SB01JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
	Pest Type									W Weed	W Weed
	Pest Code									ECHCG	IPOLA
	Pest Scientific Name									Echinochloa cr>	Ipomoea lacuno>
	Pest Name									Common barnyar>	Pitted morning>
	Rating Date									Jun/19/2013	Jun/19/2013
	Rating Type									Control	Control
	Rating Unit									%	%
13	Liberty Link									93a	67cd
	Zidua	85	DF	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	C		
14	Liberty Link									0c	0e
	Nontreated										
	LSD (P=.05)									5.7	13.9
	Standard Deviation									3.4	8.3
	CV									4.4	12.2
	Bartlett's X2									10.775	10.432
	P(Bartlett's X2)									0.215	0.492
	Skewness									-1.9296*	-1.4577*
	Kurtosis									2.1211*	0.979
	Replicate F									3.780	0.254
	Replicate Prob(F)									0.0362	0.7777
	Treatment F									288.236	41.437
	Treatment Prob(F)									0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Mid-South - Soybean Herbicide Programs

Trial ID:	13SB01JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Pest Type									W Weed	W Weed	
	Pest Code									SIDSP	SEBEX	
	Pest Scientific Name									Sida spinosa	Sesbania exalt>	
	Pest Name									Prickly sida	Hemp sesbania	
	Crop Code											GLXMA
	BBCH Scale											BSOY
	Crop Scientific Name											Glycine max
	Crop Name											Soybean
	Rating Date									Jun/19/2013	Jun/19/2013	Jun/19/2013
	Rating Type									Control	Control	Crop Injury
	Rating Unit									%	%	%
1	Roundup Ready									93a	93a	12ab
	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B			
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D			
2	Roundup Ready									95a	95a	12ab
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B			
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D			
3	Roundup Ready									94a	95a	10ab
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B			
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D			
4	Roundup Ready									94a	92a	8abc
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B			
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D			
5	Roundup Ready									94a	95a	12a
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B			
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D			
6	Roundup Ready									88b	62b	2c
	Zidua	85	DF	2.5	oz wt/a	0.133	lb ai/a	PRE	A			

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Mid-South - Soybean Herbicide Programs

Trial ID: 13SB01JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: DuPont

Pest Type														W Weed	W Weed	
Pest Code														SIDSP	SEBEX	
Pest Scientific Name														Sida spinosa	Sesbania exalt>	
Pest Name														Prickly sida	Hemp sesbania	
Crop Code																GLXMA
BBCH Scale																BSOY
Crop Scientific Name																Glycine max
Crop Name																Soybean
Rating Date														Jun/19/2013	Jun/19/2013	Jun/19/2013
Rating Type														Control	Control	Crop Injury
Rating Unit														%	%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
7	Roundup Ready Nontreated													0c	0c	0c
8	Liberty Link													94a	95a	5abc
	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A							
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B							
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B							
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D							
9	Liberty Link													92ab	87a	7abc
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A							
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B							
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B							
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D							
10	Liberty Link													94a	95a	8abc
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A							
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A							
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B							
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B							
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D							
11	Liberty Link													94a	90a	7abc
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A							
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B							
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B							
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D							
12	Liberty Link													94a	86a	3bc
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A							
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A							
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B							
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B							
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D							

School of Plant, Environmental, and Soil Sciences

Mid-South - Soybean Herbicide Programs

Trial ID:	13SB01JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Pest Type									W Weed	W Weed	
	Pest Code									SIDSP	SEBEX	
	Pest Scientific Name									Sida spinosa	Sesbania exalt>	
	Pest Name									Prickly sida	Hemp sesbania	
	Crop Code											GLXMA
	BBCH Scale											BSOY
	Crop Scientific Name											Glycine max
	Crop Name											Soybean
	Rating Date									Jun/19/2013	Jun/19/2013	Jun/19/2013
	Rating Type									Control	Control	Crop Injury
	Rating Unit									%	%	%
13	Liberty Link									90ab	81a	5abc
	Zidua	85	DF	2.5	oz wt/a	0.133	lb ai/a	PRE	A			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	C			
14	Liberty Link									0c	0c	0c
	Nontreated											
	LSD (P=.05)									3.2	10.0	5.0
	Standard Deviation									1.9	6.0	3.0
	CV									2.39	7.87	45.36
	Bartlett's X2									12.018	9.697	2.357
	P(Bartlett's X2)									0.284	0.084	0.993
	Skewness									-2.0942*	-1.795*	0.1015
	Kurtosis									2.5478*	1.6579*	-1.0056
	Replicate F									1.282	0.045	1.960
	Replicate Prob(F)									0.2945	0.9565	0.1611
	Treatment F									945.504	93.532	6.048
	Treatment Prob(F)									0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Mid-South - Soybean Herbicide Programs

Trial ID:	13SB01JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Pest Type	W Weed	W Weed
Pest Code	ECHCG	IPOLA
Pest Scientific Name	Echinochloa cr>	Ipomoea lacuno>
Pest Name	Common barnyar>	Pitted morning>
Rating Date	Jul/3/2013	Jul/3/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Roundup Ready									90b	89a
	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
2	Roundup Ready									94a	92a
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
3	Roundup Ready									95a	92a
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A		
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
4	Roundup Ready									95a	92a
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
5	Roundup Ready									95a	90a
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A		
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B		
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D		
6	Roundup Ready									95a	65b
	Zidua	85	DF	2.5	oz wt/a	0.133	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Mid-South - Soybean Herbicide Programs

Trial ID: 13SB01JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: DuPont

Pest Type											W Weed	W Weed
Pest Code											ECHCG	IPOLA
Pest Scientific Name											Echinochloa cr>	Ipomoea lacuno>
Pest Name											Common barnyar>	Pitted morning>
Rating Date											Jul/3/2013	Jul/3/2013
Rating Type											Control	Control
Rating Unit											%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
7	Roundup Ready										0c	0c
	Nontreated											
8	Liberty Link										95a	95a
	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D			
9	Liberty Link										95a	95a
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D			
10	Liberty Link										95a	95a
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D			
11	Liberty Link										95a	95a
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D			
12	Liberty Link										95a	95a
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D			

School of Plant, Environmental, and Soil Sciences

Mid-South - Soybean Herbicide Programs

Trial ID: 13SB01JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: DuPont

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
	Pest Type									W Weed	W Weed
	Pest Code									ECHCG	IPOLA
	Pest Scientific Name									Echinochloa cr>	Ipomoea lacuno>
	Pest Name									Common barnyar>	Pitted morning>
	Rating Date									Jul/3/2013	Jul/3/2013
	Rating Type									Control	Control
	Rating Unit									%	%
13	Liberty Link									95a	95a
	Zidua	85	DF	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B		
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	C		
14	Liberty Link									0c	0c
	Nontreated										
	LSD (P=.05)									2.3	4.3
	Standard Deviation									1.4	2.6
	CV									1.72	3.32
	Bartlett's X2									3.24	1.393
	P(Bartlett's X2)									0.072	0.925
	Skewness									-2.1066*	-1.9115*
	Kurtosis									2.5777*	2.001*
	Replicate F									0.603	0.711
	Replicate Prob(F)									0.5548	0.5003
	Treatment F									1828.701	516.308
	Treatment Prob(F)									0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Mid-South - Soybean Herbicide Programs

Trial ID:	13SB01JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Pest Type	W Weed	W Weed	
Pest Code	SIDSP	SEBEX	
Pest Scientific Name	Sida spinosa	Sesbania exalt>	
Pest Name	Prickly sida	Hemp sesbania	
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Rating Date	Jul/3/2013	Jul/3/2013	Jul/3/2013
Rating Type	Control	Control	Crop Injury
Rating Unit	%	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Roundup Ready									95a	94a	0a
	Envive41.3	WG	3.5	oz wt/a		0.09	lb ai/a	PRE	A			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B			
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D			
2	Roundup Ready									95a	95a	0a
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B			
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D			
3	Roundup Ready									95a	93a	0a
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B			
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D			
4	Roundup Ready									95a	93a	0a
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B			
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D			
5	Roundup Ready									95a	93a	0a
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	B			
	Prefix	5.29	EC	32	fl oz/a	1.32	lb ai/a	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ai/a	POST	D			
6	Roundup Ready									93a	60b	0a
	Zidua	85	DF	2.5	oz wt/a	0.133	lb ai/a	PRE	A			

School of Plant, Environmental, and Soil Sciences

Mid-South - Soybean Herbicide Programs

Trial ID: 13SB01JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: DuPont

Pest Type	W Weed	W Weed	
Pest Code	SIDSP	SEBEX	
Pest Scientific Name	Sida spinosa	Sesbania exalt>	
Pest Name	Prickly sida	Hemp sesbania	
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Rating Date	Jul/3/2013	Jul/3/2013	Jul/3/2013
Rating Type	Control	Control	Crop Injury
Rating Unit	%	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
7	Roundup Ready Nontreated									0b	0c	0a
8	Liberty Link									95a	95a	0a
	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D			
9	Liberty Link									95a	95a	0a
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D			
10	Liberty Link									95a	95a	0a
	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D			
11	Liberty Link									95a	95a	0a
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D			
12	Liberty Link									95a	95a	0a
	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	PRE	A			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B			
	Cinch	7.64	EC	16	fl oz/a	0.955	lb ai/a	POST	B			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	D			

School of Plant, Environmental, and Soil Sciences

Mid-South - Soybean Herbicide Programs

Trial ID:	13SB01JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Pest Type										W Weed	W Weed	
Pest Code										SIDSP	SEBEX	
Pest Scientific Name										Sida spinosa	Sesbania exalt>	
Pest Name										Prickly sida	Hemp sesbania	
Crop Code												GLXMA
BBCH Scale												BSOY
Crop Scientific Name												Glycine max
Crop Name												Soybean
Rating Date										Jul/3/2013	Jul/3/2013	Jul/3/2013
Rating Type										Control	Control	Crop Injury
Rating Unit										%	%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
13	Liberty Link									95a	95a	0a
	Zidua	85	DF	2.5	oz wt/a	0.133	lb ai/a	PRE	A			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	B			
	Liberty	1.67	SL	29	fl oz/a	0.38	lb ai/a	POST	C			
14	Liberty Link									0b	0c	0a
	Nontreated											
LSD (P=.05)										1.3	5.2	0.0
Standard Deviation										0.8	3.1	0.0
CV										0.95	3.93	0.0
Bartlett's X2										0.0	9.259	0.0
P(Bartlett's X2)										.	0.055	.
Skewness										-2.1154*	-1.8639*	.
Kurtosis										2.6006*	1.7972*	.
Replicate F										1.000	0.273	0.000
Replicate Prob(F)										0.3816	0.7635	1.0000
Treatment F										5981.616	375.388	0.000
Treatment Prob(F)										0.0001	0.0001	1.0000

Envive, Canopy, and DPX R5W13 Plus Zidua

LSU AgCenter

School of Plant, Environmental, and Soil Sciences

Experiment number	:	13SB02JG
Location	:	Ben Hur Research Farm
Experimental design	:	Randomized Complete Block
Number of reps	:	3
Plot size	:	11.25' x 25' (6' x 25' treated)
Row width/# per plot	:	15"/3
Soil type	:	clay loam
OM (%)	:	1.9
pH	:	6.3
Planting date	:	5-20-13
Harvest date	:	10-29-13
Crop/Variety	:	Soybean/Progeny P5711RY
Uniform std. treatment	:	Roundup Powermax @ 22 oz/A applied on 6-26-13

Application type	:	PRE A	POST B
Date applied (mm-dd-yy)	:	5-21-13	6-5-13
Time (hh:mm-hh:mm)	:	1:15-1:40pm	10:45-11:00am
Incorporation equipment	:	N/A	N/A
Incorporation depth	:	N/A	N/A
Air/Soil temperature (F)	:	N/A	84/89
Wind (mph/direction)	:	N/A	5-7/E
Relative humidity (%)	:	N/A	68
Soil/Leaf surface moist	:	dry/N/A	dry/dry
Crop stage/height	:	N/A	V2/5-6"
Sprayer type/mph	:	CO_2bkpk/3.0	CO_2bkpk/3.0
Nozzle type/size	:	FF/TTI11002	FF/TTI11002
Boom ht/#noz/spacing (in)	:	15"/4/18"	15"/4/18"
GPA/psi (at nozzle)	:	15/28	15/28
Applied by	:	Copes	Bauerle

Weed species	:	population per ft^2/height/# leaves	
ECHCG	:	N/A	10-15/1-2"/1-3
IPOLA	:	N/A	0-2/1-2"/2-4
SEBEX	:	N/A	3-6/1-2"/2-4

Rainfall (in.)			
0-24 hr/1-3 days	:	-- / --	0.00/0.57
4-7 days/2nd week	:	0.05/1.07	0.44/0.32
3rd week/4th week	:	1.01/0.00	2.37/1.61

Comments:

Insecticide and fungicide treatments were applied on 8-2-13 and consisted of 0.5 lb/A Orthene + 6 oz/A Discipline and 10 oz/A Stratego, respectively. A second application of insecticide was made on 8-22-13 and consisted of 4.5 oz/A Endigo + 2 oz/A Belt. Orthene was applied again at 1 lb/A on 9-13-13, and Gramoxone was applied on 9-26-13 at 1 pt/A in 15 GPA spray volume with Induce at 0.25% v/v.

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID:	13SB02JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Pest Type	W Weed	W Weed
Pest Code	ECHCG	IPOLA
Pest Scientific Name	Echinochloa cr>	Ipomoea lacuno>
Pest Name	Common barnyar>	Pitted morning>
Rating Date	Jun/4/2013	Jun/4/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	80abc	48c
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
2	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	55de	53c
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
3	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	79abc	40c
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
4	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	62cde	50c
	Fierce	76	WG	2	oz wt/a	0.095	lb ai/a	PRE	A		
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
5	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	85ab	48c
	Cinch	7.64	EC	1	pt/a	0.955	lb ai/a	PRE	A		
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
6	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	48e	37c
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
7	DPX R5W13			8	oz wt/a			PRE	A	92ab	72b
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
8	DPX R5W13			8	oz wt/a			PRE	A	72bcd	52c
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID: 13SB02JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: DuPont

Pest Type										W Weed	W Weed
Pest Code										ECHCG	IPOLA
Pest Scientific Name										Echinochloa cr>	Ipomoea lacuno>
Pest Name										Common barnyar>	Pitted morning>
Rating Date										Jun/4/2013	Jun/4/2013
Rating Type										Control	Control
Rating Unit										%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
9	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	77abc	50c
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
10	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	96a	88a
	Cinch	7.64	EC	1	pt/a	0.955	lb ai/a	PRE	A		
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
11	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	62cde	45c
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
12	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	PRE	A	78abc	38c
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
13	Fierce	76	WG	3	oz wt/a	0.143	lb ai/a	PRE	A	75bc	57c
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
14	Nontreated									0f	0d
LSD (P=.05)										13.0	13.1
Standard Deviation										7.7	7.8
CV										11.25	16.06
Bartlett's X2										7.556	5.345
P(Bartlett's X2)										0.752	0.945
Skewness										-1.6272*	-0.5308
Kurtosis										2.8015*	1.7049*
Replicate F										0.543	0.287
Replicate Prob(F)										0.5878	0.7528
Treatment F										28.657	18.592
Treatment Prob(F)										0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID:	13SB02JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Pest Type	W Weed		W Weed
Pest Code	SEBEX		ECHCG
Pest Scientific Name	Sesbania exalt>		Echinochloa cr>
Pest Name	Hemp sesbania		Common barnyar>
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Rating Date	Jun/4/2013	Jun/4/2013	Jun/19/2013
Rating Type	Control	Injury	Control
Rating Unit	%	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	47b	0a	87abc
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
2	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	52b	0a	47e
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
3	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	57ab	0a	93ab
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
4	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	65ab	0a	82bc
	Fierce	76	WG	2	oz wt/a	0.095	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
5	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	67ab	0a	95a
	Cinch	7.64	EC	1	pt/a	0.955	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
6	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	45b	0a	66d
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
7	DPX R5W13			8	oz wt/a			PRE	A	80a	0a	93ab
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID: 13SB02JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: DuPont

Pest Type	W Weed		W Weed
Pest Code	SEBEX		ECHCG
Pest Scientific Name	Sesbania exalt>		Echinochloa cr>
Pest Name	Hemp sesbania		Common barnyar>
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Rating Date	Jun/4/2013	Jun/4/2013	Jun/19/2013
Rating Type	Control	Injury	Control
Rating Unit	%	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
8	DPX R5W13			8	oz wt/a			PRE	A	67ab	0a	80c
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
9	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	48b	0a	92ab
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
10	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	65ab	0a	94ab
	Cinch	7.64	EC	1	pt/a	0.955	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
11	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	57ab	0a	79c
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
12	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	PRE	A	43b	0a	94ab
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
13	Fierce	76	WG	3	oz wt/a	0.143	lb ai/a	PRE	A	67ab	0a	90abc
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
14	Nontreated									0c	0a	0f

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID:	13SB02JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Pest Type	W Weed		W Weed
Pest Code	SEBEX		ECHCG
Pest Scientific Name	Sesbania exalt>		Echinochloa cr>
Pest Name	Hemp sesbania		Common barnyar>
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Rating Date	Jun/4/2013	Jun/4/2013	Jun/19/2013
Rating Type	Control	Injury	Control
Rating Unit	%	%	%
LSD (P=.05)	16.3	0.0	7.8
Standard Deviation	9.7	0.0	4.6
CV	17.91	0.0	5.92
Bartlett's X2	12.274	0.0	12.829
P(Bartlett's X2)	0.424	.	0.233
Skewness	-1.1098*	.	-2.1263*
Replicate F	2.320	0.000	2.636
Replicate Prob(F)	0.1191	1.0000	0.0914
Treatment F	11.317	0.000	96.504
Treatment Prob(F)	0.0001	1.0000	0.0001

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID:	13SB02JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Pest Type	W Weed	W Weed	
Pest Code	IPOLA	SEBEX	
Pest Scientific Name	Ipomoea lacuno>	Sesbania exalt>	
Pest Name	Pitted morning>	Hemp sesbania	
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Rating Date	Jun/19/2013	Jun/19/2013	Jun/19/2013
Rating Type	Control	Control	Injury
Rating Unit	%	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	67ab	55bcd	2a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
2	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	50b	48cd	3a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
3	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	57ab	50cd	2a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
4	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	63ab	53bcd	2a
	Fierce	76	WG	2	oz wt/a	0.095	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
5	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	55ab	55bcd	3a
	Cinch	7.64	EC	1	pt/a	0.955	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
6	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	68ab	52cd	2a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
7	DPX R5W13			8	oz wt/a			PRE	A	69ab	76ab	2a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			

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Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID: 13SB02JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: DuPont

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Pest Type									W Weed	W Weed	
	Pest Code									IPOLA	SEBEX	
	Pest Scientific Name									Ipomoea lacuno>	Sesbania exalt>	
	Pest Name									Pitted morning>	Hemp sesbania	
	Crop Code											GLXMA
	BBCH Scale											BSOY
	Crop Scientific Name											Glycine max
	Crop Name											Soybean
	Rating Date									Jun/19/2013	Jun/19/2013	Jun/19/2013
	Rating Type									Control	Control	Injury
	Rating Unit									%	%	%
8	DPX R5W13			8	oz wt/a			PRE	A	77a	77ab	2a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
9	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	52b	69abc	2a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
10	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	66ab	79a	1a
	Cinch	7.64	EC	1	pt/a	0.955	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
11	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	57ab	68abc	2a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
12	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	PRE	A	50b	43d	3a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
13	Fierce	76	WG	3	oz wt/a	0.143	lb ai/a	PRE	A	74ab	75ab	2a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
14	Nontreated									0c	0e	0a

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID:	13SB02JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Pest Type	W Weed	W Weed	
Pest Code	IPOLA	SEBEX	
Pest Scientific Name	Ipomoea lacuno>	Sesbania exalt>	
Pest Name	Pitted morning>	Hemp sesbania	
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Rating Date	Jun/19/2013	Jun/19/2013	Jun/19/2013
Rating Type	Control	Control	Injury
Rating Unit	%	%	%
LSD (P=.05)	14.1	15.0	2.4
Standard Deviation	8.4	8.9	1.4
CV	14.6	15.59	75.61
Bartlett's X2	7.512	4.344	0.0
P(Bartlett's X2)	0.822	0.959	.
Skewness	-1.6246*	-1.0023*	0.5784
Kurtosis	3.3101*	1.6359*	-1.7536*
Replicate F	2.811	5.333	39.574
Replicate Prob(F)	0.0792	0.0118	0.0001
Treatment F	14.897	15.810	1.204
Treatment Prob(F)	0.0001	0.0001	0.3322

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID:	13SB02JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Pest Type	W Weed	W Weed
Pest Code	ECHCG	IPOLA
Pest Scientific Name	Echinochloa cr>	Ipomoea lacuno>
Pest Name	Common barnyar>	Pitted morning>
Rating Date	Jul/3/2013	Jul/3/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	90a	90a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
2	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	83a	87a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
3	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	93a	90a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
4	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	88a	90a
	Fierce	76	WG	2	oz wt/a	0.095	lb ai/a	PRE	A		
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
5	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	92a	89a
	Cinch	7.64	EC	1	pt/a	0.955	lb ai/a	PRE	A		
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
6	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	89a	88a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
7	DPX R5W13			8	oz wt/a			PRE	A	93a	93a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID: 13SB02JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: DuPont

Pest Type		W Weed	W Weed
Pest Code		ECHCG	IPOLA
Pest Scientific Name		Echinochloa cr>	Ipomoea lacuno>
Pest Name		Common barnyar>	Pitted morning>
Rating Date		Jul/3/2013	Jul/3/2013
Rating Type		Control	Control
Rating Unit		%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
8	DPX R5W13			8	oz wt/a			PRE	A	95a	91a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
9	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	93a	87a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
10	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	93a	89a
	Cinch	7.64	EC	1	pt/a	0.955	lb ai/a	PRE	A		
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
11	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	93a	92a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
12	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	PRE	A	90a	87a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
13	Fierce	76	WG	3	oz wt/a	0.143	lb ai/a	PRE	A	93a	92a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B		
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B		
14	Nontreated									35b	33b

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID:	13SB02JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Pest Type	W Weed	W Weed
Pest Code	ECHCG	IPOLA
Pest Scientific Name	Echinochloa cr>	Ipomoea lacuno>
Pest Name	Common barnyar>	Pitted morning>
Rating Date	Jul/3/2013	Jul/3/2013
Rating Type	Control	Control
Rating Unit	%	%
LSD (P=.05)	8.0	7.4
Standard Deviation	4.7	4.4
CV	5.44	5.13
Bartlett's X2	8.373	7.448
P(Bartlett's X2)	0.755	0.827
Skewness	-2.9803*	-3.023*
Kurtosis	8.4971*	8.4333*
Replicate F	3.425	0.835
Replicate Prob(F)	0.0485	0.4455
Treatment F	31.305	35.786
Treatment Prob(F)	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID:	13SB02JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Pest Type	W Weed		W Weed
Pest Code	SEBEX		ECHCG
Pest Scientific Name	Sesbania exalt>		Echinochloa cr>
Pest Name	Hemp sesbania		Common barnyar>
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Rating Date	Jul/3/2013	Jul/3/2013	Jul/17/2013
Rating Type	Control	Injury	Control
Rating Unit	%	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	82a	0a	95a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
2	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	70a	0a	94a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
3	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	79a	0a	95a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
4	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	83a	0a	95a
	Fierce	76	WG	2	oz wt/a	0.095	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
5	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	85a	0a	95a
	Cinch	7.64	EC	1	pt/a	0.955	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
6	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	72a	0a	95a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
7	DPX R5W13			8	oz wt/a			PRE	A	86a	0a	95a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID: 13SB02JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: DuPont

Pest Type	W Weed		W Weed
Pest Code	SEBEX		ECHCG
Pest Scientific Name	Sesbania exalt>		Echinochloa cr>
Pest Name	Hemp sesbania		Common barnyar>
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Rating Date	Jul/3/2013	Jul/3/2013	Jul/17/2013
Rating Type	Control	Injury	Control
Rating Unit	%	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
8	DPX R5W13			8	oz wt/a			PRE	A	86a	0a	95a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
9	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	77a	0a	95a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
10	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	86a	0a	95a
	Cinch	7.64	EC	1	pt/a	0.955	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
11	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	85a	0a	95a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
12	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	PRE	A	73a	0a	95a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
13	Fierce	76	WG	3	oz wt/a	0.143	lb ai/a	PRE	A	88a	0a	95a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
14	Nontreated									43b	0a	68b

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID:	13SB02JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Pest Type	W Weed		W Weed
Pest Code	SEBEX		ECHCG
Pest Scientific Name	Sesbania exalt>		Echinochloa cr>
Pest Name	Hemp sesbania		Common barnyar>
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Rating Date	Jul/3/2013	Jul/3/2013	Jul/17/2013
Rating Type	Control	Injury	Control
Rating Unit	%	%	%
LSD (P=.05)	11.5	0.0	3.6
Standard Deviation	6.8	0.0	2.1
CV	8.74	0.0	2.28
Bartlett's X2	13.628	0.0	4.789
P(Bartlett's X2)	0.401	.	0.029*
Skewness	-1.4237*	.	-3.7327*
Kurtosis	2.1915*	.	13.4805*
Replicate F	1.754	0.000	0.790
Replicate Prob(F)	0.1937	1.0000	0.4650
Treatment F	8.689	0.000	33.802
Treatment Prob(F)	0.0001	1.0000	0.0001

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID:	13SB02JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Pest Type	W Weed	W Weed	
Pest Code	IPOLA	SEBEX	
Pest Scientific Name	Ipomoea lacuno>	Sesbania exalt>	
Pest Name	Pitted morning>	Hemp sesbania	
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Rating Date	Jul/17/2013	Jul/17/2013	Jul/17/2013
Rating Type	Control	Control	Injury
Rating Unit	%	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	95a	92a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
2	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	95a	88a	0a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
3	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	95a	95a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
4	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	95a	88a	0a
	Fierce	76	WG	2	oz wt/a	0.095	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
5	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	95a	93a	0a
	Cinch	7.64	EC	1	pt/a	0.955	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
6	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	95a	92a	0a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
7	DPX R5W13			8	oz wt/a			PRE	A	95a	93a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID: 13SB02JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: DuPont

Pest Type	W Weed	W Weed	
Pest Code	IPOLA	SEBEX	
Pest Scientific Name	Ipomoea lacuno>	Sesbania exalt>	
Pest Name	Pitted morning>	Hemp sesbania	
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Rating Date	Jul/17/2013	Jul/17/2013	Jul/17/2013
Rating Type	Control	Control	Injury
Rating Unit	%	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
8	DPX R5W13			8	oz wt/a			PRE	A	95a	95a	0a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
9	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	95a	93a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
10	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	95a	94a	0a
	Cinch	7.64	EC	1	pt/a	0.955	lb ai/a	PRE	A			
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
11	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	95a	95a	0a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
12	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	PRE	A	95a	95a	0a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
13	Fierce	76	WG	3	oz wt/a	0.143	lb ai/a	PRE	A	95a	95a	0a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B			
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B			
14	Nontreated									78b	70b	0a

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Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID:	13SB02JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Pest Type	W Weed	W Weed	
Pest Code	IPOLA	SEBEX	
Pest Scientific Name	Ipomoea lacuno>	Sesbania exalt>	
Pest Name	Pitted morning>	Hemp sesbania	
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Rating Date	Jul/17/2013	Jul/17/2013	Jul/17/2013
Rating Type	Control	Control	Injury
Rating Unit	%	%	%
LSD (P=.05)	3.5	6.5	0.0
Standard Deviation	2.1	3.9	0.0
CV	2.21	4.23	0.0
Bartlett's X2	0.0	9.133	0.0
P(Bartlett's X2)	.	0.243	.
Skewness	-4.1821*	-2.3504*	.
Kurtosis	18.0425*	4.9712*	.
Replicate F	1.053	2.907	0.000
Replicate Prob(F)	0.3639	0.0732	1.0000
Treatment F	13.819	8.766	0.000
Treatment Prob(F)	0.0001	0.0001	1.0000

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID:	13SB02JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA BSOY Glycine max Soybean Oct/29/2013 Moisture %	GLXMA BSOY Glycine max Soybean Oct/29/2013 Test Weight lb/bu	GLXMA BSOY Glycine max Soybean Oct/29/2013 Yield kg	GLXMA BSOY Glycinemax Soybean Oct/29/2013 Yield bu/A
1	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	16.6a	48.1a	4.09a	50.6a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A				
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B				
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B				
2	Envive	41.3	WG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	15.6a	48.8a	4.44a	55.2a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B				
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B				
3	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	14.3a	50.8a	4.54a	57.3a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A				
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B				
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B				
4	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	14.3a	51.5a	4.79a	60.4a
	Fierce	76	WG	2	oz wt/a	0.095	lb ai/a	PRE	A				
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B				
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B				
5	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	14.2a	51.9a	5.06a	63.9a
	Cinch	7.64	EC	1	pt/a	0.955	lb ai/a	PRE	A				
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B				
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B				
6	Canopy	75	WG	4	oz wt/a	0.188	lb ai/a	PRE	A	14.1a	50.8a	4.26a	53.8a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B				
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B				
7	DPX R5W13			8	oz wt/a			PRE	A	14.3a	51.6a	5.17a	65.2a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A				
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B				

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID: 13SB02JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: DuPont

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
	Crop Code									GLXMA	GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max	Glycinemax
	Crop Name									Soybean	Soybean	Soybean	Soybean
	Rating Date									Oct/29/2013	Oct/29/2013	Oct/29/2013	Oct/29/2013
	Rating Type									Moisture	Test Weight	Yield	Yield
	Rating Unit									%	lb/bu	kg	bu/A
8	DPX R5W13			8	oz wt/a			PRE	A	15.0a	49.3a	5.31a	66.5a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B				
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B				
9	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	14.6a	52.0a	4.59a	57.8a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A				
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B				
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B				
10	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	14.2a	50.8a	4.52a	57.1a
	Cinch	7.64	EC	1	pt/a	0.955	lb ai/a	PRE	A				
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B				
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B				
11	Canopy	75	WG	6	oz wt/a	0.28	lb ai/a	PRE	A	14.1a	51.9a	5.34a	67.6a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B				
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B				
12	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	PRE	A	14.2a	51.9a	5.35a	67.6a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B				
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B				
13	Fierce	76	WG	3	oz wt/a	0.143	lb ai/a	PRE	A	13.8a	52.6a	5.54a	70.2a
	Abundit Extra	3	SL	32	fl oz/a	0.75	lb ae/a	POST	B				
	Choice	100	L	6	fl oz/a	6	fl oz/a	POST	B				
14	Nontreated									14.9a	51.9a	1.70b	21.3b

School of Plant, Environmental, and Soil Sciences

Envive, Canopy, and DPX R5W13 Plus Zidua

Trial ID:	13SB02JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	DuPont

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycinemax
Crop Name	Soybean	Soybean	Soybean	Soybean
Rating Date	Oct/29/2013	Oct/29/2013	Oct/29/2013	Oct/29/2013
Rating Type	Moisture	Test Weight	Yield	Yield
Rating Unit	%	lb/bu	kg	bu/A
LSD (P=.05)	1.73	4.74	1.527	19.73
Standard Deviation	1.03	2.81	0.906	11.71
CV	7.03	5.52	19.6	20.12
Bartlett's X2	36.771	43.948	13.321	13.614
P(Bartlett's X2)	0.001*	0.001*	0.423	0.402
Skewness	1.9522*	0.7501*	-1.1004*	-1.0563*
Kurtosis	5.6805*	6.6828*	0.9499	0.7799
Replicate F	4.924	3.740	1.318	1.478
Replicate Prob(F)	0.0161	0.0386	0.2864	0.2480
Treatment F	1.543	0.685	3.341	3.246
Treatment Prob(F)	0.1730	0.7586	0.0051	0.0061

Xtend Herbicide Programs for Roundup Ready 2 Soybeans

LSU AgCenter

School of Plant, Environmental, and Soil Sciences

Experiment number	13SB03JG
Location	Ben Hur Research Farm – Baton Rouge, LA
Experimental design	Randomized Complete Block
Number of reps	4
Plot size	11.25’ x 30’ (6’ x 30’ treated)
Row width/# per plot	15”/3
Soil type	clay loam
OM (%)	1.9
pH	6.3
Planting date	5-20-13
Harvest date	N/A
Crop/Variety	Soybean/dicamba tolerant
Uniform std. treatment	N/A

Application type	PRE A	POST B	POST C
Date applied (mm-dd-yy)	5-21-13	6-10-13	6-26-13
Time (hh:mm-hh:mm)	3:35-4:00pm	9:30-10:15pm	9:15-10:00am
Incorporation equipment	N/A	N/A	N/A
Incorporation depth	N/A	N/A	N/A
Air/Soil temperature (F)	N/A	83/89	86/82
Wind (mph/direction)	N/A	0-1/SW	3-4/SW
Relative humidity (%)	N/A	77	67
Soil/Leaf surface moist	dry/N/A	moist/moist	moist/moist
Crop stage/height	N/A	V3/5-8”	N/A
Sprayer type/mph	CO_2bkpk/3.0	CO2bkpk/3.0	CO2bkpk/3.0
Nozzle type/size	FF/TTI11002	FF/TTI11002	FF/TTI11002
Boom ht/#noz/spacing (in)	15”/4/18”	15”/4/18”	15”/4/18”
GPA/psi (at nozzle)	15/28	15/28	15/28
Applied by	Copes	Bauerle	Foster

Weed species	population per ft^2/height/# leaves		
ECHCG	N/A	7-25/2-10”/4-8	N/A
SIDSP	N/A	2-10/1-4”/2-6	N/A
IPOLA	N/A	1-2/2-6”/2-8	N/A

Rainfall (in.)			
0-24 hr/1-3 days	-- / --	0.00/0.00	0.00/1.06
4-7 days/2nd week	-- / --	0.00/2.69	0.55/0.44
3rd week/4th week	1.01/0.00	1.06/0.95	1.67/0.71

Comments:

School of Plant, Environmental, and Soil Sciences

Xtend Herbicide Programs for Roundup Ready 2 Soybeans

Trial ID:	13SB03JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	Monsanto

Pest Type	W Weed	W Weed
Pest Code	ECHCG	IPOLA
Pest Scientific Name	Echinochloa cr>	Ipomoealacuno>
Pest Name	Common barnyar>	Pitted morning>
Rating Date	Jun/4/2013	Jun/4/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WG	1.98	oz wt/a	0.063	lb ai/a	PRE	A	59c	53cd
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
2	Valor SX	51	WG	1.98	oz wt/a	0.063	lb ai/a	PRE	A	54cd	50cd
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
3	XtendiMax	2.91	SL	12.8	fl oz/a	0.29	lb ae/a	PRE	A	80b	43d
	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	PRE	A		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
4	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	PRE	A	84b	41d
	Tricor	75	DF	5.33	oz wt/a	0.25	lb ai/a	PRE	A		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
5	Valor SX	51	WG	1.98	oz wt/a	0.063	lb ai/a	PRE	A	53cd	54cd
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Flexstar	1.88	SL	20	fl oz/a	0.294	lb ai/a	POST	B		
	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
6	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	95a	93a
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
7	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	59c	83ab
	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A		
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		

School of Plant, Environmental, and Soil Sciences

Xtend Herbicide Programs for Roundup Ready 2 Soybeans

Trial ID: 13SB03JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: Monsanto

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
Pest Type										W Weed	W Weed
Pest Code										ECHCG	IPOLA
Pest Scientific Name										Echinochloa cr>	Ipomoealacuno>
Pest Name										Common barnyar>	Pitted morning>
Rating Date										Jun/4/2013	Jun/4/2013
Rating Type										Control	Control
Rating Unit										%	%
8	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	81b	68bc
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
9	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	45d	55cd
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
10	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	80b	44cd
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
11	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	91ab	68bc
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
12	Nontreated									0e	0e
LSD (P=.05)										9.1	15.7
Standard Deviation										6.3	10.9
CV										9.75	20.11
Bartlett's X2										6.809	14.327
P(Bartlett's X2)										0.657	0.159
Skewness										-1.1319*	-0.4208
Kurtosis										1.0282	0.1056
Replicate F										0.104	1.237
Replicate Prob(F)										0.9573	0.3121
Treatment F										69.198	18.582
Treatment Prob(F)										0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Xtend Herbicide Programs for Roundup Ready 2 Soybeans

Trial ID:	13SB03JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	Monsanto

Pest Type	W Weed	
Pest Code	SIDSP	
Pest Scientific Name	Sida spinosa	
Pest Name	Prickly sida	
Crop Code		GLXMA
BBCH Scale		BSOY
Crop Scientific Name		Glycine max
Crop Name		Soybean
Rating Date	Jun/4/2013	Jun/4/2013
Rating Type	Control	Injury
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WG	1.98	oz wt/a	0.063	lb ai/a	PRE	A	71b	0a
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
2	Valor SX	51	WG	1.98	oz wt/a	0.063	lb ai/a	PRE	A	83ab	0a
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
3	XtendiMax	2.91	SL	12.8	fl oz/a	0.29	lb ae/a	PRE	A	40cd	0a
	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	PRE	A		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
4	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	PRE	A	69b	0a
	Tricor	75	DF	5.33	oz wt/a	0.25	lb ai/a	PRE	A		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
5	Valor SX	51	WG	1.98	oz wt/a	0.063	lb ai/a	PRE	A	79ab	0a
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Flexstar	1.88	SL	20	fl oz/a	0.294	lb ai/a	POST	B		
	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
6	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	88a	0a
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
7	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	86a	0a
	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A		
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		

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Xtend Herbicide Programs for Roundup Ready 2 Soybeans

Trial ID: 13SB03JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: Monsanto

Pest Type	W Weed	
Pest Code	SIDSP	
Pest Scientific Name	Sida spinosa	
Pest Name	Prickly sida	
Crop Code		GLXMA
BBCH Scale		BSOY
Crop Scientific Name		Glycine max
Crop Name		Soybean
Rating Date	Jun/4/2013	Jun/4/2013
Rating Type	Control	Injury
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
8	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	69b	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
9	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	35d	0a
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
10	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	50c	0a
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
11	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	83ab	0a
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
12	Nontreated									0e	0a

LSD (P=.05)	10.5	0.0
Standard Deviation	7.2	0.0
CV	11.56	0.0
Bartlett's X2	9.579	0.0
P(Bartlett's X2)	0.478	.
Skewness	-1.1061*	.
Kurtosis	0.4493	.
Replicate F	0.884	0.000
Replicate Prob(F)	0.4593	1.0000
Treatment F	53.647	0.000
Treatment Prob(F)	0.0001	1.0000

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Xtend Herbicide Programs for Roundup Ready 2 Soybeans

Trial ID:	13SB03JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	Monsanto

Pest Type	W Weed	W Weed
Pest Code	ECHCG	IPOLA
Pest Scientific Name	Echinochloa cr>	Ipomoea lacuno>
Pest Name	Common barnyar>	Pitted morning>
Rating Date	Jun/24/2013	Jun/24/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WG	1.98	oz wt/a	0.063	lb ai/a	PRE	A	81c	87ab
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
2	Valor SX	51	WG	1.98	oz wt/a	0.063	lb ai/a	PRE	A	73d	92a
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
3	XtendiMax	2.91	SL	12.8	fl oz/a	0.29	lb ae/a	PRE	A	95a	93a
	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	PRE	A		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
4	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	PRE	A	96a	93a
	Tricor	75	DF	5.33	oz wt/a	0.25	lb ai/a	PRE	A		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
5	Valor SX	51	WG	1.98	oz wt/a	0.063	lb ai/a	PRE	A	91ab	95a
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Flexstar	1.88	SL	20	fl oz/a	0.294	lb ai/a	POST	B		
	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
6	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	97a	94a
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
7	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	81c	66e
	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A		
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		

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Xtend Herbicide Programs for Roundup Ready 2 Soybeans

Trial ID: 13SB03JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: Monsonto

Pest Type											W Weed	W Weed
Pest Code											ECHCG	IPOLA
Pest Scientific Name											Echinochloa cr>	Ipomoea lacuno>
Pest Name											Common barnyar>	Pitted morning>
Rating Date											Jun/24/2013	Jun/24/2013
Rating Type											Control	Control
Rating Unit											%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
8	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		85c	71de
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A			
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B			
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
9	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		87bc	70de
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B			
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
10	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		93a	76cd
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B			
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
11	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A		95a	81bc
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B			
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
12	Nontreated										0e	0f
LSD (P=.05)											4.6	6.4
Standard Deviation											3.2	4.4
CV											3.93	5.79
Bartlett's X2											10.009	11.927
P(Bartlett's X2)											0.264	0.217
Skewness											-2.6157*	-2.2078*
Kurtosis											5.9625*	4.4572*
Replicate F											0.352	0.860
Replicate Prob(F)											0.7879	0.4717
Treatment F											279.123	140.191
Treatment Prob(F)											0.0001	0.0001

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Xtend Herbicide Programs for Roundup Ready 2 Soybeans

Trial ID:	13SB03JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	Monsanto

Pest Type	W Weed	
Pest Code	SIDSP	
Pest Scientific Name	Sida spinosa	
Pest Name	Prickly sida	
Crop Code		GLXMA
BBCH Scale		BSOY
Crop Scientific Name		Glycine max
Crop Name		Soybean
Rating Date	Jun/24/2013	Jun/24/2013
Rating Type	Control	Injury
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WG	1.98	oz wt/a	0.063	lb ai/a	PRE	A	87a	0c
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
2	Valor SX	51	WG	1.98	oz wt/a	0.063	lb ai/a	PRE	A	92a	5b
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
3	XtendiMax	2.91	SL	12.8	fl oz/a	0.29	lb ae/a	PRE	A	68b	0c
	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	PRE	A		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
4	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	PRE	A	92a	1c
	Tricor	75	DF	5.33	oz wt/a	0.25	lb ai/a	PRE	A		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
5	Valor SX	51	WG	1.98	oz wt/a	0.063	lb ai/a	PRE	A	95a	15a
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Flexstar	1.88	SL	20	fl oz/a	0.294	lb ai/a	POST	B		
	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
6	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	97a	0c
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
7	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	66b	5b
	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A		
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		

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Xtend Herbicide Programs for Roundup Ready 2 Soybeans

Trial ID: 13SB03JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: Monsanto

Pest Type	W Weed	
Pest Code	SIDSP	
Pest Scientific Name	Sida spinosa	
Pest Name	Prickly sida	
Crop Code		GLXMA
BBCH Scale		BSOY
Crop Scientific Name		Glycine max
Crop Name		Soybean
Rating Date	Jun/24/2013	Jun/24/2013
Rating Type	Control	Injury
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
8	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	75b	0c
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
9	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	75b	8b
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
10	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	93a	0c
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
11	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	92a	0c
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
12	Nontreated									0c	0c

LSD (P=.05)	6.5	2.2
Standard Deviation	4.5	1.5
CV	5.78	54.55
Bartlett's X2	22.214	0.773
P(Bartlett's X2)	0.014*	0.679
Skewness	-2.1759*	1.606*
Kurtosis	4.2217*	1.4984*
Replicate F	2.465	2.580
Replicate Prob(F)	0.0802	0.0707
Treatment F	142.549	36.630
Treatment Prob(F)	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Xtend Herbicide Programs for Roundup Ready 2 Soybeans

Trial ID:	13SB03JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	Monsanto

Pest Type	W Weed	
Pest Code	ECHCG	
Pest Scientific Name	Echinochloa cr>	
Pest Name	Common barnyar>	
Crop Code		GLXMA
BBCH Scale		BSOY
Crop Scientific Name		Glycine max
Crop Name		Soybean
Rating Date	Jul/30/2013	Jul/30/2013
Rating Type	Control	Injury
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WG	1.98	oz wt/a	0.063	lb ai/a	PRE	A	98a	0a
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
2	Valor SX	51	WG	1.98	oz wt/a	0.063	lb ai/a	PRE	A	98a	0a
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
3	XtendiMax	2.91	SL	12.8	fl oz/a	0.29	lb ae/a	PRE	A	97a	0a
	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	PRE	A		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
4	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	PRE	A	97a	0a
	Tricor	75	DF	5.33	oz wt/a	0.25	lb ai/a	PRE	A		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	B		
	Roundup Xtend	3	SL	48	fl oz/a	1.13	lb ae/a	POST	C		
5	Valor SX	51	WG	1.98	oz wt/a	0.063	lb ai/a	PRE	A	97a	0a
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Flexstar	1.88	SL	20	fl oz/a	0.294	lb ai/a	POST	B		
	Warrant	3	CS	48	fl oz/a	1.125	lb ai/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
6	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	95a	5a
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
7	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	98a	0a
	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A		
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		

School of Plant, Environmental, and Soil Sciences

Xtend Herbicide Programs for Roundup Ready 2 Soybeans

Trial ID:	13SB03JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	Monsanto

Pest Type	W Weed	
Pest Code	ECHCG	
Pest Scientific Name	Echinochloa cr>	
Pest Name	Common barnyar>	
Crop Code		GLXMA
BBCH Scale		BSOY
Crop Scientific Name		Glycine max
Crop Name		Soybean
Rating Date	Jul/30/2013	Jul/30/2013
Rating Type	Control	Injury
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
8	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	98a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
9	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	98a	0a
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
10	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	98a	0a
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
11	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	98a	0a
	Roundup PowerMAX	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Roundup PowerMAX	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
12	Nontreated									0b	0a

LSD (P=.05)	2.8	4.2
Standard Deviation	1.9	2.9
CV	2.18	703.56
Bartlett's X2	10.492	0.0
P(Bartlett's X2)	0.015*	.
Skewness	-3.0446*	6.8557*
Kurtosis	7.6526*	47.0*
Replicate F	2.492	0.970
Replicate Prob(F)	0.0779	0.4191
Treatment F	837.450	0.970
Treatment Prob(F)	0.0001	0.4921

BASF DTS Test

LSU AgCenter

School of Plant, Environmental, and Soil Sciences

Experiment number	13SB04JG
Location	Ben Hur Research Farm – Baton Rouge, LA
Experimental design	Randomized Complete Block
Number of reps	3
Plot size	11.25’ x 25’ (6’ x 25’ treated)
Row width/# per plot	15”/3
Soil type	clay loam
OM (%)	1.9
pH	6.3
Planting date	5-20-13
Harvest date	N/A
Crop/Variety	Soybean/dicamba tolerant
Uniform std. treatment	N/A

Application type	PRE A	POST B	POST C
Date applied (mm-dd-yy)	5-21-13	6-10-13	7-1-13
Time (hh:mm-hh:mm)	5:00-5:35pm	11:20-12:15 pm	N/A
Incorporation equipment	N/A	N/A	N/A
Incorporation depth	N/A	N/A	N/A
Air/Soil temperature (F)	88/87	83/89	N/A
Wind (mph/direction)	6-7/S	0-1/SW	N/A
Relative humidity (%)	57	77	N/A
Soil/Leaf surface moist	dry/N/A	moist/moist	N/A
Crop stage/height	N/A	V3/5-8”	N/A
Sprayer type/mph	CO_2bkpk/2.25	CO_2bkpk/2.25	CO_2bkpk/2.25
Nozzle type/size	FF/TTI11002	FF/TTI11002	FF/TTI11002
Boom ht/#noz/spacing (in)	15”/4/18”	15”/4/18”	15”/4/18”
GPA/psi (at nozzle)	20/28	20/28	20/28
Applied by	Copes	Bauerle	Foster

Weed species	population per ft^2/height/# leaves		
ECHCG	N/A	9-40/2-10”/4-8	N/A
IPOLA	N/A	1-2/2-5”/3-6	N/A
SIDSP	N/A	4-9/1-4”/2-5	N/A

Rainfall (in.)			
0-24 hr/1-3 days	-- / --	0.00/0.00	0.00/0.55
4-7 days/2nd week	0.05/1.07	0.00/2.69	0.40/1.59
3rd week/4th week	1.01/0.00	1.06/0.95	0.83/0.86

Comments:

Ratings made on July 8 are reflective of the application to the entire experimental area of Roundup PowerMax on July 1. This application was made because of variable soybean stand and reinfestation of weeds following the June 10 applications.

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID:	13SB04JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	BASF

Pest Type	W Weed	W Weed
Pest Code	ECHCG	IPOLA
Pest Scientific Name	Echinochloa cr>	Ipomoea lacuno>
Pest Name	Common barnyar>	Pitted morning>
Rating Date	Jun/4/2013	Jun/4/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Nontreated									0g	0h
2	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A	0g	0h
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
3	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	8g	18g
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
4	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	23ef	32c-g
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
5	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	3g	55a
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID: 13SB04JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: BASF

Pest Type											W Weed	W Weed
Pest Code											ECHCG	IPOLA
Pest Scientific Name											Echinochloa cr>	Ipomoea lacuno>
Pest Name											Common barnyar>	Pitted morning>
Rating Date											Jun/4/2013	Jun/4/2013
Rating Type											Control	Control
Rating Unit											%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
6	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A		38d	40a-e
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A			
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A			
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A			
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B			
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B			
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
7	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A		13fg	23fg
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A			
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A			
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B			
	Outlook	6	EC	16.0	fl oz/a	0.75	lb ai/a	POST	B			
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B			
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
8	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A		35de	27efg
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A			
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A			
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A			
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B			
	Outlook	6	EC	16.0	fl oz/a	0.75	lb ai/a	POST	B			
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B			
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
9	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A		70ab	53a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A			
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A			
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A			
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B			
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B			
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID: 13SB04JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: BASF

Pest Type										W Weed	W Weed
Pest Code										ECHCG	IPOLA
Pest Scientific Name										Echinochloa cr>	Ipomoea lacuno>
Pest Name										Common barnyar>	Pitted morning>
Rating Date										Jun/4/2013	Jun/4/2013
Rating Type										Control	Control
Rating Unit										%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
10	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	67ab	50ab
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Outlook	6	EC	16.0	fl oz/a	0.75	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
11	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	72ab	37b-f
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
12	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	68ab	30d-g
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
13	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	72ab	43a-d
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID: 13SB04JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: BASF

Pest Type											W Weed	W Weed
Pest Code											ECHCG	IPOLA
Pest Scientific Name											Echinochloa cr>	Ipomoea lacuno>
Pest Name											Common barnyar>	Pitted morning>
Rating Date											Jun/4/2013	Jun/4/2013
Rating Type											Control	Control
Rating Unit											%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
14	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		80a	40a-e
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A			
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A			
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A			
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B			
	Outlook	6	EC	16.0	fl oz/a	0.75	lb ai/a	POST	B			
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B			
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
15	Valor SX	51	WG	2.0	oz wt/a	0.064	lb ai/a	PRE	A		58bc	47abc
	Weedar 64	3.8	SL	32.0	fl oz/a	0.95	lb ae/a	PRE	A			
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A			
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A			
	Flexstar	1.88	ME	16.0	fl oz/a	0.235	lb ai/a	POST	B			
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B			
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
16	Valor SX	51	WG	2.0	oz wt/a	0.064	lb ai/a	PRE	A		52c	43a-d
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A			
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A			
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A			
	Warrant	3	CS	48.0	fl oz/a	1.13	lb ai/a	POST	B			
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B			
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B			
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID:	13SB04JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	BASF

Pest Type	W Weed	W Weed
Pest Code	ECHCG	IPOLA
Pest Scientific Name	Echinochloa cr>	Ipomoea lacuno>
Pest Name	Common barnyar>	Pitted morning>
Rating Date	Jun/4/2013	Jun/4/2013
Rating Type	Control	Control
Rating Unit	%	%
LSD (P=.05)	12.3	10.3
Standard Deviation	7.4	6.2
CV	17.96	18.29
Bartlett's X2	7.012	7.903
P(Bartlett's X2)	0.857	0.793
Skewness	-0.2219	-0.6478
Kurtosis	-1.4935*	-0.5941
Replicate F	4.443	8.758
Replicate Prob(F)	0.0204	0.0010
Treatment F	47.504	22.327
Treatment Prob(F)	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID:	13SB04JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	BASF

Pest Type	W Weed	
Pest Code	SIDSP	
Pest Scientific Name	Sida spinosa	
Pest Name	Prickly sida	
Crop Code		GLXMA
BBCH Scale		BSOY
Crop Scientific Name		Glycine max
Crop Name		Soybean
Rating Date	Jun/4/2013	Jun/4/2013
Rating Type	Control	Injury
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Nontreated									0e	0b
2	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A	0e	0b
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
3	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	30d	0b
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
4	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	65b	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
5	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	72b	0b
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
6	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	43cd	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID: 13SB04JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: BASF

Pest Type	W Weed	
Pest Code	SIDSP	
Pest Scientific Name	Sida spinosa	
Pest Name	Prickly sida	
Crop Code		GLXMA
BBCH Scale		BSOY
Crop Scientific Name		Glycine max
Crop Name		Soybean
Rating Date	Jun/4/2013	Jun/4/2013
Rating Type	Control	Injury
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
7	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	42cd	0b
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Outlook	6	EC	16.0	fl oz/a	0.75	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
8	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	53bc	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Outlook	6	EC	16.0	fl oz/a	0.75	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
9	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	62b	0b
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
10	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	67b	0b
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID: 13SB04JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: BASF

Pest Type	W Weed	
Pest Code	SIDSP	
Pest Scientific Name	Sida spinosa	
Pest Name	Prickly sida	
Crop Code		GLXMA
BBCH Scale		BSOY
Crop Scientific Name		Glycine max
Crop Name		Soybean
Rating Date	Jun/4/2013	Jun/4/2013
Rating Type	Control	Injury
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
11	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	28d	0b
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
12	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	33d	0b
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
13	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	37cd	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
14	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	45cd	0b
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Outlook	6	EC	16.0	fl oz/a	0.75	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID: 13SB04JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: BASF

Pest Type	W Weed	
Pest Code	SIDSP	
Pest Scientific Name	Sida spinosa	
Pest Name	Prickly sida	
Crop Code		GLXMA
BBCH Scale		BSOY
Crop Scientific Name		Glycine max
Crop Name		Soybean
Rating Date	Jun/4/2013	Jun/4/2013
Rating Type	Control	Injury
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
15	Valor SX	51	WG	2.0	oz wt/a	0.064	lb ai/a	PRE	A	85a	67a
	Weedar 64	3.8	SL	32.0	fl oz/a	0.95	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Flexstar	1.88	ME	16.0	fl oz/a	0.235	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
16	Valor SX	51	WG	2.0	oz wt/a	0.064	lb ai/a	PRE	A	65b	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Warrant	3	CS	48.0	fl oz/a	1.13	lb ai/a	POST	B		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		

LSD (P=.05)	13.1	4.8
Standard Deviation	7.8	2.9
CV	17.27	69.28
Bartlett's X2	9.385	0.0
P(Bartlett's X2)	0.743	.
Skewness	-0.3609	3.8729*
Kurtosis	-0.4284	14.0067*
Replicate F	0.440	1.000
Replicate Prob(F)	0.6480	0.3798
Treatment F	28.271	100.000
Treatment Prob(F)	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID:	13SB04JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	BASF

Pest Type	W Weed	W Weed
Pest Code	ECHCG	SIDSP
Pest Scientific Name	Echinochloa cr>	Sida spinosa
Pest Name	Common barnyar>	Prickly sida
Rating Date	Jun/17/2013	Jun/17/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Nontreated									0c	0f
2	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A	77b	60e
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
3	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	75b	73cd
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
4	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	77b	68de
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
5	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	73b	93a
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
6	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	71b	94a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID: 13SB04JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: BASF

Pest Type	W Weed	W Weed
Pest Code	ECHCG	SIDSP
Pest Scientific Name	Echinochloa cr>	Sida spinosa
Pest Name	Common barnyar>	Prickly sida
Rating Date	Jun/17/2013	Jun/17/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
7	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	72b	73cd
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Outlook	6	EC	16.0	fl oz/a	0.75	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
8	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	72b	87ab
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Outlook	6	EC	16.0	fl oz/a	0.75	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
9	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	92a	94a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
10	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	92a	93a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID: 13SB04JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: BASF

Pest Type	W Weed	W Weed
Pest Code	ECHCG	SIDSP
Pest Scientific Name	Echinochloa cr>	Sida spinosa
Pest Name	Common barnyar>	Prickly sida
Rating Date	Jun/17/2013	Jun/17/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
11	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	95a	83abc
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
12	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	89a	76bcd
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
13	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	94a	85ab
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
14	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	95a	88ab
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Outlook	6	EC	16.0	fl oz/a	0.75	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID:	13SB04JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	BASF

Pest Type	W Weed	W Weed
Pest Code	ECHCG	SIDSP
Pest Scientific Name	Echinochloa cr>	Sida spinosa
Pest Name	Common barnyar>	Prickly sida
Rating Date	Jun/17/2013	Jun/17/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
15	Valor SX	51	WG	2.0	oz wt/a	0.064	lb ai/a	PRE	A	77b	94a
	Weedar 64	3.8	SL	32.0	fl oz/a	0.95	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Flexstar	1.88	ME	16.0	fl oz/a	0.235	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
16	Valor SX	51	WG	2.0	oz wt/a	0.064	lb ai/a	PRE	A	78b	88ab
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Warrant	3	CS	48.0	fl oz/a	1.13	lb ai/a	POST	B		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		

LSD (P=.05)	6.5	8.6
Standard Deviation	3.9	5.1
CV	5.1	6.6
Bartlett's X2	10.573	20.102
P(Bartlett's X2)	0.566	0.065
Skewness	-2.5525*	-2.4575*
Kurtosis	7.0571*	6.2684*
Replicate F	8.459	3.137
Replicate Prob(F)	0.0012	0.0579
Treatment F	98.724	61.000
Treatment Prob(F)	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID:	13SB04JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	BASF

Pest Type			W Weed
Pest Code			ECHCG
Pest Scientific Name			Echinochloa cr>
Pest Name			Common barnyar>
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Rating Date		Jun/17/2013	Jul/8/2013
Rating Type		Injury	Control
Rating Unit		%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Nontreated									0c	0b
2	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A	0c	82a
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
3	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	0c	78a
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
4	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	0c	83a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
5	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	0c	85a
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
6	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	0c	84a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID: 13SB04JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: BASF

Pest Type			W Weed
Pest Code			ECHCG
Pest Scientific Name			Echinochloa cr>
Pest Name			Common barnyar>
Crop Code		GLXMA	
BBCH Scale		BSOY	
Crop Scientific Name		Glycine max	
Crop Name		Soybean	
Rating Date		Jun/17/2013	Jul/8/2013
Rating Type		Injury	Control
Rating Unit		%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
7	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	8ab	87a
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Outlook	6	EC	16.0	fl oz/a	0.75	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
8	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	8ab	91a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Outlook	6	EC	16.0	fl oz/a	0.75	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
9	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	0c	95a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
10	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	10a	95a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID: 13SB04JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: BASF

Pest Type		W Weed
Pest Code		ECHCG
Pest Scientific Name		Echinochloa cr>
Pest Name		Common barnyar>
Crop Code	GLXMA	
BBCH Scale	BSOY	
Crop Scientific Name	Glycine max	
Crop Name	Soybean	
Rating Date	Jun/17/2013	Jul/8/2013
Rating Type	Injury	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
11	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0c	95a
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
12	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0c	95a
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
13	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0c	95a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
14	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	5bc	97a
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Outlook	6	EC	16.0	fl oz/a	0.75	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID: 13SB04JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: BASF

Pest Type		W Weed
Pest Code		ECHCG
Pest Scientific Name		Echinochloa cr>
Pest Name		Common barnyar>
Crop Code	GLXMA	
BBCH Scale	BSOY	
Crop Scientific Name	Glycine max	
Crop Name	Soybean	
Rating Date	Jun/17/2013	Jul/8/2013
Rating Type	Injury	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
15	Valor SX	51	WG	2.0	oz wt/a	0.064	lb ai/a	PRE	A	12a	89a
	Weedar 64	3.8	SL	32.0	fl oz/a	0.95	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Flexstar	1.88	ME	16.0	fl oz/a	0.235	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
16	Valor SX	51	WG	2.0	oz wt/a	0.064	lb ai/a	PRE	A	2c	92a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Warrant	3	CS	48.0	fl oz/a	1.13	lb ai/a	POST	B		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		

LSD (P=.05)	3.0	11.4
Standard Deviation	1.8	6.8
CV	63.2	8.13
Bartlett's X2	1.112	34.839
P(Bartlett's X2)	0.892	0.001*
Skewness	1.3737*	-3.0932*
Kurtosis	0.6811	9.0471*
Replicate F	3.462	1.037
Replicate Prob(F)	0.0444	0.3670
Treatment F	17.484	34.586
Treatment Prob(F)	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID:	13SB04JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	BASF

Pest Type	W Weed	W Weed
Pest Code	IPOLA	SIDSP
Pest Scientific Name	Ipomoea lacuno>	Sida spinosa
Pest Name	Pitted morning>	Prickly sida
Rating Date	Jul/8/2013	Jul/8/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Nontreated									0c	0b
2	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A	87b	92a
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
3	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	90ab	92a
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
4	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	88ab	93a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
5	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	91ab	93a
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
6	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	95ab	95a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID: 13SB04JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: BASF

Pest Type	W Weed	W Weed
Pest Code	IPOLA	SIDSP
Pest Scientific Name	Ipomoea lacuno>	Sida spinosa
Pest Name	Pitted morning>	Prickly sida
Rating Date	Jul/8/2013	Jul/8/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
7	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	95ab	93a
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Outlook	6	EC	16.0	fl oz/a	0.75	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
8	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	95ab	95a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Outlook	6	EC	16.0	fl oz/a	0.75	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
9	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	97a	97a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
10	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	95ab	96a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	MSO		OL	1.0	% v/v	1	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID: 13SB04JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: BASF

Pest Type		W Weed	W Weed
Pest Code		IPOLA	SIDSP
Pest Scientific Name		Ipomoea lacuno>	Sida spinosa
Pest Name		Pitted morning>	Prickly sida
Rating Date		Jul/8/2013	Jul/8/2013
Rating Type		Control	Control
Rating Unit		%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
11	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	94ab	94a
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
12	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	94ab	94a
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
13	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	94ab	94a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
14	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	97a	97a
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A		
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B		
	Outlook	6	EC	16.0	fl oz/a	0.75	lb ai/a	POST	B		
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B		
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		

School of Plant, Environmental, and Soil Sciences

BASF DTS Test

Trial ID: 13SB04JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Bauerle
Sponsor Contact: BASF

Pest Type											W Weed	W Weed
Pest Code											IPOLA	SIDSP
Pest Scientific Name											Ipomoea lacuno>	Sida spinosa
Pest Name											Pitted morning>	Prickly sida
Rating Date											Jul/8/2013	Jul/8/2013
Rating Type											Control	Control
Rating Unit											%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
15	Valor SX	51	WG	2.0	oz wt/a	0.064	lb ai/a	PRE	A		95ab	95a
	Weedar 64	3.8	SL	32.0	fl oz/a	0.95	lb ae/a	PRE	A			
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A			
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A			
	Flexstar	1.88	ME	16.0	fl oz/a	0.235	lb ai/a	POST	B			
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B			
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
16	Valor SX	51	WG	2.0	oz wt/a	0.064	lb ai/a	PRE	A		95ab	95a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A			
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	PRE	A			
	Induce		TK	0.25	% v/v	0.25	% v/v	PRE	A			
	Warrant	3	CS	48.0	fl oz/a	1.13	lb ai/a	POST	B			
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	POST	B			
	Roundup Powermax	4.5	SL	28.4	fl oz/a	1	lb ae/a	POST	B			
	Induce		TK	0.25	% v/v	0.25	% v/v	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
LSD (P=.05)											4.9	3.8
Standard Deviation											2.9	2.3
CV											3.35	2.57
Bartlett's X2											10.571	4.809
P(Bartlett's X2)											0.227	0.904
Skewness											-3.5726*	-3.6636*
Kurtosis											11.6451*	12.1128*
Replicate F											0.596	1.330
Replicate Prob(F)											0.5574	0.2796
Treatment F											192.831	323.806
Treatment Prob(F)											0.0001	0.0001

2013 BASF Soybean Herbicide Demonstration Trial – B

LSU AgCenter

School of Plant, Environmental, and Soil Sciences

Experiment number	13SB05JG
Location	Ben Hur Research Farm – Baton Rouge, LA
Experimental design	N/A
Number of reps	1
Plot size	20’ x 180’
Row width/# per plot	30”/8
Soil type	clay loam
OM (%)	1.9
pH	6.3
Planting date	6-6-13
Harvest date	10-24-13
Crop/Variety	Soybean/Pioneer 94Y80
Uniform std. treatment	N/A

Application type	PRE A	POST B
Date applied (mm-dd-yy)	6-6-13	7-1-13
Time (hh:mm-hh:mm)	2:45-3:15pm	1:00-1:45pm
Incorporation equipment	N/A	N/A
Incorporation depth	N/A	N/A
Air/Soil temperature (F)	89/95	84/86
Wind (mph/direction)	8-10/NW	9-10/NW
Relative humidity (%)	53	51
Soil/Leaf surface moist	dry/N/A	dry/dry
Crop stage/height	N/A	N/A
Sprayer type/mph	CO_2bkpk/3.0	CO2bkpk/3.0
Nozzle type/size	FF/TTI11002	FF/TTI11002
Boom ht/#noz/spacing (in)	18”/3/20”	18”/3/20”
GPA/psi (at nozzle)	15/28	15/28
Applied by	Bauerle	Foster

Weed species	population per ft^2/height/# leaves	
ECHCG	N/A	0-1/1-3”/2-4
IPOLA	N/A	1-2/2-4”/3-5
MEOCO	N/A	0-1/1-3”/2-4
COMDI	N/A	0-1/2-4”/3-4
SIDSP	N/A	0-1/1-3”/1-3

Rainfall (in.)		
0-24 hr/1-3 days	0.54/0.47	0.00/0.55
4-7 days/2nd week	0.00/0.95	0.40/1.59
3rd week/4th week	1.74/1.61	0.83/0.86

Comments:

Insecticide and fungicide treatments were applied on 8-22-13 and consisted of 4.5 oz/A Endigo + 2 oz/A Belt and 10oz/A Stratego, respectively. Orthene was applied again at 1 lb/A on 9-13-13, and Gramoxone was applied on 10-3-13 at 1 pt/A in 15 GPA spray volume with Induce at 0.25% v/v. Six subplots (150 ft^2) were harvested in each treatment and used to calculate yield in bushels per acre.

School of Plant, Environmental, and Soil Sciences

2013 BASF Soybean Herbicide Demonstration Trial- B

Trial ID:	13SB05JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	BASF

Pest Type	W Weed	W Weed
Pest Code	ECHCG	IPOLA
Pest Scientific Name	Echinochloa cr>	Ipomoealacuno>
Pest Name	Common barnyar>	Pitted morning>
Rating Date	Jun/29/2013	Jun/29/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	90	75
	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B		
2	Zidua	85	WG	2.0	oz wt/a	0.106	lb ai/a	PRE	A	80	60
	Zidua	85	WG	1.0	oz wt/a	0.053	lb ai/a	EPOST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B		
3	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	85	80
	Verdict	5.57	EC	5.0	fl oz/a	0.218	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B		
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	93	88
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B		
5	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B	0	0

LSD (P=.05)	.	.
Standard Deviation	.	.
CV	.	.
Bartlett's X2	.	.
P(Bartlett's X2)	.	.
Skewness	-2.1483*	-1.8033
Kurtosis	4.6813*	3.3549

School of Plant, Environmental, and Soil Sciences

2013 BASF Soybean Herbicide Demonstration Trial- B

Trial ID:	13SB05JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	BASF

Pest Type	W Weed	W Weed
Pest Code	MEOCO	SIDSP
Pest Scientific Name	Melochia corch>	Sida spinosa
Pest Name	Redweed	Prickly sida
Rating Date	Jun/29/2013	Jun/29/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	95	95
	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B		
2	Zidua	85	WG	2.0	oz wt/a	0.106	lb ai/a	PRE	A	95	95
	Zidua	85	WG	1.0	oz wt/a	0.053	lb ai/a	EPOST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B		
3	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	95	95
	Verdict	5.57	EC	5.0	fl oz/a	0.218	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B		
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	95	95
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B		
5	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B	0	0

LSD (P=.05)	.	.
Standard Deviation	.	.
CV	.	.
Bartlett's X2	.	.
P(Bartlett's X2)	.	.
Skewness	-2.2361*	-2.2361*
Kurtosis	5.0*	5.0*

School of Plant, Environmental, and Soil Sciences

2013 BASF Soybean Herbicide Demonstration Trial- B

Trial ID:	13SB05JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	BASF

Pest Type	W Weed	W Weed
Pest Code	COMDI	
Pest Scientific Name	Commelina diff>	
Pest Name	Baby dayflower	
Crop Code		GLXMA
BBCH Scale		BSOY
Crop Scientific Name		Glycine max
Crop Name		Soybean
Rating Date	Jun/29/2013	Jun/29/2013
Rating Type	Control	Injury
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	75	0
	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B		
2	Zidua	85	WG	2.0	oz wt/a	0.106	lb ai/a	PRE	A	70	0
	Zidua	85	WG	1.0	oz wt/a	0.053	lb ai/a	EPOST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B		
3	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	80	0
	Verdict	5.57	EC	5.0	fl oz/a	0.218	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B		
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	90	0
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B		
5	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B	0	0

LSD (P=.05)	.	.
Standard Deviation	.	.
CV	.	.
Bartlett's X2	.	.
P(Bartlett's X2)	.	.
Skewness	-1.9972*	.
Kurtosis	4.2174*	.

School of Plant, Environmental, and Soil Sciences

2013 BASF Soybean Herbicide Demonstration Trial- B

Trial ID:	13SB05JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	BASF

Pest Type		W Weed	W Weed
Pest Code		ECHCG	IPOLA
Pest Scientific Name		Echinochloa cr>	Ipomoea lacuno>
Pest Name		Common barnyar>	Pitted morning>
Rating Date		Jul/29/2013	Jul/29/2013
Rating Type		Control	Control
Rating Unit		%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	98	98
	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B		
2	Zidua	85	WG	2.0	oz wt/a	0.106	lb ai/a	PRE	A	98	98
	Zidua	85	WG	1.0	oz wt/a	0.053	lb ai/a	EPOST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B		
3	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	98	98
	Verdict	5.57	EC	5.0	fl oz/a	0.218	lb ai/a	PRE	A		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B		
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	98	98
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B		
5	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B	0	0

LSD (P=.05)	.	.
Standard Deviation	.	.
CV	.	.
Bartlett's X2	.	.
P(Bartlett's X2)	.	.
Skewness	-2.2361*	-2.2361*
Kurtosis	5.0*	5.0*

School of Plant, Environmental, and Soil Sciences

2013 BASF Soybean Herbicide Demonstration Trial- B

Trial ID:	13SB05JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	BASF

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	W Weed MEOCO Melochia corch> Redweed Jul/29/2013 Control %	W Weed SIDSP Sida spinosa Prickly sida Jul/29/2013 Control %	GLXMA BSOY Glycine max Soybean Jul/29/2013 Injury %
1	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	98	98	0
	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B			
2	Zidua	85	WG	2.0	oz wt/a	0.106	lb ai/a	PRE	A	98	98	0
	Zidua	85	WG	1.0	oz wt/a	0.053	lb ai/a	EPOST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B			
3	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	98	98	0
	Verdict	5.57	EC	5.0	fl oz/a	0.218	lb ai/a	PRE	A			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B			
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	98	98	0
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B			
5	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B	0	0	0
	LSD (P=.05)									.	.	.
	Standard Deviation									.	.	.
	CV									.	.	.
	Bartlett's X2									.	.	.
	P(Bartlett's X2)									.	.	.
	Skewness									-2.2361*	-2.2361*	.
	Kurtosis									5.0*	5.0*	.

School of Plant, Environmental, and Soil Sciences

2013 BASF Soybean Herbicide Demonstration Trial- B

Trial ID:	13SB05JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	BASF

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Rating Date									Oct/24/2013	Oct/24/2013	Oct/24/2013
	Rating Type									Moisture	Test Weight	Yield
	Rating Unit									%	lb/bu	kg
1	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	14.9	53.6	140.00
	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B			
2	Zidua	85	WG	2.0	oz wt/a	0.106	lb ai/a	PRE	A	13.6	54.5	137.68
	Zidua	85	WG	1.0	oz wt/a	0.053	lb ai/a	EPOST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B			
3	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	13.7	54.1	144.96
	Verdict	5.57	EC	5.0	fl oz/a	0.218	lb ai/a	PRE	A			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B			
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	13.7	54.2	141.52
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B			
5	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B	13.4	53.8	141.24
	LSD (P=.05)									.	.	.
	Standard Deviation									.	.	.
	CV									.	.	.
	Bartlett's X2									.	.	.
	P(Bartlett's X2)									.	.	.
	Skewness									1.9167*	0.4046	0.4035
	Kurtosis									4.0031*	-0.194	1.2262

School of Plant, Environmental, and Soil Sciences

2013 BASF Soybean Herbicide Demonstration Trial- B

Trial ID:	13SB05JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	BASF

Crop Code	GLXMA
BBCH Scale	BSOY
Crop Scientific Name	Glycine max
Crop Name	Soybean
Rating Date	Oct/24/2013
Rating Type	Yield
Rating Unit	bu/A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	60.9
	Sharpen	2.85	SC	1.0	fl oz/a	0.0223	lb ai/a	PRE	A	
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B	
2	Zidua	85	WG	2.0	oz wt/a	0.106	lb ai/a	PRE	A	60.8
	Zidua	85	WG	1.0	oz wt/a	0.053	lb ai/a	EPOST	B	
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B	
3	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	63.9
	Verdict	5.57	EC	5.0	fl oz/a	0.218	lb ai/a	PRE	A	
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B	
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	62.4
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B	
5	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	EPOST	B	62.5

LSD (P=.05)	.
Standard Deviation	.
CV	.
Bartlett's X2	.
P(Bartlett's X2)	.
Skewness	0.3603
Kurtosis	-1.0479

Zidua Test 1

LSU AgCenter

School of Plant, Environmental, and Soil Sciences

Experiment number	13SB06JG
Location	Ben Hur Research Farm – Baton Rouge, LA
Experimental design	Randomized Complete Block
Number of reps	3
Plot size	11.25’ x 25’ (6’ x 25’ treated)
Row width/# per plot	15”/3
Soil type	clay loam
OM (%)	1.9
pH	6.3
Planting date	5-20-13
Harvest date	10-14-13
Crop/Variety	Soybean/Progeny P5711RY
Uniform std. treatment	N/A

Application type	PRE A	POST B	POST C
Date applied (mm-dd-yy)	5-21-13	6-6-13	6-25-13
Time (hh:mm-hh:mm)	7:15-7:30pm	11:45-12:15pm	2:00-2:45pm
Incorporation equipment	N/A	N/A	N/A
Incorporation depth	N/A	N/A	N/A
Air/Soil temperature (F)	N/A	89/94	90/90
Wind (mph/direction)	N/A	5-7/SW	3-4/SW
Relative humidity (%)	N/A	58	46
Soil/Leaf surface moist	dry/N/A	dry/dry	dry/dry
Crop stage/height	N/A	V2/5-6”	V5/14-16”
Sprayer type/mph	CO_2bkpk/3.0	CO_2bkpk/3.0	CO2bkpk/3.0
Nozzle type/size	FF/TTI11002	FF/TTI11002	FF/TTI11002
Boom ht/#noz/spacing (in)	15”/4/18”	15”/4/18”	15”/4/18”
GPA/psi (at nozzle)	15/28	15/28	15/28
Applied by	Copes	Bauerle	Foster

Weed species	population per ft^2/height/# leaves		
ECHCG	N/A	2-25/1-6”/2-7	N/A
IPOLA	N/A	2-4/1-3”/1-5	N/A
SIDSP	N/A	1-2/1-2”1-3	N/A

Rainfall (in.)			
0-24 hr/1-3 days	-- / --	0.54/0.47	0.00/0.00
4-7 days/2nd week	-- / --	0.00/0.95	1.06/0.99
3rd week/4th week	1.01/0.32	1.74/1.61	1.67/0.71

Comments:

Insecticide and fungicide treatments were applied on 8-2-13 and consisted of 0.5 lb/A Orthene + 6 oz/A Discipline and 10 oz/A Stratego, respectively. A second application of insecticide was made on 8-22-13 and consisted of 4.5 oz/A Endigo + 2 oz/A Belt. Orthene was applied again at 1 lb/A on 9-13-13, and Gramoxone was applied on 9-26-13 at 1 pt/A in 15 GPA spray volume with Induce at 0.25% v/v.

School of Plant, Environmental, and Soil Sciences

Zidua Test 1

Trial ID:	13SB06JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	IPOLA
Pest Scientific Name	Echinochloa cr>	Ipomoea lacuno>
Pest Name	Common barnyar>	Pitted morning>
Rating Date	Jun/3/2013	Jun/3/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	0c	0c
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
2	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	PRE	A	63b	40b
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
3	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	PRE	A	86a	50a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
4	Zidua	85	WG	3	oz wt/a	0.16	lb ai/a	PRE	A	83a	57a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
5	Zidua	85	WG	4	oz wt/a	0.213	lb ai/a	PRE	A	88a	53a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
6	Zidua	85	WG	5	oz wt/a	0.266	lb ai/a	PRE	A	91a	57a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
7	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B		
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		
8	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	POST	B		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C		

School of Plant, Environmental, and Soil Sciences

Zidua Test 1

Trial ID:	13SB06JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	IPOLA
Pest Scientific Name	Echinochloa cr>	Ipomoea lacuno>
Pest Name	Common barnyar>	Pitted morning>
Rating Date	Jun/3/2013	Jun/3/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code
9	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	POST	B
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C
10	Zidua	85	WG	3	oz wt/a	0.16	lb ai/a	POST	B
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C
11	Zidua	85	WG	4	oz wt/a	0.213	lb ai/a	POST	B
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C
12	Zidua	85	WG	5	oz wt/a	0.266	lb ai/a	POST	B
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C

LSD (P=.05)	5.9	8.3
Standard Deviation	3.2	4.5
CV	4.66	10.47
Bartlett's X2	4.61	0.664
P(Bartlett's X2)	0.33	0.882
Skewness	-1.5233*	-1.3184*
Kurtosis	0.846	0.6572
Replicate F	6.696	5.356
Replicate Prob(F)	0.0165	0.0294
Treatment F	359.536	71.374
Treatment Prob(F)	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Zidua Test 1

Trial ID:	13SB06JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed		
Pest Code	SIDSP		
Pest Scientific Name	Sida spinosa		
Pest Name	Prickly sida		
Crop Code		GLXMA	GLXMA
BBCH Scale		BSOY	BSOY
Crop Scientific Name		Glycine max	Glycine max
Crop Name		Soybean	Soybean
Rating Date	Jun/3/2013	Jun/3/2013	Jun/6/2013
Rating Type	Control	Injury	Injury
Rating Unit	%	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	0c	0a	0a
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
2	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	PRE	A	90b	0a	0a
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
3	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	PRE	A	89b	0a	0a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
4	Zidua	85	WG	3	oz wt/a	0.16	lb ai/a	PRE	A	93a	0a	0a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
5	Zidua	85	WG	4	oz wt/a	0.213	lb ai/a	PRE	A	93a	0a	0a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
6	Zidua	85	WG	5	oz wt/a	0.266	lb ai/a	PRE	A	95a	0a	0a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
7	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
8	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			

School of Plant, Environmental, and Soil Sciences

Zidua Test 1

Trial ID:	13SB06JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed		
Pest Code	SIDSP		
Pest Scientific Name	Sida spinosa		
Pest Name	Prickly sida		
Crop Code		GLXMA	GLXMA
BBCH Scale		BSOY	BSOY
Crop Scientific Name		Glycine max	Glycine max
Crop Name		Soybean	Soybean
Rating Date	Jun/3/2013	Jun/3/2013	Jun/6/2013
Rating Type	Control	Injury	Injury
Rating Unit	%	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code
9	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	POST	B
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C
10	Zidua	85	WG	3	oz wt/a	0.16	lb ai/a	POST	B
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C
11	Zidua	85	WG	4	oz wt/a	0.213	lb ai/a	POST	B
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C
12	Zidua	85	WG	5	oz wt/a	0.266	lb ai/a	POST	B
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C

LSD (P=.05)	2.6	0.0	0.0
Standard Deviation	1.4	0.0	0.0
CV	1.85	0.0	0.0
Bartlett's X2	0.037	0.0	0.0
P(Bartlett's X2)	0.848	.	.
Skewness	-1.8496*	.	.
Kurtosis	1.6314	.	.
Replicate F	3.287	0.000	0.000
Replicate Prob(F)	0.0848	1.0000	1.0000
Treatment F	2102.901	0.000	0.000
Treatment Prob(F)	0.0001	1.0000	1.0000

School of Plant, Environmental, and Soil Sciences

Zidua Test 1

Trial ID:	13SB06JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Rating Date	Jun/14/2013	Jun/14/2013	Jun/14/2013
Rating Type	Injury	Stand Count	Avg PlantHt
Rating Unit	%	#	Inches

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	0b	50abc	6.5a
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
2	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	PRE	A	0b	71ab	6.6a
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
3	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	PRE	A	0b	42bc	6.2a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
4	Zidua	85	WG	3	oz wt/a	0.16	lb ai/a	PRE	A	0b	54abc	6.1a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
5	Zidua	85	WG	4	oz wt/a	0.213	lb ai/a	PRE	A	0b	63ab	6.3a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
6	Zidua	85	WG	5	oz wt/a	0.266	lb ai/a	PRE	A	0b	33c	5.9a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
7	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	0b	71ab	5.9a
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
8	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	POST	B	3a	76a	5.8a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			

School of Plant, Environmental, and Soil Sciences

Zidua Test 1

Trial ID: 13SB06JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Foster
Sponsor Contact: LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Rating Date									Jun/14/2013	Jun/14/2013	Jun/14/2013
	Rating Type									Injury	Stand Count	Avg PlantHt
	Rating Unit									%	#	Inches
9	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	POST	B	5a	76a	5.3a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
10	Zidua	85	WG	3	oz wt/a	0.16	lb ai/a	POST	B	5a	66ab	5.7a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
11	Zidua	85	WG	4	oz wt/a	0.213	lb ai/a	POST	B	5a	73a	5.2a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
12	Zidua	85	WG	5	oz wt/a	0.266	lb ai/a	POST	B	5a	60ab	5.7a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
	LSD (P=.05)									1.5	18.8	1.04
	Standard Deviation									0.9	11.0	0.61
	CV									44.58	18.0	10.3
	Bartlett's X2									0.0	3.849	7.95
	P(Bartlett's X2)									.	0.974	0.718
	Skewness									0.5068	-0.4205	0.147
	Kurtosis									-1.8561*	-0.2888	0.2424
	Replicate F									0.994	0.022	7.841
	Replicate Prob(F)									0.3877	0.9787	0.0031
	Treatment F									23.625	4.833	1.535
	Treatment Prob(F)									0.0001	0.0014	0.1951

School of Plant, Environmental, and Soil Sciences

Zidua Test 1

Trial ID:	13SB06JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Rating Date	Jun/28/2013	Jun/28/2013	Oct/9/2013
Rating Type	Injury	Avg PlantHt	Avg PlantHt
Rating Unit	%	Inches	Inches

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	0a	14.0a	20.5abc
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
2	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	PRE	A	0a	16.1a	25.3a
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
3	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	PRE	A	0a	14.0a	22.2abc
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
4	Zidua	85	WG	3	oz wt/a	0.16	lb ai/a	PRE	A	0a	15.1a	22.0abc
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
5	Zidua	85	WG	4	oz wt/a	0.213	lb ai/a	PRE	A	0a	15.3a	23.5ab
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
6	Zidua	85	WG	5	oz wt/a	0.266	lb ai/a	PRE	A	0a	13.5a	22.1abc
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
7	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	0a	13.4a	19.6bc
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
8	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	POST	B	0a	15.5a	22.2abc
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			

School of Plant, Environmental, and Soil Sciences

Zidua Test 1

Trial ID: 13SB06JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Foster
Sponsor Contact: LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Rating Date									Jun/28/2013	Jun/28/2013	Oct/9/2013
	Rating Type									Injury	Avg PlantHt	Avg PlantHt
	Rating Unit									%	Inches	Inches
9	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	POST	B	0a	13.1a	17.6c
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
10	Zidua	85	WG	3	oz wt/a	0.16	lb ai/a	POST	B	3a	15.0a	21.1abc
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
11	Zidua	85	WG	4	oz wt/a	0.213	lb ai/a	POST	B	0a	13.7a	20.3abc
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
12	Zidua	85	WG	5	oz wt/a	0.266	lb ai/a	POST	B	0a	13.3a	19.7bc
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
	LSD (P=.05)									3.0	3.00	3.10
	Standard Deviation									1.7	1.76	1.82
	CV									629.29	12.27	8.52
	Bartlett's X2									0.0	8.209	8.475
	P(Bartlett's X2)									.	0.694	0.67
	Skewness									5.831*	0.2876	-0.3866
	Kurtosis									34.0*	-0.551	0.2897
	Replicate F									0.909	2.280	1.462
	Replicate Prob(F)									0.4189	0.1283	0.2556
	Treatment F									0.909	0.991	3.610
	Treatment Prob(F)									0.5493	0.4863	0.0062

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Zidua Test 1

Trial ID:	13SB06JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Rating Date	Oct/14/2013	Oct/14/2013	Oct/14/2013
Rating Type	Moisture	Test Weight	Yield
Rating Unit	%	lb/bu	kg

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	13.5a	53.2a	5.84a
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
2	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	PRE	A	13.3a	54.1a	6.11a
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
3	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	PRE	A	13.2a	53.9a	5.58a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
4	Zidua	85	WG	3	oz wt/a	0.16	lb ai/a	PRE	A	13.2a	54.0a	5.76a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
5	Zidua	85	WG	4	oz wt/a	0.213	lb ai/a	PRE	A	13.3a	54.1a	5.60a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
6	Zidua	85	WG	5	oz wt/a	0.266	lb ai/a	PRE	A	13.4a	51.4a	5.59a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
7	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	13.2a	55.1a	5.50a
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
8	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	POST	B	13.4a	53.5a	5.58a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			

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Zidua Test 1

Trial ID:	13SB06JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA BSOY Glycine max Soybean Oct/14/2013 Moisture %	GLXMA BSOY Glycine max Soybean Oct/14/2013 Test Weight lb/bu	GLXMA BSOY Glycine max Soybean Oct/14/2013 Yield kg
9	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	POST	B	13.0a	54.3a	5.43a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
10	Zidua	85	WG	3	oz wt/a	0.16	lb ai/a	POST	B	13.1a	53.7a	6.00a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
11	Zidua	85	WG	4	oz wt/a	0.213	lb ai/a	POST	B	13.5a	54.3a	6.23a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
12	Zidua	85	WG	5	oz wt/a	0.266	lb ai/a	POST	B	13.1a	54.2a	5.08a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C			
LSD (P=.05)										0.41	2.87	0.907
Standard Deviation										0.24	1.69	0.529
CV										1.81	3.14	9.29
Bartlett's X2										13.502	88.129	13.06
P(Bartlett's X2)										0.262	0.001*	0.289
Skewness										1.3255*	-4.3062*	0.3159
Kurtosis										1.5533	23.0598*	-0.0827
Replicate F										16.924	0.747	0.034
Replicate Prob(F)										0.0001	0.4863	0.9662
Treatment F										1.321	0.833	1.076
Treatment Prob(F)										0.2832	0.6114	0.4298

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Zidua Test 1

Trial ID:	13SB06JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA
BBCH Scale	BSOY
Crop Scientific Name	Glycine max
Crop Name	Soybean
Rating Date	Oct/14/2013
Rating Type	Yield
Rating Unit	bu/A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	74.4a
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C	
2	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	PRE	A	77.9a
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C	
3	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	PRE	A	71.3a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C	
4	Zidua	85	WG	3	oz wt/a	0.16	lb ai/a	PRE	A	73.6a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C	
5	Zidua	85	WG	4	oz wt/a	0.213	lb ai/a	PRE	A	71.5a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C	
6	Zidua	85	WG	5	oz wt/a	0.266	lb ai/a	PRE	A	71.3a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C	
7	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	70.3a
	Roundup Powermax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C	
8	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	POST	B	71.2a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C	

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Zidua Test 1

Trial ID:	13SB06JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA
BBCH Scale	BSOY
Crop Scientific Name	Glycine max
Crop Name	Soybean
Rating Date	Oct/14/2013
Rating Type	Yield
Rating Unit	bu/A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
9	Zidua	85	WG	2	oz wt/a	0.106	lb ai/a	POST	B	69.6a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C	
10	Zidua	85	WG	3	oz wt/a	0.16	lb ai/a	POST	B	76.7a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C	
11	Zidua	85	WG	4	oz wt/a	0.213	lb ai/a	POST	B	79.3a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C	
12	Zidua	85	WG	5	oz wt/a	0.266	lb ai/a	POST	B	65.0a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	B	
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	POST	C	

Standard Deviation	6.70
CV	9.22
Bartlett's X2	10.076
P(Bartlett's X2)	0.524
Skewness	0.2963
Kurtosis	-0.1638
Replicate F	0.055
Replicate Prob(F)	0.9469
Treatment F	1.053
Treatment Prob(F)	0.4448

Zidua Test 2

LSU AgCenter

School of Plant, Environmental, and Soil Sciences

Experiment number	:	13SB07JG
Location	:	Ben Hur Research Farm
Experimental design	:	Randomized Complete Block
Number of reps	:	4
Plot size	:	11.25' x 25' (6' x 25' treated)
Row width/# per plot	:	15"/3
Soil type	:	clay loam
OM (%)	:	1.9
pH	:	6.3
Planting date	:	5-20-13
Harvest date	:	10-14-13
Crop/Variety	:	Soybean/Progeny P5711RY
Uniform std. treatment	:	N/A

Application type	:	PRE A	POST B & C
Date applied (mm-dd-yy)	:	5-21-13	6-6-13
Time (hh:mm-hh:mm)	:	6:45-7:15pm	12:15-12:45pm
Incorporation equipment	:	N/A	N/A
Incorporation depth	:	N/A	N/A
Air/Soil temperature (F)	:	N/A	89/94
Wind (mph/direction)	:	N/A	5-7/SW
Relative humidity (%)	:	N/A	58
Soil/Leaf surface moist	:	dry/N/A	dry/dry
Crop stage/height	:	N/A	V2/5-8"
Sprayer type/mph	:	CO_2bkpk/3.0	CO_2bkpk/3.0
Nozzle type/size	:	FF/TTI11002	FF/TTI11002
Boom ht/#noz/spacing (in)	:	15"/4/18"	15"/4/18"
GPA/psi (at nozzle)	:	15/28	15/28
Applied by	:	Copes	Bauerle

Weed species	:	population per ft^2/height/# leaves	
ECHCG	:	N/A	2-25/1-6"/2-7
IPOLA	:	N/A	2-4/1-3"/1-5
SIDSP	:	N/A	1-2/1-2"/1-3

Rainfall (in.)			
0-24 hr/1-3 days	:	-- / --	0.54/0.47
4-7 days/2nd week	:	-- /1.01	0.00/0.95
3rd week/4th week	:	0.00/2.69	1.74/1.61

Comments:

Insecticide and fungicide treatments were applied on 8-2-13 and consisted of 0.5 lb/A Orthene + 6 oz/A Discipline and 10 oz/A Stratego, respectively. A second application of insecticide was made on 8-22-13 and consisted of 4.5 oz/A Endigo + 2 oz/A Belt. Orthene was applied again at 1 lb/A on 9-13-13, and Gramoxone was applied on 9-26-13 at 1 pt/A in 15 GPA spray volume with Induce at 0.25% v/v.

Injury on June 6 and 11 based on stand reduction due to planting problems. Average injury greater than that noted for the nontreated was attributed to herbicide injury.

School of Plant, Environmental, and Soil Sciences

Zidua Test 2

Trial ID:	13SB07JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

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Pest Type	W Weed	W Weed
Pest Code	ECHCG	IPOLA
Pest Scientific Name	Echinochloa cr>	Ipomoea lacuno>
Pest Name	Common barnyar>	Pitted morning>
Rating Date	Jun/6/2013	Jun/6/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Nontreated									0d	0d
2	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	88ab	90a
	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
3	Verdict	5.57	EC	5	fl oz/a	0.218	lb ai/a	PRE	A	93a	93a
	Prowl H2O	3.8	CS	2.1	pt/a	1	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
4	Valor SX	51	WG	2	oz wt/a	0.064	lb ai/a	PRE	A	66c	56b
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
5	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	82b	60b
	Valor SX	51	WG	2	oz wt/a	0.064	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
6	Anthem	2.15	SE	8	fl oz/a	0.134	lb ai/a	PRE	A	86ab	33c
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
7	Prefix	5.29	EC	2	pt/a	1.32	lb ai/a	PRE	A	94a	58b
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
8	Authority MTZ	45	DG	14	oz wt/a	0.394	lb ai/a	PRE	A	85ab	90a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	93a	38c
	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	V3	B		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	V3	B		

School of Plant, Environmental, and Soil Sciences

Zidua Test 2

Trial ID:	13SB07JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										ECHCG	IPOLA
Pest Scientific Name										Echinochloa cr>	Ipomoea lacuno>
Pest Name										Common barnyar>	Pitted morning>
Rating Date										Jun/6/2013	Jun/6/2013
Rating Type										Control	Control
Rating Unit										%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
10	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	88ab	29c
	Prefix	5.29	EC	2	pt/a	1.32	lb ai/a	V3	B		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	V3	B		
11	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	85ab	33c
	Flexstar GT 3.5	2.82	SL	3.5	pt/a	1.23	lb ae/a	6-8 WAT	C		
12	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	90ab	64b
	Enlite	47.9	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
LSD (P=.05)										5.5	9.6
Standard Deviation										3.8	6.7
CV										4.8	12.46
Bartlett's X2										7.93	15.953
P(Bartlett's X2)										0.636	0.068
Skewness										-2.6242*	-0.1255
Kurtosis										5.9837*	-0.8357
Replicate F										3.913	0.698
Replicate Prob(F)										0.0170	0.5597
Treatment F										186.867	73.770
Treatment Prob(F)										0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Zidua Test 2

Trial ID:	13SB07JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	
Pest Code	SIDSP	
Pest Scientific Name	Sida spinosa	
Pest Name	Prickly sida	
Crop Code		GLXMA
BBCH Scale		BSOY
Crop Scientific Name		Glycine max
Crop Name		Soybean
Rating Date	Jun/6/2013	Jun/6/2013
Rating Type	Control	Injury
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Nontreated									0c	11a
2	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	95a	10a
	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
3	Verdict	5.57	EC	5	fl oz/a	0.218	lb ai/a	PRE	A	95a	9a
	Prowl H2O	3.8	CS	2.1	pt/a	1	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
4	Valor SX	51	WG	2	oz wt/a	0.064	lb ai/a	PRE	A	95a	13a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
5	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	94a	11a
	Valor SX	51	WG	2	oz wt/a	0.064	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
6	Anthem	2.15	SE	8	fl oz/a	0.134	lb ai/a	PRE	A	86a	9a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
7	Prefix	5.29	EC	2	pt/a	1.32	lb ai/a	PRE	A	95a	15a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
8	Authority MTZ	45	DG	14	oz wt/a	0.394	lb ai/a	PRE	A	95a	11a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	90a	6a
	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	V3	B		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	V3	B		
10	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	91a	13a

School of Plant, Environmental, and Soil Sciences

Zidua Test 2

Trial ID:	13SB07JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	
Pest Code	SIDSP	
Pest Scientific Name	Sida spinosa	
Pest Name	Prickly sida	
Crop Code		GLXMA
BBCH Scale		BSOY
Crop Scientific Name		Glycine max
Crop Name		Soybean
Rating Date	Jun/6/2013	Jun/6/2013
Rating Type	Control	Injury
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
11	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	57b	9a
	Flexstar GT 3.5	2.82	SL	3.5	pt/a	1.23	lb ae/a	6-8 WAT	C		
12	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	93a	14a
	Enlite	47.9	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		

LSD (P=.05)	5.6	8.2
Standard Deviation	3.9	5.7
CV	4.69	52.73
Bartlett's X2	3.609	11.715
P(Bartlett's X2)	0.607	0.385
Skewness	-2.4195*	1.2384*
Kurtosis	4.8361*	0.8389
Replicate F	1.296	12.759
Replicate Prob(F)	0.2922	0.0001
Treatment F	211.051	0.747
Treatment Prob(F)	0.0001	0.6875

School of Plant, Environmental, and Soil Sciences

Zidua Test 2

Trial ID:	13SB07JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	IPOLA
Pest Scientific Name	Echinochloa cr>	Ipomoea lacuno>
Pest Name	Common barnyar>	Pitted morning>
Rating Date	Jun/11/2013	Jun/11/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Nontreated									0c	0d
2	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	94a	94a
	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
3	Verdict	5.57	EC	5	fl oz/a	0.218	lb ai/a	PRE	A	95a	95a
	Prowl H2O	3.8	CS	2.1	pt/a	1	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
4	Valor SX	51	WG	2	oz wt/a	0.064	lb ai/a	PRE	A	74b	65b
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
5	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	90a	69b
	Valor SX	51	WG	2	oz wt/a	0.064	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
6	Anthem	2.15	SE	8	fl oz/a	0.134	lb ai/a	PRE	A	90a	48c
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
7	Prefix	5.29	EC	2	pt/a	1.32	lb ai/a	PRE	A	95a	66b
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
8	Authority MTZ	45	DG	14	oz wt/a	0.394	lb ai/a	PRE	A	92a	93a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	93a	46c
	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	V3	B		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	V3	B		
10	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	93a	77b

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Zidua Test 2

Trial ID:	13SB07JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type											W Weed	W Weed
Pest Code											ECHCG	IPOLA
Pest Scientific Name											Echinochloa cr>	Ipomoea lacuno>
Pest Name											Common barnyar>	Pitted morning>
Rating Date											Jun/11/2013	Jun/11/2013
Rating Type											Control	Control
Rating Unit											%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
11	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		88a	53c
	Flexstar GT 3.5	2.82	SL	3.5	pt/a	1.23	lb ae/a	6-8 WAT	C			
12	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		91a	70b
	Enlite	47.9	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C			
LSD (P=.05)											4.5	9.8
Standard Deviation											3.1	6.8
CV											3.74	10.46
Bartlett's X2											24.639	22.304
P(Bartlett's X2)											0.006*	0.008*
Skewness											-2.8295*	-0.9861*
Kurtosis											6.7888*	0.8003
Replicate F											5.186	2.085
Replicate Prob(F)											0.0048	0.1211
Treatment F											296.976	61.775
Treatment Prob(F)											0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Zidua Test 2

Trial ID:	13SB07JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	
Pest Code	SIDSP	
Pest Scientific Name	Sida spinosa	
Pest Name	Prickly sida	
Crop Code		GLXMA
BBCH Scale		BSOY
Crop Scientific Name		Glycine max
Crop Name		Soybean
Rating Date	Jun/11/2013	Jun/11/2013
Rating Type	Control	Injury
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Nontreated									0c	10a
2	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	95a	9a
	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
3	Verdict	5.57	EC	5	fl oz/a	0.218	lb ai/a	PRE	A	95a	6a
	Prowl H2O	3.8	CS	2.1	pt/a	1	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
4	Valor SX	51	WG	2	oz wt/a	0.064	lb ai/a	PRE	A	95a	10a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
5	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	95a	9a
	Valor SX	51	WG	2	oz wt/a	0.064	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
6	Anthem	2.15	SE	8	fl oz/a	0.134	lb ai/a	PRE	A	93a	10a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
7	Prefix	5.29	EC	2	pt/a	1.32	lb ai/a	PRE	A	95a	11a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
8	Authority MTZ	45	DG	14	oz wt/a	0.394	lb ai/a	PRE	A	95a	9a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	95a	8a
	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	V3	B		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	V3	B		
10	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	93a	9a

School of Plant, Environmental, and Soil Sciences

Zidua Test 2

Trial ID:	13SB07JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	
Pest Code	SIDSP	
Pest Scientific Name	Sida spinosa	
Pest Name	Prickly sida	
Crop Code		GLXMA
BBCH Scale		BSOY
Crop Scientific Name		Glycine max
Crop Name		Soybean
Rating Date	Jun/11/2013	Jun/11/2013
Rating Type	Control	Injury
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
11	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	84b	10a
	Flexstar GT 3.5	2.82	SL	3.5	pt/a	1.23	lb ae/a	6-8 WAT	C		
12	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	93a	14a
	Enlite	47.9	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		

LSD (P=.05)	5.7	4.9
Standard Deviation	3.9	3.4
CV	4.58	35.73
Bartlett's X2	28.909	6.957
P(Bartlett's X2)	0.001*	0.642
Skewness	-2.9694*	1.4957*
Kurtosis	7.3558*	5.622*
Replicate F	1.658	4.425
Replicate Prob(F)	0.1950	0.0109
Treatment F	191.668	1.320
Treatment Prob(F)	0.0001	0.2615

School of Plant, Environmental, and Soil Sciences

Zidua Test 2

Trial ID:	13SB07JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	IPOLA
Pest Scientific Name	Echinochloa cr>	Ipomoea lacuno>
Pest Name	Common barnyar>	Pitted morning>
Rating Date	Jun/27/2013	Jun/27/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Nontreated									0c	0f
2	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	91a	82ab
	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
3	Verdict	5.57	EC	5	fl oz/a	0.218	lb ai/a	PRE	A	92a	79abc
	Prowl H2O	3.8	CS	2.1	pt/a	1	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
4	Valor SX	51	WG	2	oz wt/a	0.064	lb ai/a	PRE	A	69b	65cd
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
5	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	89a	73bc
	Valor SX	51	WG	2	oz wt/a	0.064	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
6	Anthem	2.15	SE	8	fl oz/a	0.134	lb ai/a	PRE	A	92a	46e
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
7	Prefix	5.29	EC	2	pt/a	1.32	lb ai/a	PRE	A	95a	58de
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
8	Authority MTZ	45	DG	14	oz wt/a	0.394	lb ai/a	PRE	A	90a	89a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	94a	50e
	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	V3	B		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	V3	B		
10	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	93a	75bc

School of Plant, Environmental, and Soil Sciences

Zidua Test 2

Trial ID:	13SB07JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	IPOLA
Pest Scientific Name	Echinochloa cr>	Ipomoea lacuno>
Pest Name	Common barnyar>	Pitted morning>
Rating Date	Jun/27/2013	Jun/27/2013
Rating Type	Control	Control
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
11	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	88a	50e
	Flexstar GT 3.5	2.82	SL	3.5	pt/a	1.23	lb ae/a	6-8 WAT	C		
12	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	90a	73bc
	Enlite	47.9	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A		
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C		

LSD (P=.05)	4.4	9.9
Standard Deviation	3.1	6.9
CV	3.74	11.17
Bartlett's X2	14.22	9.082
P(Bartlett's X2)	0.163	0.524
Skewness	-2.7234*	-1.2674*
Kurtosis	6.3431*	1.4677*
Replicate F	7.609	3.018
Replicate Prob(F)	0.0005	0.0436
Treatment F	303.551	47.850
Treatment Prob(F)	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Zidua Test 2

Trial ID:	13SB07JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed		
Pest Code	SIDSP		
Pest Scientific Name	Sida spinosa		
Pest Name	Prickly sida		
Crop Code		GLXMA	GLXMA
BBCH Scale		BSOY	BSOY
Crop Scientific Name		Glycine max	Glycine max
Crop Name		Soybean	Soybean
Rating Date	Jun/27/2013	Jun/27/2013	Oct/9/2013
Rating Type	Control	Injury	Avg PlantHt
Rating Unit	%	%	Inches

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Nontreated									0b	0a	19.6b
2	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	93a	0a	22.4ab
	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C			
3	Verdict	5.57	EC	5	fl oz/a	0.218	lb ai/a	PRE	A	93a	0a	23.7a
	Prowl H2O	3.8	CS	2.1	pt/a	1	lb ai/a	PRE	A			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C			
4	Valor SX	51	WG	2	oz wt/a	0.064	lb ai/a	PRE	A	90a	0a	25.3a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C			
5	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	93a	0a	24.7a
	Valor SX	51	WG	2	oz wt/a	0.064	lb ai/a	PRE	A			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C			
6	Anthem	2.15	SE	8	fl oz/a	0.134	lb ai/a	PRE	A	91a	0a	25.3a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C			
7	Prefix	5.29	EC	2	pt/a	1.32	lb ai/a	PRE	A	92a	0a	23.5a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C			
8	Authority MTZ	45	DG	14	oz wt/a	0.394	lb ai/a	PRE	A	95a	0a	26.5a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C			
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	95a	0a	25.1a
	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	V3	B			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	V3	B			
10	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	92a	0a	23.7a

School of Plant, Environmental, and Soil Sciences

Zidua Test 2

Trial ID:	13SB07JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type									W Weed		
Pest Code									SIDSP		
Pest Scientific Name									Sida spinosa		
Pest Name									Prickly sida		
Crop Code										GLXMA	GLXMA
BBCH Scale										BSOY	BSOY
Crop Scientific Name										Glycine max	Glycine max
Crop Name										Soybean	Soybean
Rating Date									Jun/27/2013	Jun/27/2013	Oct/9/2013
Rating Type									Control	Injury	Avg PlantHt
Rating Unit									%	%	Inches
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
11	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	85a	0a	25.5a
	Flexstar GT 3.5	2.82	SL	3.5	pt/a	1.23	lb ae/a	6-8 WAT	C			
12	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	93a	0a	23.0a
	Enlite	47.9	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C			
LSD (P=.05)										7.4	0.0	2.76
Standard Deviation										5.1	0.0	1.91
CV										6.06	0.0	7.96
Bartlett's X2										50.647	0.0	17.466
P(Bartlett's X2)										0.001*	.	0.095
Skewness										-2.9322*	.	-0.1836
Kurtosis										7.1721*	.	-0.8821
Replicate F										1.855	0.000	6.505
Replicate Prob(F)										0.1565	1.0000	0.0014
Treatment F										109.093	0.000	3.645
Treatment Prob(F)										0.0001	1.0000	0.0019

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Zidua Test 2

Trial ID:	13SB07JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Crop Code											GLXMA	GLXMA	GLXMA
BBCH Scale											BSOY	BSOY	BSOY
Crop Scientific Name											Glycine max	Glycine max	Glycine max
Crop Name											Soybean	Soybean	Soybean
Rating Date											Oct/14/2013	Oct/14/2013	Oct/14/2013
Rating Type											Moisture	Test Weight	Yield
Rating Unit											%	lb/bu	kg
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	Nontreated										18.9a	47.3b	1.35c
2	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		13.3b	53.2a	4.63ab
2	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A				
2	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C				
3	Verdict	5.57	EC	5	fl oz/a	0.218	lb ai/a	PRE	A		12.7b	52.9a	4.98ab
3	Prowl H2O	3.8	CS	2.1	pt/a	1	lb ai/a	PRE	A				
3	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C				
4	Valor SX	51	WG	2	oz wt/a	0.064	lb ai/a	PRE	A		13.4b	53.5a	4.37ab
4	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C				
5	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		13.3b	52.6a	4.96ab
5	Valor SX	51	WG	2	oz wt/a	0.064	lb ai/a	PRE	A				
5	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C				
6	Anthem	2.15	SE	8	fl oz/a	0.134	lb ai/a	PRE	A		12.8b	53.3a	4.74ab
6	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C				
7	Prefix	5.29	EC	2	pt/a	1.32	lb ai/a	PRE	A		13.2b	52.5a	3.69b
7	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C				
8	Authority MTZ	45	DG	14	oz wt/a	0.394	lb ai/a	PRE	A		13.1b	53.3a	5.95a
8	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C				
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		12.7b	53.4a	5.37ab
9	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	V3	B				
9	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	V3	B				
10	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		12.6b	55.3a	4.51ab

School of Plant, Environmental, and Soil Sciences

Zidua Test 2

Trial ID: 13SB07JG
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matthew Foster
Sponsor Contact: LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Rating Date									Oct/14/2013	Oct/14/2013	Oct/14/2013
	Rating Type									Moisture	Test Weight	Yield
	Rating Unit									%	lb/bu	kg
11	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	13.0b	53.7a	4.94ab
	Flexstar GT 3.5	2.82	SL	3.5	pt/a	1.23	lb ae/a	6-8 WAT	C			
12	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	13.0b	53.7a	4.41ab
	Enlite	47.9	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A			
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C			
	LSD (P=.05)									3.01	2.27	1.197
	Standard Deviation									2.07	1.56	0.824
	CV									15.33	2.95	18.34
	Bartlett's X2									65.46	18.125	17.407
	P(Bartlett's X2)									0.001*	0.079	0.096
	Skewness									4.6955*	-1.7383*	-0.6622
	Kurtosis									24.2189*	5.5956*	0.1222
	Replicate F									2.504	0.822	5.562
	Replicate Prob(F)									0.0813	0.4938	0.0044
	Treatment F									2.717	5.962	7.585
	Treatment Prob(F)									0.0177	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Zidua Test 2

Trial ID:	13SB07JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA
BBCH Scale	BSOY
Crop Scientific Name	Glycine max
Crop Name	Soybean
Rating Date	Oct/14/2013
Rating Type	Yield
Rating Unit	bu/A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	Nontreated									16.3c
2	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	59.1ab
	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C	
3	Verdict	5.57	EC	5	fl oz/a	0.218	lb ai/a	PRE	A	63.9ab
	Prowl H2O	3.8	CS	2.1	pt/a	1	lb ai/a	PRE	A	
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C	
4	Valor SX	51	WG	2	oz wt/a	0.064	lb ai/a	PRE	A	55.6ab
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C	
5	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	63.3ab
	Valor SX	51	WG	2	oz wt/a	0.064	lb ai/a	PRE	A	
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C	
6	Anthem	2.15	SE	8	fl oz/a	0.134	lb ai/a	PRE	A	60.9ab
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C	
7	Prefix	5.29	EC	2	pt/a	1.32	lb ai/a	PRE	A	47.2b
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C	
8	Authority MTZ	45	DG	14	oz wt/a	0.394	lb ai/a	PRE	A	76.2a
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C	
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	68.9ab
	Zidua	85	WG	1	oz wt/a	0.053	lb ai/a	V3	B	
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	V3	B	
10	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	58.0ab

School of Plant, Environmental, and Soil Sciences

Zidua Test 2

Trial ID:	13SB07JG
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA
BBCH Scale	BSOY
Crop Scientific Name	Glycine max
Crop Name	Soybean
Rating Date	Oct/14/2013
Rating Type	Yield
Rating Unit	bu/A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
11	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	63.2ab
	Flexstar GT 3.5	2.82	SL	3.5	pt/a	1.23	lb ae/a	6-8 WAT	C	
12	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	56.5ab
	Enlite	47.9	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	
	Roundup PowerMax	4.5	SL	22	fl oz/a	0.77	lb ae/a	6-8 WAT	C	

LSD (P=.05)	15.25
Standard Deviation	10.49
CV	18.26
Bartlett's X2	15.938
P(Bartlett's X2)	0.143
Skewness	-0.6952
Kurtosis	0.2074
Replicate F	6.038
Replicate Prob(F)	0.0029
Treatment F	7.973
Treatment Prob(F)	0.0001

Harvest Aid Test

LSU AgCenter

School of Plant, Environmental, and Soil Sciences

Experiment number	:	13SB08JG
Location	:	Ben Hur Research Farm – Baton Rouge, LA
Experimental design	:	Randomized Complete Block
Number of reps	:	4
Plot size	:	10’ x 30’ (6’ x 30’ treated)
Row width/# per plot	:	30”/2
Soil type	:	clay loam
OM (%)	:	1.9
pH	:	6.3
Planting date	:	5-6-13
Harvest date	:	N/A
Crop/Variety	:	Soybean/Pioneer 94Y80
Uniform std. treatment	:	N/A

Application type	:	POST A
Date applied (mm-dd-yy)	:	9-16-13
Time (hh:mm-hh:mm)	:	2:20-2:50pm
Incorporation equipment	:	N/A
Incorporation depth	:	N/A
Air/Soil temperature (F)	:	93/84
Wind (mph/direction)	:	8-9/E
Relative humidity (%)	:	46
Soil/Leaf surface moist	:	dry/dry
Crop stage/height	:	R6.5-R7/40-42”
Sprayer type/mph	:	CO_2bkpk/3.0
Nozzle type/size	:	FF/11002VS
Boom ht/#noz/spacing (in)	:	15”/4/18”
GPA/psi (at nozzle)	:	15/28
Applied by	:	Bauerle

Weed species	:	population per ft^2/height/# leaves
N/A	:	

Rainfall (in.)

0-24 hr/1-3 days	:	0.00/0.59
4-7 days/2nd week	:	4.36/0.43
3rd week/4th week	:	0.31/0.24

Comments:

Treatments were applied at 5% cloud cover and 5% soybean defoliation.

School of Plant, Environmental, and Soil Sciences

Harvest Aid Test

Trial ID:	13SB08JG
Location:	Ben Hur Reasearch Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Description									1 DAT	3 DAT	7 DAT
	Rating Date									Sep/17/2013	Sep/19/2013	Sep/23/2013
	Rating Type									Discolorati	Discolorati	Discolorati
	Rating Unit									%	%	%
1	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	48a	68a	79a
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
2	Defol	5	L	4.8	qt/a	6	lb ai/a	R7	A	25b	35b	50b
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
3	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	R7	A	11c	18c	24c
	MSO			1	% v/v	1	% v/v	R7	A			
4	Sharpen	2.85	SC	2	fl oz/a	0.0445	lb ai/a	R7	A	11c	20c	28c
	MSO			1	% v/v	1	% v/v	R7	A			
5	Aim	2	EC	1.5	fl oz/a	0.0234	lb ai/a	R7	A	5c	9d	12d
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
6	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	50a	70a	78a
	Sharpen	2.85	SC	1.5	fl oz/a	0.0334	lb ai/a	R7	A			
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
7	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	46a	68a	80a
	Aim	2	EC	1.5	fl oz/a	0.0234	lb ai/a	R7	A			
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
8	Nontreated									5c	9d	12d
	LSD (P=.05)									4.4	7.2	4.7
	Standard Deviation									3.0	4.9	3.2
	CV									11.99	13.34	7.06
	Bartlett's X2									9.883	4.803	5.012
	P(Bartlett's X2)									0.079	0.569	0.542
	Skewness									0.3339	0.3133	0.15
	Replicate F									0.431	0.226	2.034
	Replicate Prob(F)									0.7327	0.8771	0.1398
	Treatment F									178.786	124.281	361.063
	Treatment Prob(F)									0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Harvest Aid Test

Trial ID:	13SB08JG
Location:	Ben Hur Reasearch Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Description									10 DAT	10 DAT	10 DAT
	Rating Date									Sep/26/2013	Sep/26/2013	Sep/26/2013
	Rating Type									Defoliation	Green Stems	Green Pods
	Rating Unit									%	%	%
1	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	84a	6c	9e
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
2	Defol	5	L	4.8	qt/a	6	lb ai/a	R7	A	66b	14c	24d
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
3	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	R7	A	39cd	81b	78c
	MSO			1	% v/v	1	% v/v	R7	A			
4	Sharpen	2.85	SC	2	fl oz/a	0.0445	lb ai/a	R7	A	41c	84b	80bc
	MSO			1	% v/v	1	% v/v	R7	A			
5	Aim	2	EC	1.5	fl oz/a	0.0234	lb ai/a	R7	A	28e	88b	86b
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
6	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	85a	9c	11e
	Sharpen	2.85	SC	1.5	fl oz/a	0.0334	lb ai/a	R7	A			
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
7	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	88a	9c	9e
	Aim	2	EC	1.5	fl oz/a	0.0234	lb ai/a	R7	A			
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
8	Nontreated									31de	95a	94a
	LSD (P=.05)									7.6	5.8	6.7
	Standard Deviation									5.2	3.9	4.6
	CV									8.96	8.15	9.4
	Bartlett's X2									9.297	2.661	14.387
	P(Bartlett's X2)									0.232	0.85	0.026*
	Skewness									0.1089	0.0176	0.0085
	Kurtosis									-1.7274*	-2.0508*	-1.9678*
	Replicate F									1.669	0.915	1.307
	Replicate Prob(F)									0.2040	0.4507	0.2984
	Treatment F									99.109	451.044	287.198
	Treatment Prob(F)									0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Harvest Aid Test

Trial ID:	13SB08JG
Location:	Ben Hur Reasearch Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Description									14 DAT	14 DAT	14 DAT
	Rating Date									Sep/30/2013	Sep/30/2013	Sep/30/2013
	Rating Type									Defoliation	Green Stems	Green Pods
	Rating Unit									%	%	
1	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	90a	3c	3c
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
2	Defol	5	L	4.8	qt/a	6	lb ai/a	R7	A	81b	9c	8c
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
3	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	R7	A	56c	56b	59b
	MSO			1	% v/v	1	% v/v	R7	A			
4	Sharpen	2.85	SC	2	fl oz/a	0.0445	lb ai/a	R7	A	58c	56b	59b
	MSO			1	% v/v	1	% v/v	R7	A			
5	Aim	2	EC	1.5	fl oz/a	0.0234	lb ai/a	R7	A	48d	78a	75a
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
6	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	90a	4c	3c
	Sharpen	2.85	SC	1.5	fl oz/a	0.0334	lb ai/a	R7	A			
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
7	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	92a	3c	2c
	Aim	2	EC	1.5	fl oz/a	0.0234	lb ai/a	R7	A			
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
8	Nontreated									49d	75a	80a
	LSD (P=.05)									6.7	8.4	9.0
	Standard Deviation									4.5	5.7	6.1
	CV									6.45	16.19	17.04
	Bartlett's X2									5.561	16.905	15.996
	P(Bartlett's X2)									0.474	0.018*	0.025*
	Skewness									-0.0562	0.1921	0.2011
	Kurtosis									-1.7393*	-1.8161*	-1.7754*
	Replicate F									1.089	0.923	2.515
	Replicate Prob(F)									0.3754	0.4467	0.0860
	Treatment F									74.355	139.431	132.070
	Treatment Prob(F)									0.0001	0.0001	0.0001

Harvest Aid Test 2

LSU AgCenter

School of Plant, Environmental, and Soil Sciences

Experiment number	:	13SB09JG
Location	:	Ben Hur Research Farm – Baton Rouge, LA
Experimental design	:	Randomized Complete Block
Number of reps	:	4
Plot size	:	10’ x 30’ (6’ x 30’ treated)
Row width/# per plot	:	30”/2
Soil type	:	clay loam
OM (%)	:	1.9
pH	:	6.3
Planting date	:	5-6-13
Harvest date	:	N/A
Crop/Variety	:	Soybean/Pioneer 94Y80
Uniform std. treatment	:	N/A

Application type	:	POST A
Date applied (mm-dd-yy)	:	10-2-13
Time (hh:mm-hh:mm)	:	1:50-2:26pm
Incorporation equipment	:	N/A
Incorporation depth	:	N/A
Air/Soil temperature (F)	:	86/79
Wind (mph/direction)	:	4-6/NE
Relative humidity (%)	:	67
Soil/Leaf surface moist	:	moist/dry
Crop stage/height	:	R7.5-8/40-42”
Sprayer type/mph	:	CO_2bkpk/3.0
Nozzle type/size	:	FF/11002VS
Boom ht/#noz/spacing (in)	:	15”/4/18”
GPA/psi (at nozzle)	:	15/28
Applied by	:	Bauerle

Weed species	:	population per ft^2/height/# leaves
N/A	:	

Rainfall (in.)

0-24 hr/1-3 days	:	0.00/0.29
4-7 days/2nd week	:	0.00/0.31
3rd week/4th week	:	1.03/0.03

Comments:

Treatments were applied at 35% cloud cover and 60% soybean defoliation.

School of Plant, Environmental, and Soil Sciences

Harvest Aid Test 2

Trial ID:	13SB09JG
Location:	Ben Hur Reasearch Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Description									1 DAT	1 DAT	1 DAT
	Rating Date									Oct/3/2013	Oct/3/2013	Oct/3/2013
	Rating Type									Defoliation	Green Stems	Green Pods
	Rating Unit									%	%	%
1	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	69ab	98ab	46a
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
2	Defol	5	L	4.8	qt/a	6	lb ai/a	R7	A	70ab	96ab	49a
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
3	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	R7	A	59c	100a	46a
	MSO			1	% v/v	1	% v/v	R7	A			
4	Sharpen	2.85	SC	2	fl oz/a	0.0445	lb ai/a	R7	A	63bc	97ab	48a
	MSO			1	% v/v	1	% v/v	R7	A			
5	Aim	2	EC	1.5	fl oz/a	0.0234	lb ai/a	R7	A	61c	99ab	45a
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
6	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	70ab	96ab	46a
	Sharpen	2.85	SC	1.5	fl oz/a	0.0334	lb ai/a	R7	A			
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
7	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	71a	95b	45a
	Aim	2	EC	1.5	fl oz/a	0.0234	lb ai/a	R7	A			
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
8	Nontreated									60c	99ab	45a
	LSD (P=.05)									5.9	2.6	4.6
	Standard Deviation									4.0	1.8	3.1
	CV									6.17	1.82	6.78
	Bartlett's X2									8.399	0.11	1.14
	P(Bartlett's X2)									0.299	1.00	0.992
	Skewness									0.2806	0.0459	-0.0412
	Kurtosis									-1.1859	-2.1008*	-1.5173
	Replicate F									3.275	5.444	21.848
	Replicate Prob(F)									0.0413	0.0063	0.0001
	Treatment F									6.578	3.429	0.727
	Treatment Prob(F)									0.0003	0.0132	0.6510

School of Plant, Environmental, and Soil Sciences

Harvest Aid Test 2

Trial ID:	13SB09JG
Location:	Ben Hur Reasearch Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code	GLXMA		GLXMA		GLXMA				BSOY	BSOY	BSOY
	BBCH Scale											
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Description									3 DAT	3 DAT	3 DAT
	Rating Date									Oct/5/2013	Oct/5/2013	Oct/5/2013
	Rating Type									Defoliation	Green Stems	Green Pods
	Rating Unit									%	%	%
1	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	71ab	60a	43a
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
2	Defol	5	L	4.8	qt/a	6	lb ai/a	R7	A	68ab	65a	46a
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
3	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	R7	A	59c	61a	41a
	MSO			1	% v/v	1	% v/v	R7	A			
4	Sharpen	2.85	SC	2	fl oz/a	0.0445	lb ai/a	R7	A	65bc	60a	43a
	MSO			1	% v/v	1	% v/v	R7	A			
5	Aim	2	EC	1.5	fl oz/a	0.0234	lb ai/a	R7	A	60c	53a	45a
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
6	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	70ab	55a	45a
	Sharpen	2.85	SC	1.5	fl oz/a	0.0334	lb ai/a	R7	A			
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
7	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	74a	55a	43a
	Aim	2	EC	1.5	fl oz/a	0.0234	lb ai/a	R7	A			
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
8	Nontreated									58c	61a	48a
	LSD (P=.05)									6.0	9.0	5.9
	Standard Deviation									4.1	6.1	4.0
	CV									6.21	10.38	9.06
	Bartlett's X2									4.131	3.766	4.656
	P(Bartlett's X2)									0.659	0.584	0.702
	Skewness									0.0698	0.5038	0.6799
	Kurtosis									-0.5988	0.109	-0.6767
	Replicate F									0.173	5.208	3.206
	Replicate Prob(F)									0.9134	0.0076	0.0441
	Treatment F									9.162	1.872	1.206
	Treatment Prob(F)									0.0001	0.1258	0.3426

School of Plant, Environmental, and Soil Sciences

Harvest Aid Test 2

Trial ID:	13SB09JG
Location:	Ben Hur Reasearch Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Description									7 DAT	7 DAT	7 DAT
	Rating Date									Oct/9/2013	Oct/9/2013	Oct/9/2013
	Rating Type									Defoliation	Green Stems	Green Pods
	Rating Unit									%	%	%
1	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	81ab	45ab	29bc
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
2	Defol	5	L	4.8	qt/a	6	lb ai/a	R7	A	74bcd	56a	40a
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
3	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	R7	A	69def	53ab	43a
	MSO			1	% v/v	1	% v/v	R7	A			
4	Sharpen	2.85	SC	2	fl oz/a	0.0445	lb ai/a	R7	A	71cde	58a	43a
	MSO			1	% v/v	1	% v/v	R7	A			
5	Aim	2	EC	1.5	fl oz/a	0.0234	lb ai/a	R7	A	65ef	54ab	43a
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
6	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	79bc	53ab	34ab
	Sharpen	2.85	SC	1.5	fl oz/a	0.0334	lb ai/a	R7	A			
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
7	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	88a	38b	24c
	Aim	2	EC	1.5	fl oz/a	0.0234	lb ai/a	R7	A			
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
8	Nontreated									61f	55a	44a
	LSD (P=.05)									6.4	11.5	7.1
	Standard Deviation									4.3	7.8	4.8
	CV									5.92	15.32	12.91
	Bartlett's X2									5.601	6.394	11.222
	P(Bartlett's X2)									0.587	0.495	0.129
	Skewness									0.3943	-0.5637	-1.0606*
	Kurtosis									-0.6749	-0.673	-0.2
	Replicate F									1.598	1.319	3.116
	Replicate Prob(F)									0.2197	0.2947	0.0480
	Treatment F									16.134	2.928	9.890
	Treatment Prob(F)									0.0001	0.0265	0.0001

School of Plant, Environmental, and Soil Sciences

Harvest Aid Test 2

Trial ID:	13SB09JG
Location:	Ben Hur Reasearch Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Description									10 DAT	10 DAT	10 DAT
	Rating Date									Oct/12/2013	Oct/12/2013	Oct/12/2013
	Rating Type									Defoliation	Green Stems	Green Pods
	Rating Unit									%	%	%
1	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	88a	33bc	11c
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
2	Defol	5	L	4.8	qt/a	6	lb ai/a	R7	A	79b	41ab	16abc
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
3	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	R7	A	70cd	48a	16abc
	MSO			1	% v/v	1	% v/v	R7	A			
4	Sharpen	2.85	SC	2	fl oz/a	0.0445	lb ai/a	R7	A	76bc	49a	19a
	MSO			1	% v/v	1	% v/v	R7	A			
5	Aim	2	EC	1.5	fl oz/a	0.0234	lb ai/a	R7	A	70cd	46ab	18ab
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
6	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	83ab	36abc	15abc
	Sharpen	2.85	SC	1.5	fl oz/a	0.0334	lb ai/a	R7	A			
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
7	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	89a	28c	13bc
	Aim	2	EC	1.5	fl oz/a	0.0234	lb ai/a	R7	A			
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
8	Nontreated									65d	46ab	18ab
	LSD (P=.05)									5.5	9.7	3.6
	Standard Deviation									3.7	6.6	2.4
	CV									4.82	16.25	15.5
	Bartlett's X2									3.738	8.325	0.219
	P(Bartlett's X2)									0.712	0.305	1.00
	Skewness									0.1612	-0.2319	-0.2549
	Kurtosis									-1.0743	-0.399	-0.2069
	Replicate F									2.759	2.626	1.974
	Replicate Prob(F)									0.0677	0.0771	0.1488
	Treatment F									21.547	5.647	4.564
	Treatment Prob(F)									0.0001	0.0009	0.0031

School of Plant, Environmental, and Soil Sciences

Harvest Aid Test 2

Trial ID:	13SB09JG
Location:	Ben Hur Reasearch Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Description									14 DAT	14 DAT	14 DAT
	Rating Date									Oct/16/2013	Oct/16/2013	Oct/16/2013
	Rating Type									Defoliation	Green Stems	Green Pods
	Rating Unit									%	%	%
1	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	94a	15b	5a
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
2	Defol	5	L	4.8	qt/a	6	lb ai/a	R7	A	87b	19b	8a
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
3	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	R7	A	80c	28a	8a
	MSO			1	% v/v	1	% v/v	R7	A			
4	Sharpen	2.85	SC	2	fl oz/a	0.0445	lb ai/a	R7	A	85b	30a	8a
	MSO			1	% v/v	1	% v/v	R7	A			
5	Aim	2	EC	1.5	fl oz/a	0.0234	lb ai/a	R7	A	80c	31a	8a
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
6	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	90b	16b	5a
	Sharpen	2.85	SC	1.5	fl oz/a	0.0334	lb ai/a	R7	A			
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
7	Gramoxone	2	L	1	pt/a	0.25	lb ai/a	R7	A	95a	11b	5a
	Aim	2	EC	1.5	fl oz/a	0.0234	lb ai/a	R7	A			
	Induce			0.25	% v/v	0.25	% v/v	R7	A			
8	Nontreated									75d	30a	8a
	LSD (P=.05)									3.8	6.4	2.6
	Standard Deviation									2.6	4.3	1.7
	CV									3.01	19.29	25.71
	Bartlett's X2									3.016	6.752	0.262
	P(Bartlett's X2)									0.698	0.344	0.992
	Skewness									0.0712	-0.4188	0.6431
	Kurtosis									-1.2729	-1.3526	-1.6106
	Replicate F									8.252	1.661	5.008
	Replicate Prob(F)									0.0008	0.2059	0.0089
	Treatment F									30.977	14.334	2.917
	Treatment Prob(F)									0.0001	0.0001	0.0269

Dicamba Drift Verification Test

LSU AgCenter

School of Plant, Environmental, and Soil Sciences

Experiment number	13SB01MRF
Location	Ben Hur Research Farm – Baton Rouge, LA
Experimental design	Randomized Complete Block
Number of reps	4
Plot size	10’ x 30’ (6’ x 30’ treated)
Row width/# per plot	30”/2
Soil type	clay loam
OM (%)	1.9
pH	6.3
Planting date	6-6-13
Harvest date	10-28-13
Crop/Variety	Soybean/Pioneer 94Y80
Uniform std. treatment	Dual II Magnum @ 1.5 pt/A + Roundup Powermax @ 22 oz/A on 6-6-13; Roundup Powermax @ 22 oz/A on 7-9-13

	POST A	POST B
Application type	POST A	POST B
Date applied (mm-dd-yy)	7-2-13	7-30-13
Time (hh:mm-hh:mm)	6:00-6:45am	7:40-8:20am
Incorporation equipment	N/A	N/A
Incorporation depth	N/A	N/A
Air/Soil temperature (F)	69/80	80/83
Wind (mph/direction)	2-4/N	1-3/N
Relative humidity (%)	94	92
Soil/Leaf surface moist	dry/moist	dry/moist
Crop stage/height	V3-V4/N/A	R2/36-38”
Sprayer type/mph	CO_2bkpk/3.0	CO_2bkpk/3.0
Nozzle type/size	FF/TTI11002	FF/TTI11002
Boom ht/#noz/spacing (in)	15”/4/18”	15”/4/18”
GPA/psi (at nozzle)	15/28	15/28
Applied by	Foster	Foster

Weed species	population per ft^2/height/# leaves
N/A	

Rainfall (in.)		
0-24 hr/1-3 days	0.00/0.63	0.00/0.97
4-7 days/2nd week	0.36/1.67	0.00/4.49
3rd week/4th week	0.71/1.58	1.36/0.34

Comments:

Insecticide and fungicide treatments were applied on 8-22-13 and consisted of 4.5 oz/A Endigo + 2 oz/A Belt and 10 oz/A Stratego, respectively. Orthene was applied again at 1 lb/A on 9-13-13, and Gramoxone was applied on 10-4-13 at 1 pt/A in 15 GPA spray volume with Induce at 0.25% v/v.

When soybean injury was 15 to 35% and height reduction was around 5% 30 days after the R2 application, lodging of soybean plants was observed at maturity.

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycinemax
Crop Name	Soybean	Soybean	Soybean
Description	7 DAT	7 DAT	7 DAT
Part Rated	Leaf	Leaf	Leaf
Rating Type	Cupping	Pale Margin	Crinkling
Rating Unit	0-5	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	V3-V4 No Herbicide							POST	A	0.0b	0.0e	0.0d
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	4.5a	1.5d	3.5abc
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	4.8a	2.3cd	4.3ab
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	5.0a	4.0ab	4.3ab
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	4.8a	3.0bc	3.8abc
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	5.0a	4.5ab	3.8abc
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	5.0a	4.3ab	3.5abc
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	5.0a	5.0a	3.5abc
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	5.0a	4.5ab	4.8a
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	5.0a	4.5ab	5.0a
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	5.0a	4.5ab	4.0abc

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code										GLXMA	GLXMA	GLXMA
BBCH Scale										BSOY	BSOY	BSOY
Crop Scientific Name										Glycine max	Glycine max	Glycinemax
Crop Name										Soybean	Soybean	Soybean
Description										7 DAT	7 DAT	7 DAT
Part Rated										Leaf	Leaf	Leaf
Rating Type										Cupping	Pale Margin	Crinkling
Rating Unit										0-5	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
12	R1 No Herbicide							POST	B	0.0b		0.0d
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	4.5a		4.0abc
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	5.0a		3.8abc
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	4.8a		3.5abc
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	4.8a		3.3abc
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	4.8a		3.0abc
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	4.8a		2.3bc
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	4.8a		2.0c
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	4.8a		2.0c
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	4.8a		2.0c
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	4.8a		2.0c

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycinemax
Crop Name	Soybean	Soybean	Soybean
Description	7 DAT	7 DAT	7 DAT
Part Rated	Leaf	Leaf	Leaf
Rating Type	Cupping	Pale Margin	Crinkling
Rating Unit	0-5	0-5	0-5
LSD (P=.05)	0.59	1.11	1.15
Standard Deviation	0.42	0.77	0.82
CV	9.57	22.28	26.39
Bartlett's X2	3.587	4.106	18.856
P(Bartlett's X2)	0.98	0.847	0.092
Skewness	-2.5591*	-0.8704*	-0.4473
Kurtosis	5.1864*	-0.4469	-0.5304
Replicate F	0.775	0.409	3.052
Replicate Prob(F)	0.5125	0.7475	0.0349
Treatment F	46.352	16.949	10.685
Treatment Prob(F)	0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	7 DAT	7 DAT	7 DAT
Part Rated	Leaf	Leaf	Leaf
Rating Type	Mottling	Chlorosis	SoilContact
Rating Unit	0-5	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	V3-V4 No Herbicide							POST	A	0.0b	0.0d	0.0d
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	2.3a	1.3c	0.0d
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	3.0a	1.5c	0.0d
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	3.3a	2.0c	0.0d
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	2.8a	1.8c	0.0d
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	2.5a	2.5bc	0.0d
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	2.8a	3.3ab	0.0d
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	1.8a	4.0a	1.0c
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	2.5a	4.0a	2.5b
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	3.0a	4.0a	4.5a
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	3.0a	4.0a	4.8a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	7 DAT	7 DAT	7 DAT
Part Rated	Leaf	Leaf	Leaf
Rating Type	Mottling	Chlorosis	SoilContact
Rating Unit	0-5	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
12	R1 No Herbicide							POST	B	0.0d
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	1.8c
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	3.3ab
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	3.5ab
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	3.5ab
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	4.0a
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	4.3a
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	4.5a
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	4.5a
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	4.8a
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	4.8a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	7 DAT	7 DAT	7 DAT
Part Rated	Leaf	Leaf	Leaf
Rating Type	Mottling	Chlorosis	SoilContact
Rating Unit	0-5	0-5	0-5
LSD (P=.05)	1.27	0.89	0.43
Standard Deviation	0.88	0.63	0.30
CV	36.25	20.76	25.8
Bartlett's X2	3.817	7.979	0.079
P(Bartlett's X2)	0.923	0.949	0.961
Skewness	-0.4679	-0.553*	1.2822*
Kurtosis	-0.2358	-0.8467	0.0221
Replicate F	1.043	5.686	0.254
Replicate Prob(F)	0.3879	0.0016	0.8577
Treatment F	4.251	21.661	157.881
Treatment Prob(F)	0.0010	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	7 DAT	7 DAT	7 DAT
Part Rated	Leaf	Petiol	Petiol
Rating Type	Inversion	Droop	Swelling
Rating Unit	0-5	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	V3-V4 No Herbicide							POST	A		0.0d	0.0f
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A		0.3cd	0.3ef
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A		0.3cd	0.3ef
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A		0.8cd	0.8def
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A		0.5cd	0.5def
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A		1.3c	0.8def
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A		2.3b	2.8b
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A		3.8a	4.0a
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A		4.3a	4.8a
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A		4.5a	5.0a
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A		5.0a	5.0a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID: 13SB01MRF
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Description									7 DAT	7 DAT	7 DAT
	Part Rated									Leaf	Petiol	Petiol
	Rating Type									Inversion	Droop	Swelling
	Rating Unit									0-5	0-5	0-5
12	R1 No Herbicide							POST	B	0.0d	0.0d	0.0f
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	0.0d	4.3a	1.5cde
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	0.0d	4.3a	1.3c-f
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	0.0d	4.3a	1.8bcd
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	0.0d	4.3a	2.3bc
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	0.0d	4.3a	2.8b
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	0.5d	4.8a	4.3a
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	2.5c	5.0a	4.5a
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	4.3b	5.0a	4.5a
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	4.8a	5.0a	4.8a
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	5.0a	5.0a	5.0a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	7 DAT	7 DAT	7 DAT
Part Rated	Leaf	Petiol	Petiol
Rating Type	Inversion	Droop	Swelling
Rating Unit	0-5	0-5	0-5
LSD (P=.05)	0.42	0.79	0.88
Standard Deviation	0.29	0.56	0.62
CV	19.02	17.9	24.19
Bartlett's X2	0.121	12.602	8.37
P(Bartlett's X2)	0.989	0.558	0.937
Skewness	0.8039*	-0.6226*	-0.0259
Kurtosis	-1.1803	-1.3272*	-1.5902*
Replicate F	3.509	2.167	2.316
Replicate Prob(F)	0.0271	0.1008	0.0842
Treatment F	212.368	50.499	38.563
Treatment Prob(F)	0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	7 DAT	7 DAT	7 DAT
Part Rated	Termin	Termin	Termin
Rating Type	Chlorosis	Necrosis	Epinasty
Rating Unit	0-5	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	V3-V4 No Herbicide							POST	A	0.0h	0.0f	0.0e
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	1.0g	0.3ef	1.0cde
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	1.3fg	0.3ef	0.3de
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	2.0ef	0.3ef	1.0cde
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	2.0ef	0.5ef	1.3cde
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	3.8bc	1.0def	1.8cd
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	4.8ab	1.8de	3.5ab
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	5.0a	2.3cd	4.0a
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	5.0a	3.8ab	5.0a
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	4.8ab	4.5a	5.0a
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	5.0a	4.8a	5.0a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID: 13SB01MRF
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Description									7 DAT	7 DAT	7 DAT
	Part Rated									Termin	Termin	Termin
	Rating Type									Chlorosis	Necrosis	Epinasty
	Rating Unit									0-5	0-5	0-5
12	R1 No Herbicide							POST	B	0.0h	0.0f	0.0e
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	2.5de	0.0f	1.5cde
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	2.5de	0.0f	1.5cde
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	3.0cde	0.0f	2.0c
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	2.8de	0.0f	2.5bc
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	3.3cd	0.0f	2.5bc
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	3.8bc	0.0f	4.0a
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	4.3ab	1.5def	4.5a
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	4.8ab	3.0bc	4.8a
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	5.0a	3.8ab	5.0a
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	5.0a	4.0ab	5.0a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	7 DAT	7 DAT	7 DAT
Part Rated	Termin	Termin	Termin
Rating Type	Chlorosis	Necrosis	Epinasty
Rating Unit	0-5	0-5	0-5
LSD (P=.05)	0.68	0.99	1.04
Standard Deviation	0.48	0.70	0.74
CV	14.88	48.67	26.53
Bartlett's X2	4.352	20.511	13.243
P(Bartlett's X2)	0.976	0.083	0.429
Skewness	-0.5615*	0.8511*	-0.1454
Kurtosis	-0.8824	-0.8919	-1.4588*
Replicate F	0.179	8.519	3.024
Replicate Prob(F)	0.9099	0.0001	0.0361
Treatment F	47.844	24.575	24.856
Treatment Prob(F)	0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	7 DAT	7 DAT	7 DAT
Part Rated	Stem	Stem	Stem
Rating Type	Epinasty	Swelling	Cracking
Rating Unit	0-5	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	V3-V4 No Herbicide							POST	A	0.0e	0.0d	0.0d
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	0.3e	0.3d	0.3d
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	0.3e	0.0d	0.0d
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	0.5de	0.0d	0.0d
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	1.0de	0.3d	0.0d
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	1.0de	0.0d	0.0d
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	2.8c	2.3c	2.3c
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	3.3bc	3.3b	3.5b
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	4.3a	4.3a	4.5a
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	5.0a	5.0a	4.8a
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	5.0a	4.8a	5.0a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID: 13SB01MRF
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	7 DAT	7 DAT	7 DAT
Part Rated	Stem	Stem	Stem
Rating Type	Epinasty	Swelling	Cracking
Rating Unit	0-5	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
12	R1 No Herbicide							POST	B	0.0e	0.0d
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	0.0e	0.0d
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	0.0e	0.0d
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	0.0e	0.0d
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	0.0e	0.0d
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	0.0e	0.0d
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	1.3d	2.0c
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	3.5b	3.0b
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	4.5a	4.5a
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	4.8a	4.8a
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	5.0a	4.8a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	7 DAT	7 DAT	7 DAT
Part Rated	Stem	Stem	Stem
Rating Type	Epinasty	Swelling	Cracking
Rating Unit	0-5	0-5	0-5
LSD (P=.05)	0.62	0.63	0.69
Standard Deviation	0.44	0.44	0.49
CV	22.84	24.13	27.42
Bartlett's X2	5.447	2.643	6.685
P(Bartlett's X2)	0.859	0.755	0.571
Skewness	0.4832	0.4962	0.5571*
Kurtosis	-1.5213*	-1.5379*	-1.4647*
Replicate F	7.144	1.260	2.326
Replicate Prob(F)	0.0003	0.3058	0.0832
Treatment F	88.130	93.567	74.435
Treatment Prob(F)	0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	7 DAT	7 DAT	15 DAT
Part Rated	Plant	Plant	Leaf
Rating Type	Ht Reductio	Injury	Cupping
Rating Unit	%	%	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	V3-V4 No Herbicide							POST	A	0i	0e	0.0d
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	8ghi	25d	4.3ab
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	13g	22d	4.3ab
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	12g	31d	4.5ab
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	11g	29d	4.5ab
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	22f	31d	4.3ab
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	25ef	44c	4.3ab
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	31e	49c	3.5b
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	54c	70b	0.8d
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	70b	78ab	0.0d
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	80a	89a	0.0d

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID: 13SB01MRF
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Description									7 DAT	7 DAT	15 DAT
	Part Rated									Plant	Plant	Leaf
	Rating Type									Ht Reductio	Injury	Cupping
	Rating Unit									%	%	0-5
12	R1 No Herbicide							POST	B	0i	0e	0.0d
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	3hi	19d	3.8ab
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	3hi	24d	5.0a
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	10gh	31d	5.0a
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	14g	28d	4.8ab
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	15g	29d	4.0ab
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	25ef	49c	2.5c
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	41d	66b	1.0d
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	44d	75ab	0.8d
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	45d	84a	0.0d
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	45d	86a	0.0d

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	7 DAT	7 DAT	15 DAT
Part Rated	Plant	Plant	Leaf
Rating Type	Ht Reductio	Injury	Cupping
Rating Unit	%	%	0-5
LSD (P=.05)	6.0	9.8	0.82
Standard Deviation	4.3	7.0	0.58
CV	16.48	16.0	22.28
Bartlett's X2	14.12	17.282	8.28
P(Bartlett's X2)	0.721	0.571	0.763
Skewness	0.8492*	0.2771	-0.1436
Kurtosis	-0.1227	-1.0608*	-1.7086*
Replicate F	1.386	0.435	1.000
Replicate Prob(F)	0.2552	0.7284	0.3988
Treatment F	114.322	61.801	50.468
Treatment Prob(F)	0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	15 DAT	15 DAT	15 DAT
Part Rated	Leaf	Leaf	Leaf
Rating Type	Pale Margin	Crinkling	Mottling
Rating Unit	0-5	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	V3-V4 No Herbicide							POST	A	0.0b	0.0e	0.0c
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	3.8a	4.0ab	3.8a
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	3.3a	4.0ab	3.0ab
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	3.0a	4.0ab	3.3a
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	3.0a	3.8ab	2.8ab
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	3.5a	4.0ab	3.3a
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	3.0a	4.3a	3.5a
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	2.3a	3.0abc	2.5ab
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	1.0b	2.0cd	1.5b
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	0.0b	1.5d	1.5b
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	0.0b	0.0e	0.0c

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	15 DAT	15 DAT	15 DAT
Part Rated	Leaf	Leaf	Leaf
Rating Type	Pale Margin	Crinkling	Mottling
Rating Unit	0-5	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
12	R1 No Herbicide							POST	B	0.0e
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	4.3a
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	4.0ab
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	2.8bcd
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	2.3cd
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	2.8bcd
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	2.8bcd
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	2.0cd
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	2.0cd
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	0.0e
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	0.0e

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	15 DAT	15 DAT	15 DAT
Part Rated	Leaf	Leaf	Leaf
Rating Type	Pale Margin	Crinkling	Mottling
Rating Unit	0-5	0-5	0-5
LSD (P=.05)	1.17	0.82	1.06
Standard Deviation	0.81	0.58	0.73
CV	39.03	23.87	32.22
Bartlett's X2	5.374	8.357	5.642
P(Bartlett's X2)	0.614	0.681	0.582
Skewness	-0.0808	-0.2534	-0.4521
Kurtosis	-1.427*	-1.1643*	-0.9529
Replicate F	0.872	1.214	3.051
Replicate Prob(F)	0.4664	0.3120	0.0437
Treatment F	14.051	29.836	13.373
Treatment Prob(F)	0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

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Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	15 DAT	15 DAT	15 DAT
Part Rated	Leaf	Leaf	Leaf
Rating Type	Chlorosis	SoilContact	Inversion
Rating Unit	0-5	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	V3-V4 No Herbicide							POST	A	0.0c	0.0d
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	1.5b	0.0d
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	1.5b	0.0d
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	2.0b	0.0d
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	1.8b	0.0d
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	1.8b	0.0d
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	1.3b	0.0d
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	1.0bc	0.0d
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	1.0bc	1.3c
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	2.3b	4.0b
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	0.0c	5.0a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID: 13SB01MRF
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	15 DAT	15 DAT	15 DAT
Part Rated	Leaf	Leaf	Leaf
Rating Type	Chlorosis	SoilContact	Inversion
Rating Unit	0-5	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
12	R1 No Herbicide							POST	B	0.0c	0.0d
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	1.0bc	0.0d
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	1.8b	0.0d
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	1.8b	0.0d
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	1.5b	0.0d
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	1.5b	0.0d
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	1.3b	1.3c
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	3.8a	3.3b
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	4.0a	4.0a
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	0.0c	1.3c
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	0.0c	0.0d

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	15 DAT	15 DAT	15 DAT
Part Rated	Leaf	Leaf	Leaf
Rating Type	Chlorosis	SoilContact	Inversion
Rating Unit	0-5	0-5	0-5
LSD (P=.05)	0.72	0.22	0.53
Standard Deviation	0.51	0.15	0.37
CV	36.91	16.18	41.2
Bartlett's X2	7.335	0.0	1.802
P(Bartlett's X2)	0.884	.	0.406
Skewness	0.7364*	1.6169*	1.4474*
Kurtosis	-0.0436	0.9157	0.6088
Replicate F	4.455	1.000	0.625
Replicate Prob(F)	0.0067	0.4064	0.6044
Treatment F	17.612	581.000	63.136
Treatment Prob(F)	0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

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Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	15 DAT	15 DAT	15 DAT
Part Rated	Leaf	Petiol	Petiol
Rating Type	Defoliation	Droop	Swelling
Rating Unit	%	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	V3-V4 No Herbicide							POST	A	0.0g	0.0e
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	0.8efg	1.0de
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	0.5fg	1.0de
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	0.5fg	1.5cd
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	0.8efg	1.8cd
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	1.3def	1.8cd
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	2.0cd	3.3b
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	2.5c	3.5b
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	3.8b	4.8a
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	4.3ab	5.0a
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	5.0a	5.0a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID: 13SB01MRF
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Description									15 DAT	15 DAT	15 DAT
	Part Rated									Leaf	Petiol	Petiol
	Rating Type									Defoliation	Droop	Swelling
	Rating Unit									%	0-5	0-5
12	R1 No Herbicide							POST	B	0e	0.0g	0.0e
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	0e	1.5c-f	1.0de
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	0e	1.8cde	1.0de
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	0e	2.0cd	1.0de
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	0e	1.8cde	1.3de
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	0e	1.8cde	2.0cd
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	0e	2.0cd	2.8bc
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	9d	5.0a	4.8a
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	48c	4.0ab	5.0a
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	86b	5.0a	5.0a
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	94a	5.0a	5.0a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

rop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	15 DAT	15 DAT	15 DAT
Part Rated	Leaf	Petiol	Petiol
Rating Type	Defoliation	Droop	Swelling
Rating Unit	%	0-5	0-5
LSD (P=.05)	3.5	0.75	0.92
Standard Deviation	2.4	0.53	0.65
CV	11.25	22.88	25.13
Bartlett's X2	1.894	6.229	11.15
P(Bartlett's X2)	0.595	0.904	0.346
Skewness	1.3084*	0.2703	0.1173
Kurtosis	-0.0172	-1.1865*	-1.4935*
Replicate F	0.357	2.692	3.357
Replicate Prob(F)	0.7843	0.0536	0.0243
Treatment F	924.818	42.492	31.380
Treatment Prob(F)	0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

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Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	15 DAT	15 DAT	15 DAT
Part Rated	Termin	Termin	Termin
Rating Type	Chlorosis	Necrosis	Epinasty
Rating Unit	0-5	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	V3-V4 No Herbicide							POST	A	0.0e	0.0d	0.0e
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	1.0cde	0.0d	1.0de
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	1.0cde	0.0d	0.8de
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	0.8cde	0.5cd	1.0de
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	1.5b-e	0.0d	1.0de
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	2.0bc	1.0c	1.5cde
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	2.8b	2.8b	2.8bc
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	1.8bcd	3.0b	2.8bc
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	0.8cde	4.8a	4.5a
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	0.0e	5.0a	4.8a
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	0.0e	5.0a	5.0a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA BSOY Glycine max Soybean 15 DAT Termin Chlorosis 0-5	GLXMA BSOY Glycine max Soybean 15 DAT Termin Necrosis 0-5	GLXMA BSOY Glycine max Soybean 15 DAT Termin Epinasty 0-5
12	R1 No Herbicide							POST	B	0.0e	0.0d	0.0e
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	0.3de	0.0d	1.0de
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	0.8cde	0.0d	1.0de
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	1.0cde	0.0d	1.0de
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	1.8bcd	0.0d	2.0bcd
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	1.5b-e	0.0d	2.5bc
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	3.8a	3.0b	3.0b
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	0.0e	5.0a	4.5a
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	0.0e	5.0a	5.0a
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	0.0e	5.0a	5.0a
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	0.0e	5.0a	5.0a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID: 13SB01MRF
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	15 DAT	15 DAT	15 DAT
Part Rated	Termin	Termin	Termin
Rating Type	Chlorosis	Necrosis	Epinasty
Rating Unit	0-5	0-5	0-5
LSD (P=.05)	0.92	0.56	0.91
Standard Deviation	0.65	0.40	0.65
CV	69.84	19.34	25.88
Bartlett's X2	14.336	3.242	9.876
P(Bartlett's X2)	0.28	0.518	0.361
Skewness	1.1034*	0.3456	0.1855
Kurtosis	0.2141	-1.7176*	-1.4777*
Replicate F	1.037	1.355	0.507
Replicate Prob(F)	0.3822	0.2648	0.6789
Treatment F	9.848	130.576	31.293
Treatment Prob(F)	0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Description									15 DAT	15 DAT	15 DAT
	Part Rated									Stem	Stem	Stem
	Rating Type									Epinasty	Swelling	Cracking
	Rating Unit									0-5	0-5	0-5
1	V3-V4 No Herbicide							POST	A	0.0e	0.0e	0.0c
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	0.5de	0.0e	0.0c
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	0.8de	0.3e	0.0c
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	0.8de	1.0de	0.5c
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	0.8de	2.3bcd	1.0c
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	1.0de	2.0cd	0.8c
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	2.3c	3.3bc	2.0b
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	2.5c	3.5b	2.5b
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	4.5a	4.8a	4.3a
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	4.8a	5.0a	4.8a
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	5.0a	5.0a	5.0a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID: 13SB01MRF
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	15 DAT	15 DAT	15 DAT
Part Rated	Stem	Stem	Stem
Rating Type	Epinasty	Swelling	Cracking
Rating Unit	0-5	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
12	R1 No Herbicide							POST	B	0.0e	0.0c
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	0.0e	0.0c
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	0.0e	0.0c
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	0.0e	0.0c
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	0.3e	0.0c
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	1.0de	0.0c
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	1.5d	3.0b
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	3.3b	4.0a
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	4.0ab	5.0a
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	4.0ab	5.0a
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	4.3a	5.0a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	15 DAT	15 DAT	15 DAT
Part Rated	Stem	Stem	Stem
Rating Type	Epinasty	Swelling	Cracking
Rating Unit	0-5	0-5	0-5
LSD (P=.05)	0.74	1.05	0.87
Standard Deviation	0.52	0.73	0.62
CV	28.02	29.58	31.79
Bartlett's X2	6.795	8.244	6.83
P(Bartlett's X2)	0.871	0.221	0.447
Skewness	0.5265*	0.0244	0.4153
Kurtosis	-1.27*	-1.5558*	-1.6194*
Replicate F	3.444	0.115	0.189
Replicate Prob(F)	0.0219	0.9507	0.9037
Treatment F	48.603	29.759	47.241
Treatment Prob(F)	0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	15 DAT	15 DAT	30 DAT
Part Rated	Plant	Plant	Leaf
Rating Type	Ht Reductio	Injury	Cupping
Rating Unit	%	%	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	V3-V4 No Herbicide							POST	A	0j	0l	0.0g
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	23gh	36hi	0.8g
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	24gh	44fgh	0.5g
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	34fg	48fg	1.0fg
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	36ef	50ef	2.5de
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	40def	60d	3.5bcd
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	59c	71c	4.3abc
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	58c	74c	3.8bc
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	74b	80bc	3.3cd
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	83ab	88ab	4.3abc
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	91a	96a	0.0g

School of Plant, Environmental, and Soil Sciences

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Sponsor Contact: LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Description									15 DAT	15 DAT	30 DAT
	Part Rated									Plant	Plant	Leaf
	Rating Type									Ht Reductio	Injury	Cupping
	Rating Unit									%	%	0-5
12	R1 No Herbicide							POST	B	0j	0l	0.0g
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	3j	15k	4.0abc
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	2j	24j	4.8ab
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	9ij	28ij	5.0a
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	18hi	39gh	4.5abc
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	16hi	29ij	3.5bcd
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	31fg	58de	2.0ef
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	46cde	70c	1.0fg
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	49cd	81bc	1.0fg
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	53c	93a	0.0g
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	54c	96a	0.0g

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	15 DAT	15 DAT	30 DAT
Part Rated	Plant	Plant	Leaf
Rating Type	Ht Reductio	Injury	Cupping
Rating Unit	%	%	0-5
LSD (P=.05)	9.2	8.2	0.81
Standard Deviation	6.5	5.8	0.57
CV	17.89	10.84	25.49
Bartlett's X2	27.808	38.347	8.964
P(Bartlett's X2)	0.087	0.002*	0.706
Skewness	0.3375	-0.2376	0.0727
Kurtosis	-0.7729	-1.0466*	-1.566*
Replicate F	0.132	0.135	0.783
Replicate Prob(F)	0.9405	0.9391	0.5079
Treatment F	68.452	106.900	41.539
Treatment Prob(F)	0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

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Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	30 DAT	30 DAT	30 DAT
Part Rated	Leaf	Leaf	Leaf
Rating Type	Pale Margin	Crinkling	Chlorosis
Rating Unit	0-5	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	V3-V4 No Herbicide							POST	A	0.0c	0.0e
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	0.3c	2.0d
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	0.0c	2.0d
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	0.5c	2.5d
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	2.5ab	4.0abc
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	2.5ab	5.0a
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	3.3a	5.0a
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	2.3ab	4.8a
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	1.5b	4.8a
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	3.3a	4.5ab
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	0.0c	0.0e

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID: 13SB01MRF
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Crop Code									GLXMA	GLXMA	GLXMA
BBCH Scale									BSOY	BSOY	BSOY
Crop Scientific Name									Glycine max	Glycine max	Glycine max
Crop Name									Soybean	Soybean	Soybean
Description									30 DAT	30 DAT	30 DAT
Part Rated									Leaf	Leaf	Leaf
Rating Type									Pale Margin	Crinkling	Chlorosis
Rating Unit									0-5	0-5	0-5
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
12	R1 No Herbicide							POST	B		0.0e	0.0d
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B		4.5ab	1.0c
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B		4.3abc	1.0c
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B		3.5c	1.0c
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B		3.8bc	1.0c
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B		2.5d	1.0c
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B		2.8d	1.8b
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B		2.3d	4.0a
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B		2.0d	4.0a
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B		0.0e	0.0d
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B		0.0e	0.0d

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	30 DAT	30 DAT	30 DAT
Part Rated	Leaf	Leaf	Leaf
Rating Type	Pale Margin	Crinkling	Chlorosis
Rating Unit	0-5	0-5	0-5
LSD (P=.05)	0.99	0.64	0.22
Standard Deviation	0.69	0.46	0.15
CV	47.12	16.69	11.24
Bartlett's X2	7.461	4.961	0.0
P(Bartlett's X2)	0.383	0.933	.
Skewness	0.4149	-0.3103	1.1265*
Kurtosis	-1.3332	-1.2595*	0.0202
Replicate F	2.065	0.732	1.000
Replicate Prob(F)	0.1260	0.5369	0.4064
Treatment F	15.310	63.920	357.000
Treatment Prob(F)	0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

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Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	30 DAT	30 DAT	30 DAT
Part Rated	Leaf	Leaf	Petiol
Rating Type	Inversion	Defoliation	Droop
Rating Unit	0-5	%	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	V3-V4 No Herbicide							POST	A	0.0f
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	2.5b
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	1.cde
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	1.8cd
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	1.0e
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	1.0e
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	1.0e
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	1.0e
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	1.3de
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	1.0e
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	0.0f

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Trial ID: 13SB01MRF
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Crop Code									GLXMA	GLXMA	GLXMA
BBCH Scale									BSOY	BSOY	BSOY
Crop Scientific Name									Glycine max	Glycine max	Glycine max
Crop Name									Soybean	Soybean	Soybean
Description									30 DAT	30 DAT	30 DAT
Part Rated									Leaf	Leaf	Petiol
Rating Type									Inversion	Defoliation	Droop
Rating Unit									0-5	%	0-5
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
12	R1 No Herbicide							POST	B	0.0d	0d	0.0f
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	0.0d	0d	1.0e
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	0.0d	0d	1.0e
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	0.0d	0d	1.0e
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	0.0d	0d	1.0e
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	0.3d	0d	1.0e
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	1.0c	4d	2.0c
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	3.5b	18c	5.0a
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	4.0a	56b	4.5a
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	0.5d	96a	5.0a
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	0.0d	97a	5.0a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	30 DAT	30 DAT	30 DAT
Part Rated	Leaf	Leaf	Petiol
Rating Type	Inversion	Defoliation	Droop
Rating Unit	0-5	%	0-5
LSD (P=.05)	0.43	3.4	0.43
Standard Deviation	0.30	2.4	0.30
CV	35.56	9.58	17.23
Bartlett's X2	0.079	13.786	1.722
P(Bartlett's X2)	0.961	0.008*	0.787
Skewness	1.5484*	1.2116*	1.1907*
Kurtosis	0.7904	-0.2783	0.0696
Replicate F	0.254	2.807	2.833
Replicate Prob(F)	0.8577	0.0565	0.0453
Treatment F	97.475	1108.681	115.238
Treatment Prob(F)	0.0001	0.0001	0.0001

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Dicamba Drift Verification Test

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Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	30 DAT	30 DAT	30 DAT
Part Rated	Petiol	Termin	Termin
Rating Type	Swelling	Chlorosis	Necrosis
Rating Unit	0-5	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code
1	V3-V4 No Herbicide							POST	A
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A

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Trial ID: 13SB01MRF
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Investigator: Dr. James L. Griffin
Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Crop Code									GLXMA	GLXMA	GLXMA
	BBCH Scale									BSOY	BSOY	BSOY
	Crop Scientific Name									Glycine max	Glycine max	Glycine max
	Crop Name									Soybean	Soybean	Soybean
	Description									30 DAT	30 DAT	30 DAT
	Part Rated									Petiol	Termin	Termin
	Rating Type									Swelling	Chlorosis	Necrosis
	Rating Unit									0-5	0-5	0-5
12	R1 No Herbicide							POST	B	0.0f	0.0c	0.0c
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	1.0e	1.0b	0.0c
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	1.0e	1.0b	0.0c
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	1.0e	1.0b	0.0c
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	1.0e	1.0b	0.0c
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	2.0d	1.0b	0.0c
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	3.8c	3.8a	3.0b
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	5.0a	0.0c	5.0a
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	4.5b	0.0c	5.0a
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	5.0a	0.0c	5.0a
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	5.0a	0.0c	5.0a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	30 DAT	30 DAT	30 DAT
Part Rated	Petiol	Termin	Termin
Rating Type	Swelling	Chlorosis	Necrosis
Rating Unit	0-5	0-5	0-5
LSD (P=.05)	0.34	0.22	0.00
Standard Deviation	0.24	0.15	0.00
CV	8.9	18.95	0.0
Bartlett's X2	0.061	0.0	0.0
P(Bartlett's X2)	0.804	.	.
Skewness	0.1436	1.984*	0.3207
Kurtosis	-1.7542*	3.8992*	-1.8824*
Replicate F	0.405	1.000	0.000
Replicate Prob(F)	0.7502	0.4064	1.0000
Treatment F	282.081	213.000	0.000
Treatment Prob(F)	0.0001	0.0001	1.0000

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	30 DAT	30 DAT	30 DAT
Part Rated	Termin	Stem	Stem
Rating Type	Epinasty	Epinasty	Cracking
Rating Unit	0-5	0-5	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code
1	V3-V4 No Herbicide							POST	A
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID: 13SB01MRF
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Crop Code									GLXMA	GLXMA	GLXMA
BBCH Scale									BSOY	BSOY	BSOY
Crop Scientific Name									Glycine max	Glycine max	Glycine max
Crop Name									Soybean	Soybean	Soybean
Description									30 DAT	30 DAT	30 DAT
Part Rated									Termin	Stem	Stem
Rating Type									Epinasty	Epinasty	Cracking
Rating Unit									0-5	0-5	0-5
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
12	R1 No Herbicide							POST	B	0.0f	0.0d	0.0e
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	1.0e	0.0d	0.0e
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	1.0e	0.0d	0.0e
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	1.0e	0.0d	0.0e
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	2.0d	0.5d	0.0e
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	3.5c	2.0c	1.0d
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	3.8c	2.5b	3.0c
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	4.0bc	4.0a	4.0b
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	4.0bc	4.0a	5.0a
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	4.5ab	4.0a	5.0a
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	4.8a	4.3a	5.0a

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Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	30 DAT	30 DAT	30 DAT
Part Rated	Termin	Stem	Stem
Rating Type	Epinasty	Epinasty	Cracking
Rating Unit	0-5	0-5	0-5
LSD (P=.05)	0.49	0.42	0.00
Standard Deviation	0.34	0.29	0.00
CV	12.57	14.94	0.0
Bartlett's X2	0.121	0.079	0.0
P(Bartlett's X2)	0.989	0.961	.
Skewness	-0.1917	0.1287	0.3085
Kurtosis	-1.5035*	-1.7642*	-1.7827*
Replicate F	0.267	1.000	0.000
Replicate Prob(F)	0.8489	0.4064	1.0000
Treatment F	102.120	170.455	0.000
Treatment Prob(F)	0.0001	0.0001	1.0000

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Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	30 DAT	30 DAT	60 DAT
Part Rated	Plant	Plant	Leaf
Rating Type	Ht Reductio	Injury	Cupping
Rating Unit	%	%	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	V3-V4 No Herbicide							POST	A	0k	0h	0.0d
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	8h-k	13fg	0.0d
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	10g-j	12fg	0.0d
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	11g-j	16fg	0.5d
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	13ghi	29de	2.0c
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	20g	35d	3.8b
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	38f	51c	4.3ab
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	45e	59c	4.8a
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	65c	71b	4.0b
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	90b	91a	4.0b
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	100a	99a	0.0d

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID: 13SB01MRF
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	30 DAT	30 DAT	60 DAT
Part Rated	Plant	Plant	Leaf
Rating Type	Ht Reductio	Injury	Cupping
Rating Unit	%	%	0-5

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
12	R1 No Herbicide							POST	B	1jk	8gh
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	4ijk	21ef
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	5h-k	29de
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	11g-j	31de
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	14ghi	40d
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	15gh	38d
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	31f	59c
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	46e	71b
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	50e	79b
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	54de	96a
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	60cd	98a

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	30 DAT	30 DAT	60 DAT
Part Rated	Plant	Plant	Leaf
Rating Type	Ht Reductio	Injury	Cupping
Rating Unit	%	%	0-5
LSD (P=.05)	6.6	7.8	0.54
Standard Deviation	4.7	5.5	0.38
CV	14.93	11.6	17.86
Bartlett's X2	18.92	37.843	2.509
P(Bartlett's X2)	0.273	0.006*	0.474
Skewness	0.9314*	0.2594	0.0551
Kurtosis	-0.0066	-1.1467*	-1.8121*
Replicate F	0.656	1.417	2.287
Replicate Prob(F)	0.5820	0.2460	0.0988
Treatment F	153.192	131.975	117.383
Treatment Prob(F)	0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

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Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	60 DAT	60 DAT	60 DAT
Part Rated	Leaf	Leaf	Leaf
Rating Type	Crinkling	Chlorosis	Green
Rating Unit	0-5	0-5	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	V3-V4 No Herbicide							POST	A	0.0e	0.0b
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	1.0d	0.5ab
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	1.0d	0.0b
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	2.3c	0.5ab
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	2.8b	1.0a
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	4.0a	1.0a
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	4.0a	1.0a
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	4.0a	1.0a
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	4.0a	1.0a
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	4.0a	1.0a
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	0.0e	0.0b

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	60 DAT	60 DAT	60 DAT
Part Rated	Leaf	Leaf	Leaf
Rating Type	Crinkling	Chlorosis	Green
Rating Unit	0-5	0-5	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
12	R1 No Herbicide							POST	B	46.3d
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	40.0de
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	32.5f
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	36.3ef
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	40.0de
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	61.3c
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	83.8b
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	90.0a
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	81.3b
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	0.0g
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	0.0g

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	60 DAT	60 DAT	60 DAT
Part Rated	Leaf	Leaf	Leaf
Rating Type	Crinkling	Chlorosis	Green
Rating Unit	0-5	0-5	%
LSD (P=.05)	0.30	0.36	5.17
Standard Deviation	0.21	0.25	3.58
CV	8.54	38.69	7.71
Bartlett's X2	0.0	0.0	4.963
P(Bartlett's X2)	.	.	0.665
Skewness	-0.3838	-0.5872	-0.0867
Kurtosis	-1.5706*	-1.7364*	-0.9399
Replicate F	1.379	1.000	0.870
Replicate Prob(F)	0.2681	0.4064	0.4674
Treatment F	258.103	13.500	293.283
Treatment Prob(F)	0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

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Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	60 DAT	60 DAT	60 DAT
Part Rated	Petiol	Stem	Plant
Rating Type	Swelling	Cracking	Ht Reductio
Rating Unit	0-5	0-5	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	V3-V4 No Herbicide							POST	A	0.0b	0.0c	0h
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	0.8a	0.0c	5gh
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	1.0a	0.0c	4gh
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	1.0a	0.0c	10fg
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	1.0a	0.0c	13f
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	1.0a	0.0c	18f
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	1.0a	2.3b	36e
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	1.0a	3.0a	45d
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	1.0a	3.0a	54c
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	1.0a	3.0a	80b
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	0.0b	0.0c	100a

School of Plant, Environmental, and Soil Sciences

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Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	60 DAT	60 DAT	60 DAT
Part Rated	Petiol	Stem	Plant
Rating Type	Swelling	Cracking	Ht Reductio
Rating Unit	0-5	0-5	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code
12	R1 No Herbicide							POST	B
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B

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Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	60 DAT	60 DAT	60 DAT
Part Rated	Petiol	Stem	Plant
Rating Type	Swelling	Cracking	Ht Reductio
Rating Unit	0-5	0-5	%
LSD (P=.05)	0.22	0.22	6.3
Standard Deviation	0.15	0.15	4.4
CV	18.95	14.74	13.15
Bartlett's X2	0.0	0.0	11.419
P(Bartlett's X2)	.	.	0.121
Skewness	-1.5172*	0.6666	0.8948*
Kurtosis	0.3139	-1.5547*	-0.378
Replicate F	1.000	1.000	1.418
Replicate Prob(F)	0.4064	0.4064	0.2570
Treatment F	28.200	361.800	235.950
Treatment Prob(F)	0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

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Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code										GLXMA	GLXMA	GLXMA
BBCH Scale										BSOY	BSOY	BSOY
Crop Scientific Name										Glycine max	Glycine max	Glycine max
Crop Name										Soybean	Soybean	Soybean
Description										60 DAT		
Part Rated										Plant		
Rating Date											Jul/12/2013	Jul/19/2013
Rating Type										Injury	PlantHeight	PlantHeight
Rating Unit										%	Inches	Inches

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	V3-V4 No Herbicide							POST	A	0i	19a	25a
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	8h	16bc	21b
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	5h	17b	20b
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	15g	15bc	17c
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	19g	15bc	17c
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	36f	14cd	16c
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	59e	13d	14d
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	65d	12d	13d
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	76c	9e	10e
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	92b	8ef	7f
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	100a	7f	6f

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Dicamba Drift Verification Test

Trial ID: 13SB01MRF
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	60 DAT		
Part Rated	Plant		
Rating Date		Jul/12/2013	Jul/19/2013
Rating Type	Injury	PlantHeight	PlantHeight
Rating Unit	%	Inches	Inches

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code
12	R1 No Herbicide							POST	B
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Description	60 DAT		
Part Rated	Plant		
Rating Date		Jul/12/2013	Jul/19/2013
Rating Type	Injury	PlantHeight	PlantHeight
Rating Unit	%	Inches	Inches
LSD (P=.05)	4.5	1.6	1.8
Standard Deviation	3.1	1.1	1.3
CV	7.16	8.45	8.48
Bartlett's X2	3.1	16.01	10.177
P(Bartlett's X2)	0.796	0.099	0.425
Skewness	0.2904	-0.245	-0.1028
Kurtosis	-1.455*	-0.7988	-0.6939
Replicate F	1.122	0.903	1.374
Replicate Prob(F)	0.3556	0.4510	0.2697
Treatment F	564.863	48.900	88.127
Treatment Prob(F)	0.0001	0.0001	0.0001

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Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Rating Date	Jul/31/2013	Aug/6/2013	Aug/16/2013
Rating Type	PlantHeight	PlantHeight	PlantHeight
Rating Unit	Inches	Inches	Inches

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	V3-V4 No Herbicide							POST	A	36a
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	33b
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	31b
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	28c
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	28c
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	27c
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	23d
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	20e
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	15f
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	11g
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	7h

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Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Rating Date	Jul/31/2013	Aug/6/2013	Aug/16/2013
Rating Type	PlantHeight	PlantHeight	PlantHeight
Rating Unit	Inches	Inches	Inches

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
12	R1 No Herbicide							POST	B	40a	43a
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	40a	42a
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	40a	40ab
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	38a	40ab
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	37ab	38bc
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	35b	37c
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	31c	34d
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	29cd	28e
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	26d	26e
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	25d	23f
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	25d	21f

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Dicamba Drift Verification Test

Trial ID: 13SB01MRF
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Rating Date	Jul/31/2013	Aug/6/2013	Aug/16/2013
Rating Type	PlantHeight	PlantHeight	PlantHeight
Rating Unit	Inches	Inches	Inches
LSD (P=.05)	2.2	2.8	2.5
Standard Deviation	1.5	2.0	1.7
CV	6.48	5.95	5.15
Bartlett's X2	10.488	19.437	28.023
P(Bartlett's X2)	0.399	0.035*	0.002*
Skewness	-0.456	-0.1949	-0.4031
Kurtosis	-0.8637	-1.5909*	-1.3867
Replicate F	2.774	1.129	0.994
Replicate Prob(F)	0.0585	0.3532	0.4088
Treatment F	149.345	39.269	84.674
Treatment Prob(F)	0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Rating Date	Aug/30/2013	Oct/15/2013	Oct/28/2013
Rating Type	PlantHeight	PlantHeight	Moisture
Rating Unit	Inches	Inches	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	V3-V4 No Herbicide							POST	A	46a	35a	11.6a
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	43abc	29b-e	11.9a
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	42a-d	30bcd	11.8a
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	39cde	25f	12.1a
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	41bcd	25ef	11.7a
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	36e	22g	12.0a
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	32f	19gh	11.8a
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	30fg	17h	11.8a
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	24h	13i	11.6a
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A	17i	11i	
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A	14j	6j	

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Dicamba Drift Verification Test

Trial ID: 13SB01MRF
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA BSOY Glycine max Soybean Aug/30/2013 PlantHeight Inches	GLXMA BSOY Glycine max Soybean Oct/15/2013 PlantHeight Inches	GLXMA BSOY Glycine max Soybean Oct/28/2013 Moisture %
12	R1 No Herbicide							POST	B	46a	33abc	11.9a
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	46a	35a	11.8a
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	44ab	34ab	12.0a
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	42a-d	33abc	12.0a
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	40bcd	32abc	11.8a
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	39cde	30bcd	11.9a
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B	38de	29c-f	
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B	31fg	29b-e	
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B	28g	27def	
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B	24h	20gh	
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B	22h	18gh	

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Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Rating Date	Aug/30/2013	Oct/15/2013	Oct/28/2013
Rating Type	PlantHeight	PlantHeight	Moisture
Rating Unit	Inches	Inches	%
LSD (P=.05)	3.0	2.9	0.46
Standard Deviation	2.1	2.0	0.32
CV	6.16	8.14	2.71
Bartlett's X2	20.027	26.243	15.033
P(Bartlett's X2)	0.52	0.158	0.376
Skewness	-0.7209*	-0.6367*	0.6935*
Kurtosis	-0.4214	-0.3761	0.7915
Replicate F	0.682	0.175	6.170
Replicate Prob(F)	0.5668	0.9126	0.0014
Treatment F	82.719	65.819	0.855
Treatment Prob(F)	0.0001	0.0001	0.6096

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Rating Date	Oct/28/2013	Oct/28/2013	Oct/28/2013
Rating Type	Test Wt	Yield	Yield
Rating Unit	bu/A	kg	bu/A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	V3-V4 No Herbicide							POST	A	53.8a	5.22a	56.6a
2	V3-V4 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	A	53.4a	5.19a	56.1a
3	V3-V4 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	A	53.0a	5.38a	58.3a
4	V3-V4 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	A	53.5a	4.95a	53.4a
5	V3-V4 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	A	53.6a	4.91a	53.2a
6	V3-V4 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	A	54.2a	4.56ab	49.2ab
7	V3-V4 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	A	53.7a	3.98bc	43.0bc
8	V3-V4 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	A	53.2a	3.54c	38.3c
9	V3-V4 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	A	52.9a	1.77d	19.2d
10	V3-V4 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	A			
11	V3-V4 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	A			

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID: 13SB01MRF
Location: Ben Hur Research Farm
Investigator: Dr. James L. Griffin
Study Director: Matt Foster
Sponsor Contact: LSU AgCenter

Crop Code									GLXMA	GLXMA	GLXMA
BBCH Scale									BSOY	BSOY	BSOY
Crop Scientific Name									Glycine max	Glycine max	Glycine max
Crop Name									Soybean	Soybean	Soybean
Rating Date									Oct/28/2013	Oct/28/2013	Oct/28/2013
Rating Type									Test Wt	Yield	Yield
Rating Unit									bu/A	kg	bu/A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
12	R1 No Herbicide							POST	B	53.2a	5.12a	55.3a
13	R1 Clarity	4	L	0.016	fl oz/a	0.0005	lb ae/a	POST	B	53.3a	5.13a	55.4a
14	R1 Clarity	4	L	0.032	fl oz/a	0.001	lb ae/a	POST	B	53.1a	4.72ab	50.9ab
15	R1 Clarity	4	L	0.064	fl oz/a	0.002	lb ae/a	POST	B	53.9a	4.77ab	51.5ab
16	R1 Clarity	4	L	0.128	fl oz/a	0.004	lb ae/a	POST	B	53.3a	4.42ab	47.8ab
17	R1 Clarity	4	L	0.256	fl oz/a	0.008	lb ae/a	POST	B	52.4a	4.44ab	48.0ab
18	R1 Clarity	4	L	0.51	fl oz/a	0.016	lb ae/a	POST	B			
19	R1 Clarity	4	L	0.99	fl oz/a	0.031	lb ae/a	POST	B			
20	R1 Clarity	4	L	2.02	fl oz/a	0.063	lb ae/a	POST	B			
21	R1 Clarity	4	L	4	fl oz/a	0.125	lb ae/a	POST	B			
22	R1 Clarity	4	L	8	fl oz/a	0.25	lb ae/a	POST	B			

School of Plant, Environmental, and Soil Sciences

Dicamba Drift Verification Test

Trial ID:	13SB01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matt Foster
Sponsor Contact:	LSU AgCenter

Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Rating Date	Oct/28/2013	Oct/28/2013	Oct/28/2013
Rating Type	Test Wt	Yield	Yield
Rating Unit	bu/A	kg	bu/A
LSD (P=.05)	1.25	0.587	6.38
Standard Deviation	0.88	0.411	4.46
CV	1.64	9.05	9.1
Bartlett's X2	20.031	11.163	11.843
P(Bartlett's X2)	0.129	0.673	0.619
Skewness	0.579	-1.6842*	-1.6659*
Kurtosis	2.3434*	3.2264*	3.1954*
Replicate F	1.050	0.761	0.931
Replicate Prob(F)	0.3808	0.5222	0.4341
Treatment F	1.047	19.827	19.580
Treatment Prob(F)	0.4303	0.0001	0.0001

Flazasulfuron Preemergence Test

LSU AgCenter

School of Plant, Environmental, and Soil Sciences

Experiment number	:	13GN01JG
Location	:	Ben Hur Research Farm – Baton Rouge, LA
Experimental design	:	Randomized Complete Block
Number of reps	:	4
Plot size	:	6’ x 20’
Row width/# per plot	:	N/A
Soil type	:	clay loam
OM (%)	:	1.9
pH	:	6.3
Planting date	:	N/A
Harvest date	:	N/A
Crop/Variety	:	N/A
Uniform std. treatment	:	N/A

Application type	:	PRE A
Date applied (mm-dd-yy)	:	6-6-13
Time (hh:mm-hh:mm)	:	1:15-1:45pm
Incorporation equipment	:	N/A
Incorporation depth	:	N/A
Air/Soil temperature (F)	:	89/94
Wind (mph/direction)	:	5-7/SW
Relative humidity (%)	:	58
Soil/Leaf surface moist	:	dry/N/A
Crop stage/height	:	N/A
Sprayer type/mph	:	CO_2bkpk/3.0
Nozzle type/size	:	FF/TTI11002
Boom ht/#noz/spacing (in)	:	15”/4/18”
GPA/psi (at nozzle)	:	15/28
Applied by	:	Bauerle

Weed species	:	population per ft^2/height/# leaves
N/A	:	

Rainfall (in.)

0-24 hr/1-3 days	:	0.54/0.47
4-7 days/2nd week	:	0.00/0.95
3rd week/4th week	:	1.74/1.61

Comments:

The experimental area was treated with Roundup PowerMax and PRE herbicide treatments were applied.

School of Plant, Environmental, and Soil Sciences

Flazasulfuron Preemergence Test

Trial ID:	13GN01JG
Location:	St. Gabriel, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	Summit Agro

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	W Weed ECHCG	W Weed IPOLA	W Weed SIDSP
	Pest Scientific Name									Echinochloa cr>	Ipomoea lacuno>	Sidaspinosa
	Pest Name									Common barnyar>	Pitted morning>	Pricklysida
	Rating Date									Jul/4/2013	Jul/4/2013	Jul/4/2013
	Rating Type									Control	Control	Control
	Rating Unit									%	%	%
1	Mission	25	DF	1	oz wt/a	0.0156	lb ai/a	PRE	A	41b	41b	68a
2	Mission	25	DF	1	oz wt/a	0.0156	lb ai/a	PRE	A	83a	71a	93a
	Tricor	75	DF	10.7	oz wt/a	0.5	lb ai/a	PRE	A			
3	Mission	25	DF	2	oz wt/a	0.0313	lb ai/a	PRE	A	46b	44b	61a
4	Mission	25	DF	2	oz wt/a	0.0313	lb ai/a	PRE	A	83a	85a	94a
	Tricor	75	DF	10.7	oz wt/a	0.5	lb ai/a	PRE	A			
5	Mission	25	DF	3	oz wt/a	0.047	lb ai/a	PRE	A	53b	46b	76a
6	Mission	25	DF	3	oz wt/a	0.047	lb ai/a	PRE	A	83a	73a	93a
	Tricor	75	DF	10.7	oz wt/a	0.5	lb ai/a	PRE	A			
7	Tricor	75	DF	10.7	oz wt/a	0.5	lb ai/a	PRE	A	85a	75a	91a
8	Nontreated									0c	0c	0b
	LSD (P=.05)									19.1	19.3	21.2
	Standard Deviation									12.9	13.0	14.3
	CV									21.86	23.98	19.9
	Bartlett's X2									6.431	9.732	27.488
	P(Bartlett's X2)									0.377	0.136	0.001*
	Skewness									-0.805	-0.7148	-1.4284*
	Kurtosis									-0.6247	-0.6587	0.4988
	Replicate F									3.926	1.441	2.679
	Replicate Prob(F)									0.0245	0.2623	0.0762
	Treatment F									21.781	17.791	19.575
	Treatment Prob(F)									0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Flazasulfuron Preemergence Test

Trial ID:	13GN01JG
Location:	St. Gabriel, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Bauerle
Sponsor Contact:	Summit Agro

Pest Type	W Weed
Pest Code	SEBEX
Pest Scientific Name	Sesbania exalt>
Pest Name	Hemp sesbania
Rating Date	Jul/4/2013
Rating Type	Control
Rating Unit	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	Mission	25	DF	1	oz wt/a	0.0156	lb ai/a	PRE	A	66a
2	Mission	25	DF	1	oz wt/a	0.0156	lb ai/a	PRE	A	88a
	Tricor	75	DF	10.7	oz wt/a	0.5	lb ai/a	PRE	A	
3	Mission	25	DF	2	oz wt/a	0.0313	lb ai/a	PRE	A	63a
4	Mission	25	DF	2	oz wt/a	0.0313	lb ai/a	PRE	A	85a
	Tricor	75	DF	10.7	oz wt/a	0.5	lb ai/a	PRE	A	
5	Mission	25	DF	3	oz wt/a	0.047	lb ai/a	PRE	A	63a
6	Mission	25	DF	3	oz wt/a	0.047	lb ai/a	PRE	A	79a
	Tricor	75	DF	10.7	oz wt/a	0.5	lb ai/a	PRE	A	
7	Tricor	75	DF	10.7	oz wt/a	0.5	lb ai/a	PRE	A	90a
8	Nontreated									0b

LSD (P=.05)	18.5
Standard Deviation	12.5
CV	18.79
Bartlett's X2	13.363
P(Bartlett's X2)	0.038*
Skewness	-1.2909*
Kurtosis	0.2492
Replicate F	6.200
Replicate Prob(F)	0.0041
Treatment F	21.757
Treatment Prob(F)	0.0001

Comparison of Residual Herbicides #1

LSU AgCenter

School of Plant, Environmental, and Soil Sciences

Experiment number	13GN01MRF
Location	Ben Hur Research Farm – Baton Rouge, LA
Experimental design	Randomized Complete Block
Number of reps	4
Plot size	6’ x 15’
Row width/# per plot	N/A
Soil type	clay loam
OM (%)	1.9
pH	6.3
Planting date	N/A
Harvest date	N/A
Crop/Variety	N/A
Uniform std. treatment	N/A

Application type	PRE A
Date applied (mm-dd-yy)	5-21-13
Time (hh:mm-hh:mm)	7:45-9:45pm
Incorporation equipment	N/A
Incorporation depth	N/A
Air/Soil temperature (F)	N/A
Wind (mph/direction)	N/A
Relative humidity (%)	N/A
Soil/Leaf surface moist	dry/N/A
Crop stage/height	N/A
Sprayer type/mph	CO_2bkpk/3.0
Nozzle type/size	FF/TTI11002
Boom ht/#noz/spacing (in)	15”/4/18”
GPA/psi (at nozzle)	15/28
Applied by	Bauerle

Weed species	population per ft^2/height/# leaves
N/A	

Rainfall (in.)

0-24 hr/1-3 days	-- / --
4-7 days/2nd week	0.05/1.07
3rd week/4th week	0.61/0.00

Comments:

Data collection was initiated 14 days after receiving activating rainfall on May 21 and continued every 7-10 days thereafter until July 26 (66 days after application). For each weed species, average population/ft^2 was determined from random areas within each plot. After each evaluation, Gramoxone at 3 pt/A + NIS at 0.25% v/v was applied over the experimental area to control emerged weeds and to allow for comparison of residual activity of the PRE herbicide treatments. Data was collected June 4, June 14, June 26, July 3, July 15, and July 26.

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	CASOB
Pest Scientific Name	Echinochloa cr>	Cassia obtusif>
Pest Name	Common barnyar>	Sickle pod
Description	14 DA activati>	14 DA activati>
Rating Date	Jun/4/2013	Jun/4/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	19a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	6a	1a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	4a	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	6a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	5a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	18a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	19a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	12a	1a
8	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	3a	1a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	16a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	12a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	5a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	6a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	12a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	8a	1a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type									W Weed	W Weed
Pest Code									ECHCG	CASOB
Pest Scientific Name									Echinochloa cr>	Cassia obtusif>
Pest Name									Common barnyar>	Sickle pod
Description									14 DA activati>	14 DA activati>
Rating Date									Jun/4/2013	Jun/4/2013
Rating Type									Avg/Sq Ft	Avg/Sq Ft
Rating Unit									#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	16a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	12a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	9a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	14a	1a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	9a	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	6a	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	13a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	11a	0a
24	Nontreated									9a	0a
LSD (P=.05)										11.8	1.3
Standard Deviation										8.4	0.9
CV										80.85	246.48
Bartlett's X2										23.237	72.084
P(Bartlett's X2)										0.447	0.001*
Skewness										0.7876*	5.6591*
Kurtosis										-0.1705	41.3391*
Replicate F										0.258	1.790
Replicate Prob(F)										0.8556	0.1572
Treatment F										1.314	1.142
Treatment Prob(F)										0.1920	0.3271

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Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SEBEX	SIDSP
Pest Scientific Name	Sesbania exalt>	Sida spinosa
Pest Name	Hemp sesbania	Prickly sida
Description	14 DA activati>	14 DA activati>
Rating Date	Jun/4/2013	Jun/4/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	3a	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	2a	1a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1a	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1a	1a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1a	1a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	5a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	3a	1a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	2a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	2a	3a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	3a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	3a	2a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	2a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SEBEX	SIDSP
Pest Scientific Name	Sesbania exalt>	Sida spinosa
Pest Name	Hemp sesbania	Prickly sida
Description	14 DA activati>	14 DA activati>
Rating Date	Jun/4/2013	Jun/4/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	2a	1a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	2a	2a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	1a	3a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	2a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	4a	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	2a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	1a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	1a
24	Nontreated									2a	4a

LSD (P=.05)	2.4	3.7
Standard Deviation	1.7	2.6
CV	96.06	223.3
Bartlett's X2	33.898	111.917
P(Bartlett's X2)	0.05	0.001*
Skewness	1.6269*	4.2256*
Kurtosis	3.1769*	20.1052*
Replicate F	7.582	2.083
Replicate Prob(F)	0.0002	0.1104
Treatment F	1.104	0.932
Treatment Prob(F)	0.3639	0.5584

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	IPOLA	ECHCG
Pest Scientific Name	Ipomoea lacuno>	Echinochloa cr>
Pest Name	Pitted morning>	Common barnyar>
Description	14 DA activati>	24 DA activati>
Rating Date	Jun/4/2013	Jun/14/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	2a	4a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	3a	3a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1a	2a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1a	4a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1a	3a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	8a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	2a	5a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	5a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	2a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	2a	6a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	4a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	2a	4a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	3a	5a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	3a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	IPOLA	ECHCG
Pest Scientific Name	Ipomoea lacuno>	Echinochloa cr>
Pest Name	Pitted morning>	Common barnyar>
Description	14 DA activati>	24 DA activati>
Rating Date	Jun/4/2013	Jun/14/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	2a	5a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a	6a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	5a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	1a	5a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	3a	4a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	2a	2a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	3a	5a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	4a
24	Nontreated									0a	5a

LSD (P=.05)	1.6	4.0
Standard Deviation	1.2	2.9
CV	83.31	67.24
Bartlett's X2	42.384	19.076
P(Bartlett's X2)	0.008*	0.697
Skewness	1.0265*	0.6558*
Kurtosis	0.3459	-0.2426
Replicate F	1.414	3.624
Replicate Prob(F)	0.2460	0.0172
Treatment F	2.196	0.989
Treatment Prob(F)	0.0065	0.4902

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CASOB	SEBEX
Pest Scientific Name	Cassia obtusif>	Sesbania exalt>
Pest Name	Sickle pod	Hemp sesbania
Description	24 DA activati>	24 DA activati>
Rating Date	Jun/14/2013	Jun/14/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	1a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CASOB	SEBEX
Pest Scientific Name	Cassia obtusif>	Sesbania exalt>
Pest Name	Sickle pod	Hemp sesbania
Description	24 DA activati>	24 DA activati>
Rating Date	Jun/14/2013	Jun/14/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1a	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a

LSD (P=.05)	0.5	0.7
Standard Deviation	0.4	0.5
CV	216.65	135.96
Bartlett's X2	23.066	26.892
P(Bartlett's X2)	0.059	0.215
Skewness	3.1821*	1.6502*
Kurtosis	12.6401*	2.8306*
Replicate F	3.609	4.634
Replicate Prob(F)	0.0175	0.0052
Treatment F	1.105	0.859
Treatment Prob(F)	0.3633	0.6485

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type		W Weed	W Weed
Pest Code		SIDSP	IPOLA
Pest Scientific Name		Sida spinosa	Ipomoea lacuno>
Pest Name		Prickly sida	Pitted morning>
Description		24 DA activati>	24 DA activati>
Rating Date		Jun/14/2013	Jun/14/2013
Rating Type		Avg/Sq Ft	Avg/Sq Ft
Rating Unit		#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	2a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1a	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	1a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	1a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	2a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	2a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	1a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SIDSP	IPOLA
Pest Scientific Name	Sida spinosa	Ipomoea lacuno>
Pest Name	Prickly sida	Pitted morning>
Description	24 DA activati>	24 DA activati>
Rating Date	Jun/14/2013	Jun/14/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	1a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a	1a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	2a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	1a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1a	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	1a	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	1a
24	Nontreated									1a	1a

LSD (P=.05)	1.1	1.4
Standard Deviation	0.8	1.0
CV	166.01	99.73
Bartlett's X2	45.434	32.237
P(Bartlett's X2)	0.001*	0.095
Skewness	2.6946*	1.6344*
Kurtosis	8.6318*	3.5425*
Replicate F	2.598	2.285
Replicate Prob(F)	0.0592	0.0865
Treatment F	1.070	0.950
Treatment Prob(F)	0.3988	0.5362

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	CASOB
Pest Scientific Name	Echinochloa cr>	Cassia obtusif>
Pest Name	Common barnyar>	Sickle pod
Description	36 DA activati>	36 DA activati>
Rating Date	Jun/26/2013	Jun/26/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	12ab	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	20a	1a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1b	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	6ab	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	21a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	15ab	1a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	10ab	1a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	11ab	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	7ab	1a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	15ab	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	6ab	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	9ab	1a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	4ab	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	6ab	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	4ab	1a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	CASOB
Pest Scientific Name	Echinochloa cr>	Cassia obtusif>
Pest Name	Common barnyar>	Sickle pod
Description	36 DA activati>	36 DA activati>
Rating Date	Jun/26/2013	Jun/26/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	4ab	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	15ab	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	9ab	1a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	16ab	2a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	14ab	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	6ab	2a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	5ab	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1b	1a
24	Nontreated									19ab	0a

LSD (P=.05)	10.2	1.7
Standard Deviation	7.2	1.2
CV	73.84	181.1
Bartlett's X2	73.091	72.175
P(Bartlett's X2)	0.001*	0.001*
Skewness	1.8404*	2.5012*
Kurtosis	4.9453*	6.9969*
Replicate F	9.408	1.667
Replicate Prob(F)	0.0001	0.1822
Treatment F	2.751	0.803
Treatment Prob(F)	0.0006	0.7159

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SEBEX	SIDSP
Pest Scientific Name	Sesbania exalt>	Sida spinosa
Pest Name	Hemp sesbania	Prickly sida
Description	36 DA activati>	36 DA activati>
Rating Date	Jun/26/2013	Jun/26/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	3a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1a	4a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1a	1a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	2a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	3a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	3a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	3a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	5a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	1a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SEBEX	SIDSP
Pest Scientific Name	Sesbania exalt>	Sida spinosa
Pest Name	Hemp sesbania	Prickly sida
Description	36 DA activati>	36 DA activati>
Rating Date	Jun/26/2013	Jun/26/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	2a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a	5a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	2a	2a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	1a	1a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	1a	3a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	1a
24	Nontreated									1a	5a

LSD (P=.05)	0.8	3.6
Standard Deviation	0.6	2.6
CV	104.96	137.38
Bartlett's X2	29.899	93.606
P(Bartlett's X2)	0.094	0.001*
Skewness	1.3011*	2.8383*
Kurtosis	1.0755*	9.3813*
Replicate F	7.002	3.791
Replicate Prob(F)	0.0004	0.0141
Treatment F	1.675	1.361
Treatment Prob(F)	0.0522	0.1636

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	IPOLA	ECHCG
Pest Scientific Name	Ipomoea lacuno>	Echinochloa cr>
Pest Name	Pitted morning>	Common barnyar>
Description	36 DA activati>	43 DA activati>
Rating Date	Jun/26/2013	Jul/3/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	4a	3a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	5a	7a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	2a	2a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	4a	3a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	4a	5a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	4a	3a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	3a	4a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	2a	4a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	4a	3a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	6a	3a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	2a	3a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	3a	4a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	5a	3a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	2a	3a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	2a	3a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
	Pest Type									W Weed	W Weed
	Pest Code									IPOLA	ECHCG
	Pest Scientific Name									Ipomoea lacuno>	Echinochloa cr>
	Pest Name									Pitted morning>	Common barnyar>
	Description									36 DA activati>	43 DA activati>
	Rating Date									Jun/26/2013	Jul/3/2013
	Rating Type									Avg/Sq Ft	Avg/Sq Ft
	Rating Unit									#	#
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	3a	4a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	4a	3a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	2a	3a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	3a	4a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	3a	4a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a	3a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	3a	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	2a
24	Nontreated									6a	4a
	LSD (P=.05)									3.2	3.9
	Standard Deviation									2.3	2.8
	CV									69.96	82.49
	Bartlett's X2									31.509	38.928
	P(Bartlett's X2)									0.111	0.02*
	Skewness									1.0854*	1.2887*
	Kurtosis									0.9236	1.9874*
	Replicate F									3.542	6.983
	Replicate Prob(F)									0.0190	0.0004
	Treatment F									1.627	0.688
	Treatment Prob(F)									0.0628	0.8410

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CASOB	SEBEX
Pest Scientific Name	Cassia obtusif>	Sesbania exalt>
Pest Name	Sickle pod	Hemp sesbania
Description	43 DA activati>	43 DA activati>
Rating Date	Jul/3/2013	Jul/3/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	1a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	1a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CASOB	SEBEX
Pest Scientific Name	Cassia obtusif>	Sesbania exalt>
Pest Name	Sickle pod	Hemp sesbania
Description	43 DA activati>	43 DA activati>
Rating Date	Jul/3/2013	Jul/3/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a

LSD (P=.05)	0.5	0.4
Standard Deviation	0.4	0.3
CV	215.32	144.1
Bartlett's X2	17.38	13.724
P(Bartlett's X2)	0.361	0.619
Skewness	2.2982*	1.7273*
Kurtosis	5.0761*	2.9215*
Replicate F	1.185	3.621
Replicate Prob(F)	0.3218	0.0173
Treatment F	0.627	1.749
Treatment Prob(F)	0.8941	0.0393

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SIDSP	IPOLA
Pest Scientific Name	Sida spinosa	Ipomoea lacuno>
Pest Name	Prickly sida	Pitted morning>
Description	43 DA activati>	43 DA activati>
Rating Date	Jul/3/2013	Jul/3/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	1a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	1a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	1a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	1a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	1a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	2a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type		W Weed	W Weed
Pest Code		SIDSP	IPOLA
Pest Scientific Name		Sida spinosa	Ipomoea lacuno>
Pest Name		Prickly sida	Pitted morning>
Description		43 DA activati>	43 DA activati>
Rating Date		Jul/3/2013	Jul/3/2013
Rating Type		Avg/Sq Ft	Avg/Sq Ft
Rating Unit		#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	1a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a	1a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	1a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1a	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									1a	1a

LSD (P=.05)	0.8	1.2
Standard Deviation	0.5	0.9
CV	228.14	98.54
Bartlett's X2	33.886	38.984
P(Bartlett's X2)	0.009*	0.014*
Skewness	2.9839*	1.4683*
Kurtosis	10.2716*	2.9038*
Replicate F	2.383	1.120
Replicate Prob(F)	0.0768	0.3469
Treatment F	0.617	0.950
Treatment Prob(F)	0.9021	0.5369

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	CASOB
Pest Scientific Name	Echinochloa cr>	Cassia obtusif>
Pest Name	Common barnyar>	Sickle pod
Description	55 DA activati>	55 DA activati>
Rating Date	Jul/15/2013	Jul/15/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	7a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	10a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	4a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	4a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	8a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	7a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	8a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	8a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	5a	1a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	8a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	7a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	7a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	7a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	8a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	9a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	CASOB
Pest Scientific Name	Echinochloa cr>	Cassia obtusif>
Pest Name	Common barnyar>	Sickle pod
Description	55 DA activati>	55 DA activati>
Rating Date	Jul/15/2013	Jul/15/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	6a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	7a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	7a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	12a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	9a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	8a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	5a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	4a	0a
24	Nontreated									11a	0a

LSD (P=.05)	6.1	0.6
Standard Deviation	4.3	0.4
CV	58.9	242.0
Bartlett's X2	43.278	19.56
P(Bartlett's X2)	0.006*	0.145
Skewness	1.2066*	2.7982*
Kurtosis	1.555*	8.4622*
Replicate F	11.779	0.881
Replicate Prob(F)	0.0001	0.4552
Treatment F	0.919	0.658
Treatment Prob(F)	0.5749	0.8689

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SEBEX	SIDSP
Pest Scientific Name	Sesbania exalt>	Sida spinosa
Pest Name	Hemp sesbania	Prickly sida
Description	55 DA activati>	55 DA activati>
Rating Date	Jul/15/2013	Jul/15/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	1a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SEBEX	SIDSP
Pest Scientific Name	Sesbania exalt>	Sida spinosa
Pest Name	Hemp sesbania	Prickly sida
Description	55 DA activati>	55 DA activati>
Rating Date	Jul/15/2013	Jul/15/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a	1a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	1a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	1a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	0a
24	Nontreated									0a	0a

LSD (P=.05)	0.6	0.6
Standard Deviation	0.4	0.5
CV	125.26	172.91
Bartlett's X2	13.116	25.803
P(Bartlett's X2)	0.872	0.078
Skewness	1.0205*	2.4097*
Kurtosis	0.3396	7.408*
Replicate F	0.285	3.100
Replicate Prob(F)	0.8362	0.0323
Treatment F	0.770	0.775
Treatment Prob(F)	0.7546	0.7487

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	IPOLA	ECHCG
Pest Scientific Name	Ipomoea lacuno>	Echinochloa cr>
Pest Name	Pitted morning>	Common barnyar>
Description	55 DA activati>	66 DA activati>
Rating Date	Jul/15/2013	Jul/26/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	3a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	2a	4a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1a	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1a	1a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1a	4a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	2a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	3a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	3a	2a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	3a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	2a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	2a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	2a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	2a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	3a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										IPOLA	ECHCG
Pest Scientific Name										Ipomoea lacuno>	Echinochloa cr>
Pest Name										Pitted morning>	Common barnyar>
Description										55 DA activati>	66 DA activati>
Rating Date										Jul/15/2013	Jul/26/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	2a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	2a	1a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	1a	4a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	1a	4a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	2a	3a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a	3a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	2a	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	1a
24	Nontreated									2a	3a
LSD (P=.05)										1.5	2.4
Standard Deviation										1.1	1.7
CV										82.34	78.84
Bartlett's X2										38.367	34.749
P(Bartlett's X2)										0.023*	0.055
Skewness										1.4768*	1.3526*
Kurtosis										2.347*	2.5486*
Replicate F										3.389	4.012
Replicate Prob(F)										0.0228	0.0108
Treatment F										1.491	1.223
Treatment Prob(F)										0.1038	0.2569

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CASOB	SEBEX
Pest Scientific Name	Cassia obtusif>	Sesbania exalt>
Pest Name	Sickle pod	Hemp sesbania
Description	66 DA activati>	66 DA activati>
Rating Date	Jul/26/2013	Jul/26/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	1a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	1a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CASOB	SEBEX
Pest Scientific Name	Cassia obtusif>	Sesbania exalt>
Pest Name	Sickle pod	Hemp sesbania
Description	66 DA activati>	66 DA activati>
Rating Date	Jul/26/2013	Jul/26/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	1a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	1a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	1a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	1a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	1a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a

LSD (P=.05)	0.8	0.7
Standard Deviation	0.6	0.5
CV	224.58	158.07
Bartlett's X2	9.014	3.669
P(Bartlett's X2)	0.913	1.00
Skewness	2.0273*	1.221*
Kurtosis	3.3211*	0.2064
Replicate F	0.264	3.659
Replicate Prob(F)	0.8508	0.0165
Treatment F	0.552	0.989
Treatment Prob(F)	0.9440	0.4906

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SIDSP	IPOLA
Pest Scientific Name	Sida spinosa	Ipomoea lacuno>
Pest Name	Prickly sida	Pitted morning>
Description	66 DA activati>	66 DA activati>
Rating Date	Jul/26/2013	Jul/26/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	2a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1a	2a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	1a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	2a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	2a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	2a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	2a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	4a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	2a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	2a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	2a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #1

Trial ID:	13GN01MRF
Location:	Ben Hur Research Farm
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SIDSP	IPOLA
Pest Scientific Name	Sida spinosa	Ipomoea lacuno>
Pest Name	Prickly sida	Pitted morning>
Description	66 DA activati>	66 DA activati>
Rating Date	Jul/26/2013	Jul/26/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	1a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a	1a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	1a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	2a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	3a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a	2a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	1a
24	Nontreated									0a	2a

LSD (P=.05)	0.6	1.7
Standard Deviation	0.5	1.2
CV	175.33	72.18
Bartlett's X2	0.484	28.142
P(Bartlett's X2)	1.00	0.21
Skewness	1.1092*	1.239*
Kurtosis	-0.7864	2.9263*
Replicate F	2.182	1.882
Replicate Prob(F)	0.0980	0.1408
Treatment F	0.571	0.982
Treatment Prob(F)	0.9329	0.4987

Comparison of Residual Herbicides #2

LSU AgCenter

School of Plant, Environmental, and Soil Sciences

Experiment number	:	13GN02MRF
Location	:	Rice Research Station – Crowley, LA
Experimental design	:	Randomized Complete Block
Number of reps	:	4
Plot size	:	6’ x 15’
Row width/# per plot	:	N/A
Soil type	:	silt loam
OM (%)	:	1.8
pH	:	6.2
Planting date	:	N/A
Harvest date	:	N/A
Crop/Variety	:	N/A
Uniform std. treatment	:	N/A

Application type	:	PRE A
Date applied (mm-dd-yy)	:	5-30-13
Time (hh:mm-hh:mm)	:	12:00-1:15pm
Incorporation equipment	:	N/A
Incorporation depth	:	N/A
Air/Soil temperature (F)	:	86/85
Wind (mph/direction)	:	9-12/SE
Relative humidity (%)	:	61
Soil/Leaf surface moist	:	dry/N/A
Crop stage/height	:	N/A
Sprayer type/mph	:	CO_2bkpk/3.0
Nozzle type/size	:	FF/TTI11002
Boom ht/#noz/spacing (in)	:	15”/4/18”
GPA/psi (at nozzle)	:	15/28
Applied by	:	Foster

Weed species	:	population per ft^2/height/# leaves
N/A	:	

Rainfall (in.)

0-24 hr/1-3 days	:	0.00/0.00
4-7 days/2nd week	:	0.83/0.59
3rd week/4th week	:	0.78/0.67

Comments:

Data collection was initiated 14 days after receiving activating rainfall on June 6 and continued every 7-10 days thereafter until August 22 (84 days after application). For each weed species, average population/ft^2 was determined from random areas within each plot. After each evaluation, Gramoxone at 3 pt/A + NIS at 0.25% v/v was applied over the experimental area to control emerged weeds and to allow for comparison of residual activity of the PRE herbicide treatments. Data was collected June 20, July 3, July 11, July 19, July 31, August 6, and August 22.

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	SEBEX
Pest Scientific Name	Echinochloa cr>	Sesbania exalt>
Pest Name	Common barnyar>	Hemp sesbania
Description	14 DA activati>	14 DA activati>
Rating Date	Jun/20/2013	Jun/20/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	12a-d	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	19a	2a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1cd	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	3bcd	2a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	14abc	2a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	9a-d	1a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	7a-d	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	9a-d	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	5bcd	2a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	15ab	3a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	4bcd	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	3bcd	1a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	6bcd	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	7a-d	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	6bcd	1a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										ECHCG	SEBEX
Pest Scientific Name										Echinochloa cr>	Sesbania exalt>
Pest Name										Common barnyar>	Hemp sesbania
Description										14 DA activati>	14 DA activati>
Rating Date										Jun/20/2013	Jun/20/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	3bcd	2a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	10a-d	2a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	8a-d	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	7a-d	1a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	8a-d	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	2bcd	2a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	2bcd	2a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0d	1a
24	Nontreated									9a-d	1a
LSD (P=.05)										7.2	1.7
Standard Deviation										5.1	1.2
CV										73.35	89.3
Bartlett's X2										50.006	44.324
P(Bartlett's X2)										0.001*	0.005*
Skewness										1.3237*	1.1191*
Kurtosis										1.5759*	0.7118
Replicate F										5.676	5.271
Replicate Prob(F)										0.0016	0.0025
Treatment F										3.317	1.573
Treatment Prob(F)										0.0001	0.0769

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CYPES	BRAPP
Pest Scientific Name	Cyperus escule>	Brachiaria pla>
Pest Name	Yellow nutsedge	Broadleaf sign>
Description	14 DA activati>	14 DA activati>
Rating Date	Jun/20/2013	Jun/20/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0b	18a-e
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0b	22abc
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1ab	2hi
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0b	6f-i
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0b	15b-g
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0b	24ab
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0b	20a-d
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0b	10d-i
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0b	7f-i
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0b	22abc
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	8e-i
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0b	4ghi
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0b	10d-i
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0b	7f-i
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0b	5ghi
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CYPES	BRAPP
Pest Scientific Name	Cyperus escule>	Brachiaria pla>
Pest Name	Yellow nutsedge	Broadleaf sign>
Description	14 DA activati>	14 DA activati>
Rating Date	Jun/20/2013	Jun/20/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0b	5f-i
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0b	22abc
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0b	12c-i
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	1ab	17b-f
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0b	14b-h
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0b	6f-i
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0b	3ghi
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0b	1i
24	Nontreated									0b	28a

LSD (P=.05)	0.5	6.9
Standard Deviation	0.4	4.9
CV	192.89	41.1
Bartlett's X2	19.125	41.741
P(Bartlett's X2)	0.16	0.01*
Skewness	2.382*	0.7459*
Kurtosis	5.4745*	-0.5465
Replicate F	0.672	22.867
Replicate Prob(F)	0.5720	0.0001
Treatment F	2.005	10.405
Treatment Prob(F)	0.0141	0.0001

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	AESSS	CNPPA
Pest Scientific Name	Aeschynomene s>	Caperonia palu>
Pest Name	Jointvetch	Texasweed
Description	14 DA activati>	14 DA activati>
Rating Date	Jun/20/2013	Jun/20/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	3a	1a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	2a	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	3a	3a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	2a	2a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	2a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	1a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	AESSS	CNPPA
Pest Scientific Name	Aeschynomene s>	Caperonia palu>
Pest Name	Jointvetch	Texasweed
Description	14 DA activati>	14 DA activati>
Rating Date	Jun/20/2013	Jun/20/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a	1a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	1a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	1a
24	Nontreated									1a	0a

LSD (P=.05)	1.9	1.4
Standard Deviation	1.3	1.0
CV	147.89	177.14
Bartlett's X2	68.139	61.938
P(Bartlett's X2)	0.001*	0.001*
Skewness	2.6194*	3.3776*
Kurtosis	7.354*	14.2057*
Replicate F	9.100	1.478
Replicate Prob(F)	0.0001	0.2282
Treatment F	1.492	1.935
Treatment Prob(F)	0.1035	0.0188

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ALRPH	ECHCG
Pest Scientific Name	Alternanthera >	Echinochloa cr>
Pest Name	Alligatorweed	Common barnyar>
Description	14 DA activati>	27 DA activati>
Rating Date	Jun/20/2013	Jul/3/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0b	3a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0b	6a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1b	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0b	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1ab	3a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0b	1a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0b	2a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0b	4a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1ab	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0b	7a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0b	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0b	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0b	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0b	3a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0b	1a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ALRPH	ECHCG
Pest Scientific Name	Alternanthera >	Echinochloa cr>
Pest Name	Alligatorweed	Common barnyar>
Description	14 DA activati>	27 DA activati>
Rating Date	Jun/20/2013	Jul/3/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0b	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0b	1a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0b	1a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	2a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0b	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1ab	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0b	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0b	0a
24	Nontreated									0b	2a

LSD (P=.05)	0.7	3.6
Standard Deviation	0.5	2.5
CV	164.58	175.97
Bartlett's X2	26.215	123.887
P(Bartlett's X2)	0.071	0.001*
Skewness	2.9258*	3.5219*
Kurtosis	13.1194*	15.339*
Replicate F	0.476	1.648
Replicate Prob(F)	0.6998	0.1863
Treatment F	1.817	2.273
Treatment Prob(F)	0.0301	0.0047

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SEBEX	CYPES
Pest Scientific Name	Sesbania exalt>	Cyperus escule>
Pest Name	Hemp sesbania	Yellow nutsedge
Description	27 DA activati>	27 DA activati>
Rating Date	Jul/3/2013	Jul/3/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0b
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	1b
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1a	0b
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1a	0b
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1a	1b
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0b
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0b
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	0b
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0b
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	1ab
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0b
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										SEBEX	CYPES
Pest Scientific Name										Sesbania exalt>	Cyperus escule>
Pest Name										Hemp sesbania	Yellow nutsedge
Description										27 DA activati>	27 DA activati>
Rating Date										Jul/3/2013	Jul/3/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0b
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0b
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	1a	0b
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0b
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0b
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a	0b
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	1a	0b
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	0b
24	Nontreated									1a	0b
LSD (P=.05)										0.9	1.1
Standard Deviation										0.6	0.7
CV										128.16	286.41
Bartlett's X2										27.113	56.591
P(Bartlett's X2)										0.167	0.001*
Skewness										1.3636*	5.123*
Kurtosis										1.5328*	30.6707*
Replicate F										0.203	0.218
Replicate Prob(F)										0.8943	0.8833
Treatment F										0.658	1.855
Treatment Prob(F)										0.8687	0.0258

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	BRAPP	AESSS
Pest Scientific Name	Brachiaria pla>	Aeschynomene s>
Pest Name	Broadleaf sign>	Jointvetch
Description	27 DA activati>	27 DA activati>
Rating Date	Jul/3/2013	Jul/3/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	2a	1a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	2a	1a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	1a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	2a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										BRAPP	AESSS
Pest Scientific Name										Brachiaria pla>	Aeschynomene s>
Pest Name										Broadleaf sign>	Jointvetch
Description										27 DA activati>	27 DA activati>
Rating Date										Jul/3/2013	Jul/3/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	1a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	2a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	1a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	1a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									2a	0a
LSD (P=.05)										1.3	0.8
Standard Deviation										0.9	0.6
CV										176.78	148.4
Bartlett's X2										65.029	27.904
P(Bartlett's X2)										0.001*	0.085
Skewness										2.9842*	1.9264*
Kurtosis										11.4776*	3.7467*
Replicate F										0.513	2.218
Replicate Prob(F)										0.6750	0.0938
Treatment F										2.015	1.726
Treatment Prob(F)										0.0136	0.0429

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CNPPA	ALRPH
Pest Scientific Name	Caperonia palu>	Alternanthera >
Pest Name	Texasweed	Alligatorweed
Description	27 DA activati>	27 DA activati>
Rating Date	Jul/3/2013	Jul/3/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0c	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	2a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1abc	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	2abc	1a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	2abc	1a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1abc	1a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1bc	1a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0c	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1abc	2a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0bc	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	2ab	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0c	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	1abc	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0c	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0c	1a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CNPPA	ALRPH
Pest Scientific Name	Caperonia palu>	Alternanthera >
Pest Name	Texasweed	Alligatorweed
Description	27 DA activati>	27 DA activati>
Rating Date	Jul/3/2013	Jul/3/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0c	1a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1bc	1a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0c	1a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0c	1a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0c	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0c	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	1abc	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0c	2a
24	Nontreated									0bc	1a

LSD (P=.05)	1.1	1.3
Standard Deviation	0.8	0.9
CV	125.04	95.34
Bartlett's X2	46.748	40.034
P(Bartlett's X2)	0.001*	0.015*
Skewness	2.0955*	1.3451*
Kurtosis	4.3563*	2.4307*
Replicate F	0.720	1.567
Replicate Prob(F)	0.5435	0.2052
Treatment F	3.321	0.919
Treatment Prob(F)	0.0001	0.5745

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	SEBEX
Pest Scientific Name	Echinochloa cr>	Sesbania exalt>
Pest Name	Common barnyar>	Hemp sesbania
Description	35 DA activati>	35 DA activati>
Rating Date	Jul/11/2013	Jul/11/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										ECHCG	SEBEX
Pest Scientific Name										Echinochloa cr>	Sesbania exalt>
Pest Name										Common barnyar>	Hemp sesbania
Description										35 DA activati>	35 DA activati>
Rating Date										Jul/11/2013	Jul/11/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a
LSD (P=.05)										0.3	0.1
Standard Deviation										0.2	0.1
CV										385.23	562.95
Bartlett's X2										10.891	0.0
P(Bartlett's X2)										0.092	.
Skewness										4.7916*	5.4741*
Kurtosis										24.9234*	28.5601*
Replicate F										2.156	1.234
Replicate Prob(F)										0.1011	0.3040
Treatment F										0.938	0.922
Treatment Prob(F)										0.5519	0.5709

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CYPES	BRAPP
Pest Scientific Name	Cyperus escule>	Brachiaria pla>
Pest Name	Yellow nutsedge	Broadleaf sign>
Description	35 DA activati>	35 DA activati>
Rating Date	Jul/11/2013	Jul/11/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	1b
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	1b
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0b
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	1b
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	3ab
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	2b
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1b
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	1b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0b
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	2b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	2b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0b
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	1b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	1b
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1b
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CYPES	BRAPP
Pest Scientific Name	Cyperus escule>	Brachiaria pla>
Pest Name	Yellow nutsedge	Broadleaf sign>
Description	35 DA activati>	35 DA activati>
Rating Date	Jul/11/2013	Jul/11/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0b
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	2b
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	1b
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	2b
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	2b
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	4a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	1b
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0b
24	Nontreated									0a	4a

LSD (P=.05)	0.4	1.6
Standard Deviation	0.3	1.2
CV	380.32	97.1
Bartlett's X2	11.434	49.115
P(Bartlett's X2)	0.121	0.001*
Skewness	4.436*	2.0874*
Kurtosis	20.6642*	5.3782*
Replicate F	2.448	1.758
Replicate Prob(F)	0.0710	0.1634
Treatment F	0.818	3.944
Treatment Prob(F)	0.6984	0.0001

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	AESSS	CNPPA
Pest Scientific Name	Aeschynomene s>	Caperonia palu>
Pest Name	Jointvetch	Texasweed
Description	35 DA activati>	35 DA activati>
Rating Date	Jul/11/2013	Jul/11/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										AESSS	CNPPA
Pest Scientific Name										Aeschynomene s>	Caperonia palu>
Pest Name										Jointvetch	Texasweed
Description										35 DA activati>	35 DA activati>
Rating Date										Jul/11/2013	Jul/11/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a
LSD (P=.05)										0.1	0.4
Standard Deviation										0.1	0.3
CV										486.34	217.5
Bartlett's X2										0.0	10.66
P(Bartlett's X2)										.	0.558
Skewness										4.6605*	2.4684*
Kurtosis										20.1391*	6.2502*
Replicate F										1.353	2.717
Replicate Prob(F)										0.2645	0.0513
Treatment F										0.882	1.049
Treatment Prob(F)										0.6196	0.4219

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ALRPH	ECHCG
Pest Scientific Name	Alternanthera >	Echinochloa cr>
Pest Name	Alligatorweed	Common barnyar>
Description	35 DA activati>	43 DA activati>
Rating Date	Jul/11/2013	Jul/19/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0b
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	0b
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	2a	0b
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1a	0b
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1a	0b
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	0b
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0b
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	2a	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	0b
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	0b
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	1a	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	0b
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0b
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ALRPH	ECHCG
Pest Scientific Name	Alternanthera >	Echinochloa cr>
Pest Name	Alligatorweed	Common barnyar>
Description	35 DA activati>	43 DA activati>
Rating Date	Jul/11/2013	Jul/19/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	0b
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a	0b
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	1a	0b
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	1a	0b
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1a	1ab
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a	0b
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	1a	0b
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	2a	0b
24	Nontreated									2a	1a

LSD (P=.05)	1.1	0.4
Standard Deviation	0.8	0.3
CV	75.16	247.46
Bartlett's X2	23.889	11.453
P(Bartlett's X2)	0.41	0.12
Skewness	0.9031*	3.2352*
Kurtosis	0.4139	10.0513*
Replicate F	1.824	2.311
Replicate Prob(F)	0.1509	0.0838
Treatment F	1.070	2.694
Treatment Prob(F)	0.3990	0.0008

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type		W Weed	W Weed
Pest Code		SEBEX	CYPES
Pest Scientific Name		Sesbania exalt>	Cyperus escule>
Pest Name		Hemp sesbania	Yellow nutsedge
Description		43 DA activati>	43 DA activati>
Rating Date		Jul/19/2013	Jul/19/2013
Rating Type		Avg/Sq Ft	Avg/Sq Ft
Rating Unit		#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #2

Trial ID: 13GN02MRF
Location: Crowley, LA
Investigator: Dr. James L. Griffin
Study Director: Matthew Foster
Sponsor Contact: LSU AgCenter

Pest Type		W Weed	W Weed
Pest Code		SEBEX	CYPES
Pest Scientific Name		Sesbania exalt>	Cyperus escule>
Pest Name		Hemp sesbania	Yellow nutsedge
Description		43 DA activati>	43 DA activati>
Rating Date		Jul/19/2013	Jul/19/2013
Rating Type		Avg/Sq Ft	Avg/Sq Ft
Rating Unit		#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a

LSD (P=.05)	0.6	0.3
Standard Deviation	0.4	0.2
CV	177.26	224.3
Bartlett's X2	22.083	2.746
P(Bartlett's X2)	0.28	0.987
Skewness	2.0039*	2.1753*
Kurtosis	4.3199*	4.0274*
Replicate F	1.021	0.770
Replicate Prob(F)	0.3888	0.5145
Treatment F	0.766	1.306
Treatment Prob(F)	0.7596	0.1967

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	BRAPP	AESSS
Pest Scientific Name	Brachiaria pla>	Aeschynomene s>
Pest Name	Broadleaf sign>	Jointvetch
Description	43 DA activati>	43 DA activati>
Rating Date	Jul/19/2013	Jul/19/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	BRAPP	AESSS
Pest Scientific Name	Brachiaria pla>	Aeschynomene s>
Pest Name	Broadleaf sign>	Jointvetch
Description	43 DA activati>	43 DA activati>
Rating Date	Jul/19/2013	Jul/19/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	1a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a

LSD (P=.05)	0.8	0.1
Standard Deviation	0.6	0.1
CV	213.56	979.8
Bartlett's X2	34.143	0.0
P(Bartlett's X2)	0.005*	.
Skewness	3.0941*	9.798*
Kurtosis	11.4602*	96.0*
Replicate F	2.159	1.000
Replicate Prob(F)	0.1007	0.3982
Treatment F	1.002	1.000
Treatment Prob(F)	0.4752	0.4773

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CNPPA	ALRPH
Pest Scientific Name	Caperonia palu>	Alternanthera >
Pest Name	Texasweed	Alligatorweed
Description	43 DA activati>	43 DA activati>
Rating Date	Jul/19/2013	Jul/19/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	1a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	1a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	1a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	1a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	1a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #2

Trial ID: 13GN02MRF
Location: Crowley, LA
Investigator: Dr. James L. Griffin
Study Director: Matthew Foster
Sponsor Contact: LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										CNPPA	ALRPH
Pest Scientific Name										Caperonia palu>	Alternanthera >
Pest Name										Texasweed	Alligatorweed
Description										43 DA activati>	43 DA activati>
Rating Date										Jul/19/2013	Jul/19/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	1a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	1a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	1a
24	Nontreated									0a	1a
LSD (P=.05)										0.3	0.9
Standard Deviation										0.2	0.6
CV										305.82	96.04
Bartlett's X2										4.999	30.372
P(Bartlett's X2)										0.758	0.139
Skewness										3.3127*	1.1466*
Kurtosis										11.0675*	1.3388*
Replicate F										3.231	2.508
Replicate Prob(F)										0.0275	0.0660
Treatment F										0.893	1.195
Treatment Prob(F)										0.6070	0.2791

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	SEBEX
Pest Scientific Name	Echinochloa cr>	Sesbania exalt>
Pest Name	Common barnyar>	Hemp sesbania
Description	55 DA activati>	55 DA activati>
Rating Date	Jul/31/2013	Jul/31/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	2a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	SEBEX
Pest Scientific Name	Echinochloa cr>	Sesbania exalt>
Pest Name	Common barnyar>	Hemp sesbania
Description	55 DA activati>	55 DA activati>
Rating Date	Jul/31/2013	Jul/31/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	1a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	1a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	1a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									2a	0a

LSD (P=.05)	1.2	0.4
Standard Deviation	0.8	0.3
CV	166.67	364.92
Bartlett's X2	30.384	0.0
P(Bartlett's X2)	0.011*	.
Skewness	2.948*	3.3376*
Kurtosis	12.2197*	9.3339*
Replicate F	3.880	1.716
Replicate Prob(F)	0.0127	0.1717
Treatment F	1.753	0.761
Treatment Prob(F)	0.0387	0.7645

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CYPES	BRAPP
Pest Scientific Name	Cyperus escule>	Brachiaria pla>
Pest Name	Yellow nutsedge	Broadleaf sign>
Description	55 DA activati>	55 DA activati>
Rating Date	Jul/31/2013	Jul/31/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	6a-f
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	11ab
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1a	3c-f
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	5a-f
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	7a-f
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	6a-f
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	5a-f
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	4a-f
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	1f
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	11a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	10abc
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1f
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	1a	4b-f
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	5a-f
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	2ef
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CYPES	BRAPP
Pest Scientific Name	Cyperus escule>	Brachiaria pla>
Pest Name	Yellow nutsedge	Broadleaf sign>
Description	55 DA activati>	55 DA activati>
Rating Date	Jul/31/2013	Jul/31/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	1f
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	5a-f
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	3def
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	6a-f
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1a	5a-f
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	8a-e
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	6a-f
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	2ef
24	Nontreated									1a	9a-d

LSD (P=.05)	0.7	4.0
Standard Deviation	0.5	2.8
CV	171.05	55.08
Bartlett's X2	3.055	43.677
P(Bartlett's X2)	1.00	0.006*
Skewness	1.2868*	0.8107*
Kurtosis	0.4002	-0.0466
Replicate F	0.405	1.762
Replicate Prob(F)	0.7498	0.1625
Treatment F	0.969	4.813
Treatment Prob(F)	0.5142	0.0001

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	AESSS	CNPPA
Pest Scientific Name	Aeschynomene s>	Caperonia palu>
Pest Name	Jointvetch	Texasweed
Description	55 DA activati>	55 DA activati>
Rating Date	Jul/31/2013	Jul/31/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	2a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	3a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	2a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	2a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	1a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	1a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	AESSS	CNPPA
Pest Scientific Name	Aeschynomene s>	Caperonia palu>
Pest Name	Jointvetch	Texasweed
Description	55 DA activati>	55 DA activati>
Rating Date	Jul/31/2013	Jul/31/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	1a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	1a	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	1a
24	Nontreated									0a	1a

LSD (P=.05)	0.5	1.6
Standard Deviation	0.3	1.1
CV	209.55	126.74
Bartlett's X2	0.269	45.608
P(Bartlett's X2)	1.00	0.002*
Skewness	1.8174*	2.0023*
Kurtosis	1.3301*	4.9313*
Replicate F	1.594	1.155
Replicate Prob(F)	0.1987	0.3331
Treatment F	1.545	1.467
Treatment Prob(F)	0.0855	0.1132

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ALRPH	ECHCG
Pest Scientific Name	Alternanthera >	Echinochloa cr>
Pest Name	Alligatorweed	Common barnyar>
Description	55 DA activati>	61 DA activati>
Rating Date	Jul/31/2013	Aug/6/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	2a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ALRPH	ECHCG
Pest Scientific Name	Alternanthera >	Echinochloa cr>
Pest Name	Alligatorweed	Common barnyar>
Description	55 DA activati>	61 DA activati>
Rating Date	Jul/31/2013	Aug/6/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	2a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	1a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	2a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	1a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	2a	0a
24	Nontreated									1a	0a

LSD (P=.05)	1.1	0.0
Standard Deviation	0.8	0.0
CV	86.58	0.0
Bartlett's X2	22.704	0.0
P(Bartlett's X2)	0.419	.
Skewness	0.9848*	.
Kurtosis	1.8144*	.
Replicate F	1.247	0.000
Replicate Prob(F)	0.2996	1.0000
Treatment F	1.257	0.000
Treatment Prob(F)	0.2307	1.0000

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SEBEX	CYPES
Pest Scientific Name	Sesbania exalt>	Cyperus escule>
Pest Name	Hemp sesbania	Yellow nutsedge
Description	61 DA activati>	61 DA activati>
Rating Date	Aug/6/2013	Aug/6/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SEBEX	CYPES
Pest Scientific Name	Sesbania exalt>	Cyperus escule>
Pest Name	Hemp sesbania	Yellow nutsedge
Description	61 DA activati>	61 DA activati>
Rating Date	Aug/6/2013	Aug/6/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a

LSD (P=.05)	0.0	0.0
Standard Deviation	0.0	0.0
CV	0.0	0.0
Bartlett's X2	0.0	0.0
P(Bartlett's X2)	.	.
Skewness	.	.
Kurtosis	.	.
Replicate F	0.000	0.000
Replicate Prob(F)	1.0000	1.0000
Treatment F	0.000	0.000
Treatment Prob(F)	1.0000	1.0000

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	BRAPP	AESSS
Pest Scientific Name	Brachiaria pla>	Aeschynomene s>
Pest Name	Broadleaf sign>	Jointvetch
Description	61 DA activati>	61 DA activati>
Rating Date	Aug/6/2013	Aug/6/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	BRAPP	AESSS
Pest Scientific Name	Brachiaria pla>	Aeschynomene s>
Pest Name	Broadleaf sign>	Jointvetch
Description	61 DA activati>	61 DA activati>
Rating Date	Aug/6/2013	Aug/6/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a

LSD (P=.05)	0.0	0.0
Standard Deviation	0.0	0.0
CV	0.0	0.0
Bartlett's X2	0.0	0.0
P(Bartlett's X2)	.	.
Skewness	.	.
Kurtosis	.	.
Replicate F	0.000	0.000
Replicate Prob(F)	1.0000	1.0000
Treatment F	0.000	0.000
Treatment Prob(F)	1.0000	1.0000

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CNPPA	ALRPH
Pest Scientific Name	Caperonia palu>	Alternanthera >
Pest Name	Texasweed	Alligatorweed
Description	61 DA activati>	61 DA activati>
Rating Date	Aug/6/2013	Aug/6/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID: 13GN02MRF
Location: Crowley, LA
Investigator: Dr. James L. Griffin
Study Director: Matthew Foster
Sponsor Contact: LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
	Pest Type									W Weed	W Weed
	Pest Code									CNPPA	ALRPH
	Pest Scientific Name									Caperonia palu>	Alternanthera >
	Pest Name									Texasweed	Alligatorweed
	Description									61 DA activati>	61 DA activati>
	Rating Date									Aug/6/2013	Aug/6/2013
	Rating Type									Avg/Sq Ft	Avg/Sq Ft
	Rating Unit									#	#
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a
	LSD (P=.05)									0.0	0.0
	Standard Deviation									0.0	0.0
	CV									0.0	0.0
	Bartlett's X2									0.0	0.0
	P(Bartlett's X2)									.	.
	Skewness									.	.
	Kurtosis									.	.
	Replicate F									0.000	0.000
	Replicate Prob(F)									1.0000	1.0000
	Treatment F									0.000	0.000
	Treatment Prob(F)									1.0000	1.0000

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	SEBEX
Pest Scientific Name	Echinochloa cr>	Sesbania exalt>
Pest Name	Common barnyar>	Hemp sesbania
Description	77 DA activati>	77 DA activati>
Rating Date	Aug/22/2013	Aug/22/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	2a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
Pest Type										W Weed	W Weed
Pest Code										ECHCG	SEBEX
Pest Scientific Name										Echinochloa cr>	Sesbania exalt>
Pest Name										Common barnyar>	Hemp sesbania
Description										77 DA activati>	77 DA activati>
Rating Date										Aug/22/2013	Aug/22/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	1a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	1a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									1a	0a
LSD (P=.05)										1.0	0.4
Standard Deviation										0.7	0.3
CV										112.94	406.71
Bartlett's X2										8.924	0.0
P(Bartlett's X2)										0.917	.
Skewness										0.9692*	3.6724*
Kurtosis										-0.3273	11.7307*
Replicate F										0.626	0.215
Replicate Prob(F)										0.6003	0.8857
Treatment F										2.611	0.757
Treatment Prob(F)										0.0012	0.7692

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CYPES	BRAPP
Pest Scientific Name	Cyperus escule>	Brachiaria pla>
Pest Name	Yellow nutsedge	Broadleaf sign>
Description	77 DA activati>	77 DA activati>
Rating Date	Aug/22/2013	Aug/22/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	12abc
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	14abc
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	8abc
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	11abc
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1a	9abc
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	12abc
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	8abc
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	9abc
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	4c
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	12abc
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	17ab
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	2c
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	7abc
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	6abc
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	5bc
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										CYPES	BRAPP
Pest Scientific Name										Cyperus escule>	Brachiaria pla>
Pest Name										Yellow nutsedge	Broadleaf sign>
Description										77 DA activati>	77 DA activati>
Rating Date										Aug/22/2013	Aug/22/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	2c
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	10abc
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	5bc
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	12abc
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	9abc
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	13abc
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	11abc
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	3c
24	Nontreated									0a	18a
LSD (P=.05)										0.7	6.8
Standard Deviation										0.5	4.8
CV										164.01	53.61
Bartlett's X2										6.998	49.768
P(Bartlett's X2)										0.958	0.001*
Skewness										1.457*	0.9587*
Kurtosis										1.2349*	1.0684*
Replicate F										1.110	0.012
Replicate Prob(F)										0.3509	0.9981
Treatment F										1.262	3.276
Treatment Prob(F)										0.2269	0.0001

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	AESSS	CNPPA
Pest Scientific Name	Aeschynomene s>	Caperonia palu>
Pest Name	Jointvetch	Texasweed
Description	77 DA activati>	77 DA activati>
Rating Date	Aug/22/2013	Aug/22/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	1a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	1a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	1a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	AESSS	CNPPA
Pest Scientific Name	Aeschynomene s>	Caperonia palu>
Pest Name	Jointvetch	Texasweed
Description	77 DA activati>	77 DA activati>
Rating Date	Aug/22/2013	Aug/22/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	1a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	0a
24	Nontreated									0a	1a

LSD (P=.05)	0.5	0.8
Standard Deviation	0.3	0.6
CV	268.11	147.7
Bartlett's X2	0.201	7.978
P(Bartlett's X2)	1.00	0.967
Skewness	2.3039*	1.3096*
Kurtosis	3.3781*	0.7463
Replicate F	0.742	2.535
Replicate Prob(F)	0.5307	0.0639
Treatment F	0.968	1.276
Treatment Prob(F)	0.5153	0.2173

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed
Pest Code	ALRPH
Pest Scientific Name	Alternanthera >
Pest Name	Alligatorweed
Description	77 DA activati>
Rating Date	Aug/22/2013
Rating Type	Avg/Sq Ft
Rating Unit	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #2

Trial ID:	13GN02MRF
Location:	Crowley, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed
Pest Code	ALRPH
Pest Scientific Name	Alternanthera >
Pest Name	Alligatorweed
Description	77 DA activati>
Rating Date	Aug/22/2013
Rating Type	Avg/Sq Ft
Rating Unit	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	1a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A	
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a
24	Nontreated									0a

LSD (P=.05)	0.8
Standard Deviation	0.6
CV	130.67
Bartlett's X2	7.765
P(Bartlett's X2)	0.993
Skewness	0.9224*
Kurtosis	-0.1191
Replicate F	2.091
Replicate Prob(F)	0.1094
Treatment F	0.828
Treatment Prob(F)	0.6859

Comparison of Residual Herbicides #3

LSU AgCenter

School of Plant, Environmental, and Soil Sciences

Experiment number	13GN03MRF
Location	Dean Lee Research Research and Extension Center – Alexandria, LA
Experimental design	Randomized Complete Block
Number of reps	4
Plot size	6' x 15'
Row width/# per plot	N/A
Soil type	silt loam
OM (%)	1.3
pH	7.8
Planting date	N/A
Harvest date	N/A
Crop/Variety	N/A
Uniform std. treatment	N/A

Application type	PRE A
Date applied (mm-dd-yy)	6-11-13
Time (hh:mm-hh:mm)	11:45-1:18pm
Incorporation equipment	N/A
Incorporation depth	N/A
Air/Soil temperature (F)	90/96
Wind (mph/direction)	3-4/SE
Relative humidity (%)	61
Soil/Leaf surface moist	dry/N/A
Crop stage/height	N/A
Sprayer type/mph	CO_2bkpk/3.0
Nozzle type/size	FF/TTI11002
Boom ht/#noz/spacing (in)	15"/4/18"
GPA/psi (at nozzle)	15/28
Applied by	Foster

Weed species	population per ft^2/height/# leaves
N/A	

Rainfall (in.)

0-24 hr/1-3 days	0.00/0.00
4-7 days/2nd week	0.40/2.45
3rd week/4th week	0.00/0.36

Comments:

Data collection was initiated 14 days after receiving activating rainfall on June 18 and continued every 7-10 days thereafter until August 19 (69 days after application). For each weed species, average population/ft^2 was determined from random areas within each plot. After each evaluation, Gramoxone at 3 pt/A + NIS at 0.25% v/v was applied over the experimental area to control emerged weeds and to allow for comparison of residual activity of the PRE herbicide treatments. Data was collected July 2, July 9, July 18, July 26, August 5, and August 19.

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Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	CYPES
Pest Scientific Name	Echinochloa cr>	Cyperus escule>
Pest Name	Common barnyar>	Yellow nutsedge
Description	14 DA activati>	14 DA activati>
Rating Date	Jul/2/2013	Jul/2/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	6a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	3a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	2a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	5a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	2a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	7a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	2a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	2a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	CYPES
Pest Scientific Name	Echinochloa cr>	Cyperus escule>
Pest Name	Common barnyar>	Yellow nutsedge
Description	14 DA activati>	14 DA activati>
Rating Date	Jul/2/2013	Jul/2/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	6a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	4a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	3a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	3a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	1a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									7a	0a

LSD (P=.05)	4.3	0.1
Standard Deviation	3.0	0.1
CV	126.37	697.82
Bartlett's X2	87.028	0.0
P(Bartlett's X2)	0.001*	.
Skewness	2.137*	6.8168*
Kurtosis	4.7706*	45.4142*
Replicate F	0.178	0.657
Replicate Prob(F)	0.9108	0.5812
Treatment F	2.286	0.943
Treatment Prob(F)	0.0044	0.5453

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	AMAPA	PANRA
Pest Scientific Name	Amaranthus pal>	Panicum ramosum
Pest Name	Palmer amaranth	Browntop millet
Description	14 DA activati>	14 DA activati>
Rating Date	Jul/2/2013	Jul/2/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0b	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	4a	6a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0b	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0b	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0b	1a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1b	14a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0b	12a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1b	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0b	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0b	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	2b	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0b	3a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0b	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0b	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0b	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										AMAPA	PANRA
Pest Scientific Name										Amaranthus pal>	Panicum ramosum
Pest Name										Palmer amaranth	Browntop millet
Description										14 DA activati>	14 DA activati>
Rating Date										Jul/2/2013	Jul/2/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0b	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1b	14a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0b	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0b	19a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0b	2a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0b	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0b	2a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0b	1a
24	Nontreated									1b	12a
LSD (P=.05)										1.6	14.9
Standard Deviation										1.1	10.5
CV										259.74	281.8
Bartlett's X2										79.596	203.323
P(Bartlett's X2)										0.001*	0.001*
Skewness										6.1619*	4.3406*
Kurtosis										46.8107*	19.5416*
Replicate F										2.530	8.206
Replicate Prob(F)										0.0643	0.0001
Treatment F										2.198	1.192
Treatment Prob(F)										0.0064	0.2819

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Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CUMMD	ECHCG
Pest Scientific Name	Cucumis melo v>	Echinochloa cr>
Pest Name	Smell melon	Common barnyar>
Description	14 DA activati>	21 DA activati>
Rating Date	Jul/2/2013	Jul/9/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	1a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										CUMMD	ECHCG
Pest Scientific Name										Cucumis melo v>	Echinochloa cr>
Pest Name										Smell melon	Common barnyar>
Description										14 DA activati>	21 DA activati>
Rating Date										Jul/2/2013	Jul/9/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	1a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									1a	0a
LSD (P=.05)										0.6	0.6
Standard Deviation										0.4	0.4
CV										196.84	170.39
Bartlett's X2										34.975	27.237
P(Bartlett's X2)										0.001*	0.099
Skewness										4.0227*	2.1925*
Kurtosis										21.8221*	5.3495*
Replicate F										4.337	2.947
Replicate Prob(F)										0.0074	0.0388
Treatment F										1.566	0.809
Treatment Prob(F)										0.0791	0.7094

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CYPES	AMAPA
Pest Scientific Name	Cyperus escule>	Amaranthus pal>
Pest Name	Yellow nutsedge	Palmer amaranth
Description	21 DA activati>	21 DA activati>
Rating Date	Jul/9/2013	Jul/9/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #3

Trial ID: 13GN03MRF
Location: Alexandria, LA
Investigator: Dr. James L. Griffin
Study Director: Matthew Foster
Sponsor Contact: LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										CYPES	AMAPA
Pest Scientific Name										Cyperus escule>	Amaranthus pal>
Pest Name										Yellow nutsedge	Palmer amaranth
Description										21 DA activati>	21 DA activati>
Rating Date										Jul/9/2013	Jul/9/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a
LSD (P=.05)										0.2	0.2
Standard Deviation										0.2	0.1
CV										336.12	595.64
Bartlett's X2										3.466	2.054
P(Bartlett's X2)										0.902	0.358
Skewness										3.421*	6.5452*
Kurtosis										12.1392*	45.6594*
Replicate F										1.473	1.353
Replicate Prob(F)										0.2295	0.2645
Treatment F										0.695	0.941
Treatment Prob(F)										0.8348	0.5474

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	PANRA	CUMMD
Pest Scientific Name	Panicum ramosum	Cucumis melo v>
Pest Name	Browntop millet	Smell melon
Description	21 DA activati>	21 DA activati>
Rating Date	Jul/9/2013	Jul/9/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #3

Trial ID: 13GN03MRF
Location: Alexandria, LA
Investigator: Dr. James L. Griffin
Study Director: Matthew Foster
Sponsor Contact: LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										PANRA	CUMMD
Pest Scientific Name										Panicum ramosum	Cucumis melo v>
Pest Name										Browntop millet	Smell melon
Description										21 DA activati>	21 DA activati>
Rating Date										Jul/9/2013	Jul/9/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	1a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									1a	0a
LSD (P=.05)										0.6	0.5
Standard Deviation										0.4	0.3
CV										157.94	189.04
Bartlett's X2										35.149	14.244
P(Bartlett's X2)										0.013*	0.285
Skewness										2.6253*	2.6613*
Kurtosis										8.2519*	8.6184*
Replicate F										3.819	3.248
Replicate Prob(F)										0.0136	0.0270
Treatment F										1.660	1.483
Treatment Prob(F)										0.0555	0.1068

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	CYPES
Pest Scientific Name	Echinochloa cr>	Cyperus escule>
Pest Name	Common barnyar>	Yellow nutsedge
Description	30 DA activati>	30 DA activati>
Rating Date	Jul/18/2013	Jul/18/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	2a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	1a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #3

Trial ID: 13GN03MRF
Location: Alexandria, LA
Investigator: Dr. James L. Griffin
Study Director: Matthew Foster
Sponsor Contact: LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										ECHCG	CYPES
Pest Scientific Name										Echinochloa cr>	Cyperus escule>
Pest Name										Common barnyar>	Yellow nutsedge
Description										30 DA activati>	30 DA activati>
Rating Date										Jul/18/2013	Jul/18/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a
LSD (P=.05)										0.8	0.4
Standard Deviation										0.6	0.3
CV										187.43	380.47
Bartlett's X2										58.91	8.035
P(Bartlett's X2)										0.001*	0.236
Skewness										4.6719*	4.4446*
Kurtosis										30.7031*	22.1514*
Replicate F										4.321	0.815
Replicate Prob(F)										0.0075	0.4897
Treatment F										1.507	0.911
Treatment Prob(F)										0.0981	0.5841

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	AMAPA	PANRA
Pest Scientific Name	Amaranthus pal>	Panicum ramosum
Pest Name	Palmer amaranth	Browntop millet
Description	30 DA activati>	30 DA activati>
Rating Date	Jul/18/2013	Jul/18/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	1a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	2a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										AMAPA	PANRA
Pest Scientific Name										Amaranthus pal>	Panicum ramosum
Pest Name										Palmer amaranth	Browntop millet
Description										30 DA activati>	30 DA activati>
Rating Date										Jul/18/2013	Jul/18/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	3a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	2a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a
LSD (P=.05)										0.3	2.1
Standard Deviation										0.2	1.5
CV										334.48	360.24
Bartlett's X2										7.704	86.766
P(Bartlett's X2)										0.261	0.001*
Skewness										4.6938*	5.4459*
Kurtosis										27.2316*	32.9842*
Replicate F										1.395	5.776
Replicate Prob(F)										0.2518	0.0014
Treatment F										1.477	0.933
Treatment Prob(F)										0.1093	0.5577

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CUMMD	ECHCG
Pest Scientific Name	Cucumis melo v>	Echinochloa cr>
Pest Name	Smell melon	Common barnyar>
Description	30 DA activati>	38 DA activati>
Rating Date	Jul/18/2013	Jul/26/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										CUMMD	ECHCG
Pest Scientific Name										Cucumis melo v>	Echinochloa cr>
Pest Name										Smell melon	Common barnyar>
Description										30 DA activati>	38 DA activati>
Rating Date										Jul/18/2013	Jul/26/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a
LSD (P=.05)										0.3	0.4
Standard Deviation										0.2	0.3
CV										254.99	331.01
Bartlett's X2										4.15	0.11
P(Bartlett's X2)										0.656	1.00
Skewness										3.119*	3.0632*
Kurtosis										9.3772*	7.5398*
Replicate F										5.926	1.095
Replicate Prob(F)										0.0012	0.3571
Treatment F										1.873	1.048
Treatment Prob(F)										0.0241	0.4234

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CYPES	AMAPA
Pest Scientific Name	Cyperus escule>	Amaranthus pal>
Pest Name	Yellow nutsedge	Palmer amaranth
Description	38 DA activati>	38 DA activati>
Rating Date	Jul/26/2013	Jul/26/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										CYPES	AMAPA
Pest Scientific Name										Cyperus escule>	Amaranthus pal>
Pest Name										Yellow nutsedge	Palmer amaranth
Description										38 DA activati>	38 DA activati>
Rating Date										Jul/26/2013	Jul/26/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a
LSD (P=.05)										0.2	0.0
Standard Deviation										0.1	0.0
CV										677.59	0.0
Bartlett's X2										0.0	0.0
P(Bartlett's X2)										.	.
Skewness										6.8168*	.
Kurtosis										45.4142*	.
Replicate F										2.091	0.000
Replicate Prob(F)										0.1094	1.0000
Treatment F										1.000	0.000
Treatment Prob(F)										0.4773	1.0000

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	PANRA	CUMMD
Pest Scientific Name	Panicum ramosum	Cucumis melo v>
Pest Name	Browntop millet	Smell melon
Description	38 DA activati>	38 DA activati>
Rating Date	Jul/26/2013	Jul/26/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	1a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	PANRA	CUMMD
Pest Scientific Name	Panicum ramosum	Cucumis melo v>
Pest Name	Browntop millet	Smell melon
Description	38 DA activati>	38 DA activati>
Rating Date	Jul/26/2013	Jul/26/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a

LSD (P=.05)	0.3	0.3
Standard Deviation	0.2	0.2
CV	291.92	349.46
Bartlett's X2	0.11	0.122
P(Bartlett's X2)	1.00	0.989
Skewness	3.0632*	3.6724*
Kurtosis	7.5398*	11.7307*
Replicate F	7.980	1.456
Replicate Prob(F)	0.0001	0.2343
Treatment F	1.347	1.937
Treatment Prob(F)	0.1718	0.0187

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	CYPES
Pest Scientific Name	Echinochloa cr>	Cyperus escule>
Pest Name	Common barnyar>	Yellow nutsedge
Description	48 DA activati>	48 DA activati>
Rating Date	Aug/5/2013	Aug/5/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										ECHCG	CYPES
Pest Scientific Name										Echinochloa cr>	Cyperus escule>
Pest Name										Common barnyar>	Yellow nutsedge
Description										48 DA activati>	48 DA activati>
Rating Date										Aug/5/2013	Aug/5/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	1a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	1a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	1a
24	Nontreated									0a	0a
LSD (P=.05)										1.1	0.6
Standard Deviation										0.8	0.4
CV										158.75	385.58
Bartlett's X2										28.187	9.657
P(Bartlett's X2)										0.105	0.209
Skewness										2.1504*	4.6306*
Kurtosis										6.2323*	24.4467*
Replicate F										0.989	1.334
Replicate Prob(F)										0.4032	0.2704
Treatment F										0.844	0.777
Treatment Prob(F)										0.6672	0.7462

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	AMAPA	PANRA
Pest Scientific Name	Amaranthus pal>	Panicum ramosum
Pest Name	Palmer amaranth	Browntop millet
Description	48 DA activati>	48 DA activati>
Rating Date	Aug/5/2013	Aug/5/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	2a	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	2a	3a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1a	1a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	2a	1a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	8a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	3a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	2a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	2a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	4a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	1a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type		W Weed	W Weed
Pest Code		AMAPA	PANRA
Pest Scientific Name		Amaranthus pal>	Panicum ramosum
Pest Name		Palmer amaranth	Browntop millet
Description		48 DA activati>	48 DA activati>
Rating Date		Aug/5/2013	Aug/5/2013
Rating Type		Avg/Sq Ft	Avg/Sq Ft
Rating Unit		#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	3a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	1a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	2a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1a	2a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	2a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	1a
24	Nontreated									1a	1a

LSD (P=.05)	1.4	5.0
Standard Deviation	1.0	3.5
CV	132.71	217.83
Bartlett's X2	35.518	106.304
P(Bartlett's X2)	0.008*	0.001*
Skewness	2.2909*	4.7791*
Kurtosis	6.9696*	28.9065*
Replicate F	1.827	9.440
Replicate Prob(F)	0.1502	0.0001
Treatment F	1.839	0.988
Treatment Prob(F)	0.0276	0.4917

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Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CUMMD	ECHCG
Pest Scientific Name	Cucumis melo v>	Echinochloa cr>
Pest Name	Smell melon	Common barnyar>
Description	48 DA activati>	62 DA activati>
Rating Date	Aug/5/2013	Aug/19/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	1a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										CUMMD	ECHCG
Pest Scientific Name										Cucumis melo v>	Echinochloa cr>
Pest Name										Smell melon	Common barnyar>
Description										48 DA activati>	62 DA activati>
Rating Date										Aug/5/2013	Aug/19/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	1a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	1a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	1a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	1a
LSD (P=.05)										0.5	0.8
Standard Deviation										0.3	0.6
CV										207.01	129.35
Bartlett's X2										0.115	9.36
P(Bartlett's X2)										1.00	0.986
Skewness										1.9236*	1.2259*
Kurtosis										1.7362*	2.0909*
Replicate F										1.693	1.186
Replicate Prob(F)										0.1766	0.3217
Treatment F										2.039	1.031
Treatment Prob(F)										0.0123	0.4419

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CYPES	AMAPA
Pest Scientific Name	Cyperus escule>	Amaranthus pal>
Pest Name	Yellow nutsedge	Palmer amaranth
Description	62 DA activati>	62 DA activati>
Rating Date	Aug/19/2013	Aug/19/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	1a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	1a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	1a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	1a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										CYPES	AMAPA
Pest Scientific Name										Cyperus escule>	Amaranthus pal>
Pest Name										Yellow nutsedge	Palmer amaranth
Description										62 DA activati>	62 DA activati>
Rating Date										Aug/19/2013	Aug/19/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	1a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	1a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	1a
24	Nontreated									0a	1a
LSD (P=.05)										0.3	1.1
Standard Deviation										0.2	0.7
CV										435.63	152.18
Bartlett's X2										0.0	23.043
P(Bartlett's X2)										.	0.189
Skewness										4.096*	1.9802*
Kurtosis										15.0914*	5.7265*
Replicate F										1.282	1.170
Replicate Prob(F)										0.2876	0.3277
Treatment F										0.836	0.763
Treatment Prob(F)										0.6768	0.7627

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Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	PANRA	CUMMD
Pest Scientific Name	Panicum ramosum	Cucumis melo v>
Pest Name	Browntop millet	Smell melon
Description	62 DA activati>	62 DA activati>
Rating Date	Aug/19/2013	Aug/19/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	3a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	9a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	2a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	3a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	4a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0a
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #3

Trial ID:	13GN03MRF
Location:	Alexandria, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	PANRA	CUMMD
Pest Scientific Name	Panicum ramosum	Cucumis melo v>
Pest Name	Browntop millet	Smell melon
Description	62 DA activati>	62 DA activati>
Rating Date	Aug/19/2013	Aug/19/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	1a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	3a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	2a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	3a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	0a
24	Nontreated									2a	1a

LSD (P=.05)	5.1	0.5
Standard Deviation	3.6	0.3
CV	228.44	285.52
Bartlett's X2	124.031	0.115
P(Bartlett's X2)	0.001*	1.00
Skewness	6.0822*	2.4586*
Kurtosis	45.559*	4.1306*
Replicate F	6.786	1.135
Replicate Prob(F)	0.0004	0.3409
Treatment F	0.962	0.808
Treatment Prob(F)	0.5220	0.7100

Comparison of Residual Herbicides #4

LSU AgCenter

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Experiment number	13GN04MRF
Location	Northeast Research Station – St. Joseph, LA
Experimental design	Randomized Complete Block
Number of reps	4
Plot size	10’ x 20’ (6.67’ x 20’ treated)
Row width/# per plot	40”/3 (2 treated)
Soil type	silt loam
OM (%)	1.8
pH	5.0
Planting date	N/A
Harvest date	N/A
Crop/Variety	N/A
Uniform std. treatment	N/A

Application type	PRE A
Date applied (mm-dd-yy)	5-28-13
Time (hh:mm-hh:mm)	4:00-7:00pm
Incorporation equipment	N/A
Incorporation depth	N/A
Air/Soil temperature (F)	89/94
Wind (mph/direction)	3-5/NE
Relative humidity (%)	60
Soil/Leaf surface moist	dry/N/A
Crop stage/height	N/A
Sprayer type/mph	CO_2bkpk/3.0
Nozzle type/size	FF/TTI11002
Boom ht/#noz/spacing (in)	15”/4/19”
GPA/psi (at nozzle)	15/25
Applied by	Foster

Weed species	population per ft^2/height/# leaves
N/A	

Rainfall (in.)

0-24 hr/1-3 days	0.00/0.35
4-7 days/2nd week	2.59/0.11
3rd week/4th week	0.00/0.00

Comments:

Data collection was initiated 14 days after receiving activating rainfall on May 29 and continued every 7-10 days thereafter until July 27 (60 days after application). For each weed species, average population/ft^2 was determined from random areas within each plot. After each evaluation, Gramoxone at 3 pt/A + NIS at 0.25% v/v was applied over the experimental area to control emerged weeds and to allow for comparison of residual activity of the PRE herbicide treatments. Data was collected June 12, June 24, July 2, July 10, July 17, and July 27.

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	CASOB
Pest Scientific Name	Echinochloa cr>	Cassia obtusif>
Pest Name	Common barnyar>	Sickle pod
Description	14 DA activati>	14 DA activati>
Rating Date	Jun/12/2013	Jun/12/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	8a	0b
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	9a	0b
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1a	1b
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	2a	0b
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	8a	0b
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	13a	0b
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	15a	0b
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	17a	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0b
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	16a	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	2a	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	5a	0b
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	4a	1b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	7a	0b
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	3a	0b
	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A		

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	CASOB
Pest Scientific Name	Echinochloa cr>	Cassia obtusif>
Pest Name	Common barnyar>	Sickle pod
Description	14 DA activati>	14 DA activati>
Rating Date	Jun/12/2013	Jun/12/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	5a	1b
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	6a	0b
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	2a	1b
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	3a	0b
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	7a	1b
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	1b
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	10a	0b
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	4a	0b
24	Nontreated									13a	2a

LSD (P=.05)	15.2	1.0
Standard Deviation	10.7	0.7
CV	162.71	190.5
Bartlett's X2	68.446	63.357
P(Bartlett's X2)	0.001*	0.001*
Skewness	2.2658*	3.1153*
Kurtosis	5.3294*	11.4636*
Replicate F	0.115	1.307
Replicate Prob(F)	0.9511	0.2793
Treatment F	0.892	2.491
Treatment Prob(F)	0.6072	0.0019

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SEBEX	IPOLA
Pest Scientific Name	Sesbania exalt>	Ipomoea lacuno>
Pest Name	Hemp sesbania	Pitted morning>
Description	14 DA activati>	14 DA activati>
Rating Date	Jun/12/2013	Jun/12/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0b	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1b	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0b	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1b	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0b	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	2b	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	7ab	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	3ab	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	4ab	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	6ab	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	12a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	3ab	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	1b	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	5ab	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	2b	0a

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										SEBEX	IPOLA
Pest Scientific Name										Sesbania exalt>	Ipomoea lacuno>
Pest Name										Hemp sesbania	Pitted morning>
Description										14 DA activati>	14 DA activati>
Rating Date										Jun/12/2013	Jun/12/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	4ab	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	8ab	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	1b	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	1b	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1b	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	3ab	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	3ab	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0b	0a
24	Nontreated									2b	0a
LSD (P=.05)										5.7	0.3
Standard Deviation										4.0	0.2
CV										139.06	325.41
Bartlett's X2										97.564	8.929
P(Bartlett's X2)										0.001*	0.348
Skewness										2.6961*	4.3998*
Kurtosis										8.7795*	24.2661*
Replicate F										0.700	1.175
Replicate Prob(F)										0.5553	0.3256
Treatment F										2.096	1.182
Treatment Prob(F)										0.0098	0.2902

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	POROL	ELEIN
Pest Scientific Name	Portulaca oler>	Eleusine indica
Pest Name	Common purslane	Goosegrass
Description	14 DA activati>	14 DA activati>
Rating Date	Jun/12/2013	Jun/12/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	2a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	4a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	4a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	12a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	2a	14a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	9a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	4a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	3a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	25a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	8a

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										POROL	ELEIN
Pest Scientific Name										Portulaca oler>	Eleusine indica
Pest Name										Common purslane	Goosegrass
Description										14 DA activati>	14 DA activati>
Rating Date										Jun/12/2013	Jun/12/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	2a	4a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	4a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	1a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	1a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	11a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	15a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	2a
24	Nontreated									0a	9a
LSD (P=.05)										1.6	16.9
Standard Deviation										1.1	11.9
CV										416.73	215.95
Bartlett's X2										8.15	83.2
P(Bartlett's X2)										0.148	0.001*
Skewness										4.3194*	3.0822*
Kurtosis										18.3367*	11.9357*
Replicate F										0.060	0.398
Replicate Prob(F)										0.9806	0.7550
Treatment F										0.865	1.080
Treatment Prob(F)										0.6414	0.3881

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	IPOHG	CYPES
Pest Scientific Name	Ipomoea hedera>	Cyperus escule>
Pest Name	Entireleaf mor>	Yellow nutsedge
Description	14 DA activati>	14 DA activati>
Rating Date	Jun/12/2013	Jun/12/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0b
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0b
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0b
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0b
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	1b
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	2a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0b
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0b
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0b
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	1b
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0b

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										IPOHG	CYPES
Pest Scientific Name										Ipomoea hedera>	Cyperus escule>
Pest Name										Entireleaf mor>	Yellow nutsedge
Description										14 DA activati>	14 DA activati>
Rating Date										Jun/12/2013	Jun/12/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0b
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0b
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0b
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	1b
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0b
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0b
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	1b
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0b
24	Nontreated									0a	0b
LSD (P=.05)										0.1	0.7
Standard Deviation										0.1	0.5
CV										979.8	173.6
Bartlett's X2										0.0	26.042
P(Bartlett's X2)										.	0.074
Skewness										9.798*	2.3173*
Kurtosis										96.0*	5.5664*
Replicate F										1.000	2.170
Replicate Prob(F)										0.3982	0.0993
Treatment F										1.000	1.807
Treatment Prob(F)										0.4773	0.0313

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	BRAPP	AMAPA
Pest Scientific Name	Brachiaria pla>	Amaranthus pal>
Pest Name	Broadleaf sign>	Palmer amaranth
Description	14 DA activati>	14 DA activati>
Rating Date	Jun/12/2013	Jun/12/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	2a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										BRAPP	AMAPA
Pest Scientific Name										Brachiaria pla>	Amaranthus pal>
Pest Name										Broadleaf sign>	Palmer amaranth
Description										14 DA activati>	14 DA activati>
Rating Date										Jun/12/2013	Jun/12/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	1a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	4a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	3a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	0a
24	Nontreated									2a	3a
LSD (P=.05)										2.3	1.6
Standard Deviation										1.7	1.1
CV										251.91	701.71
Bartlett's X2										87.232	29.732
P(Bartlett's X2)										0.001*	0.001*
Skewness										3.5639*	9.3108*
Kurtosis										13.0851*	89.1807*
Replicate F										0.464	0.812
Replicate Prob(F)										0.7085	0.4918
Treatment F										1.444	1.348
Treatment Prob(F)										0.1228	0.1710

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	CASOB
Pest Scientific Name	Echinochloa cr>	Cassia obtusif>
Pest Name	Common barnyar>	Sickle pod
Description	26 DA activati>	26 DA activati>
Rating Date	Jun/24/2013	Jun/24/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	6a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	11a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	2a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	1a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	9a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	8a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	4a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	6a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	1a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	8a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	3a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	1a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0a

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	CASOB
Pest Scientific Name	Echinochloa cr>	Cassia obtusif>
Pest Name	Common barnyar>	Sickle pod
Description	26 DA activati>	26 DA activati>
Rating Date	Jun/24/2013	Jun/24/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	1a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	9a	1a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	2a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	2a	1a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	4a	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	2a	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	5a	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	1a
24	Nontreated									9a	1a

LSD (P=.05)	6.0	2.0
Standard Deviation	4.3	1.4
CV	114.75	194.62
Bartlett's X2	76.282	78.251
P(Bartlett's X2)	0.001*	0.001*
Skewness	2.0555*	3.27*
Kurtosis	5.0975*	12.0194*
Replicate F	1.136	1.862
Replicate Prob(F)	0.3406	0.1441
Treatment F	2.608	0.753
Treatment Prob(F)	0.0012	0.7739

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SEBEX	IPOLA
Pest Scientific Name	Sesbania exalt>	Ipomoea lacuno>
Pest Name	Hemp sesbania	Pitted morning>
Description	26 DA activati>	26 DA activati>
Rating Date	Jun/24/2013	Jun/24/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	3a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	2a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	2a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	2a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	4a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	2a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	2a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	2a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	2a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1a

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										SEBEX	IPOLA
Pest Scientific Name										Sesbania exalt>	Ipomoea lacuno>
Pest Name										Hemp sesbania	Pitted morning>
Description										26 DA activati>	26 DA activati>
Rating Date										Jun/24/2013	Jun/24/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	3a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	4a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	2a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	3a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	2a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	2a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	4a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	0a
24	Nontreated									5a	0a
LSD (P=.05)										3.3	0.4
Standard Deviation										2.3	0.3
CV										110.59	263.27
Bartlett's X2										43.923	14.236
P(Bartlett's X2)										0.004*	0.286
Skewness										1.6321*	3.1689*
Kurtosis										2.7669*	10.7873*
Replicate F										0.545	1.371
Replicate Prob(F)										0.6531	0.2588
Treatment F										1.153	1.069
Treatment Prob(F)										0.3170	0.4000

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	POROL	ELEIN
Pest Scientific Name	Portulaca oler>	Eleusine indica
Pest Name	Common purslane	Goosegrass
Description	26 DA activati>	26 DA activati>
Rating Date	Jun/24/2013	Jun/24/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	2a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	2a	2a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	3a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	1a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	3a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										POROL	ELEIN
Pest Scientific Name										Portulaca oler>	Eleusine indica
Pest Name										Common purslane	Goosegrass
Description										26 DA activati>	26 DA activati>
Rating Date										Jun/24/2013	Jun/24/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	2a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	1a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	2a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	2a
LSD (P=.05)										1.3	2.1
Standard Deviation										0.9	1.5
CV										742.37	167.88
Bartlett's X2										22.952	34.205
P(Bartlett's X2)										0.001*	0.003*
Skewness										9.3103*	2.0492*
Kurtosis										89.1698*	3.8722*
Replicate F										1.387	1.779
Replicate Prob(F)										0.2540	0.1592
Treatment F										0.985	1.674
Treatment Prob(F)										0.4954	0.0526

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type		W Weed	W Weed
Pest Code		CYPES	BRAPP
Pest Scientific Name		Cyperus escule>	Brachiaria pla>
Pest Name		Yellow nutsedge	Broadleaf sign>
Description		26 DA activati>	26 DA activati>
Rating Date		Jun/24/2013	Jun/24/2013
Rating Type		Avg/Sq Ft	Avg/Sq Ft
Rating Unit		#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	4a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	2a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	3a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	9a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	4a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	4a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	3a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	4a

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CYPES	BRAPP
Pest Scientific Name	Cyperus escule>	Brachiaria pla>
Pest Name	Yellow nutsedge	Broadleaf sign>
Description	26 DA activati>	26 DA activati>
Rating Date	Jun/24/2013	Jun/24/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	1a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	5a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	3a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	1a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1a	5a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	10a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									1a	9a

LSD (P=.05)	1.2	8.2
Standard Deviation	0.8	5.8
CV	197.17	204.3
Bartlett's X2	38.453	49.523
P(Bartlett's X2)	0.002*	0.001*
Skewness	3.068*	3.1113*
Kurtosis	11.962*	10.8455*
Replicate F	1.118	0.492
Replicate Prob(F)	0.3479	0.6891
Treatment F	0.823	1.079
Treatment Prob(F)	0.6919	0.3893

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type		W Weed	W Weed
Pest Code		AMAPA	ECHCG
Pest Scientific Name		Amaranthus pal>	Echinochloa cr>
Pest Name		Palmer amaranth	Common barnyar>
Description		26 DA activati>	34 DA activati>
Rating Date		Jun/24/2013	Jul/2/2013
Rating Type		Avg/Sq Ft	Avg/Sq Ft
Rating Unit		#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	1a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	1a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	2a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	2a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1a

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										AMAPA	ECHCG
Pest Scientific Name										Amaranthus pal>	Echinochloa cr>
Pest Name										Palmer amaranth	Common barnyar>
Description										26 DA activati>	34 DA activati>
Rating Date										Jun/24/2013	Jul/2/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	1a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									1a	1a
LSD (P=.05)										0.7	1.4
Standard Deviation										0.5	1.0
CV										896.45	167.28
Bartlett's X2										9.649	66.562
P(Bartlett's X2)										0.002*	0.001*
Skewness										9.6591*	2.4126*
Kurtosis										94.0499*	6.0173*
Replicate F										0.931	0.129
Replicate Prob(F)										0.4304	0.9425
Treatment F										0.989	1.685
Treatment Prob(F)										0.4907	0.0504

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type		W Weed	W Weed
Pest Code		CASOB	SEBEX
Pest Scientific Name		Cassia obtusif>	Sesbania exalt>
Pest Name		Sickle pod	Hemp sesbania
Description		34 DA activati>	34 DA activati>
Rating Date		Jul/2/2013	Jul/2/2013
Rating Type		Avg/Sq Ft	Avg/Sq Ft
Rating Unit		#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0ab	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0ab	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0b	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0ab	1a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0b	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0b	1a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0b	1a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0ab	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1ab	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0ab	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1ab	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0b	1a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0ab	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1ab	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0b	0a

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CASOB	SEBEX
Pest Scientific Name	Cassia obtusif>	Sesbania exalt>
Pest Name	Sickle pod	Hemp sesbania
Description	34 DA activati>	34 DA activati>
Rating Date	Jul/2/2013	Jul/2/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1ab	1a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0ab	1a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0b	1a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0ab	2a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0b	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0ab	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	1a	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0ab	1a
24	Nontreated									0ab	1a

LSD (P=.05)	0.7	1.4
Standard Deviation	0.5	1.0
CV	178.79	131.66
Bartlett's X2	27.178	23.774
P(Bartlett's X2)	0.027*	0.252
Skewness	2.6247*	1.3144*
Kurtosis	7.6822*	1.0493*
Replicate F	3.364	1.158
Replicate Prob(F)	0.0235	0.3320
Treatment F	1.789	0.873
Treatment Prob(F)	0.0336	0.6310

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	IPOLA	POROL
Pest Scientific Name	Ipomoea lacuno>	Portulaca oler>
Pest Name	Pitted morning>	Common purslane
Description	34 DA activati>	34 DA activati>
Rating Date	Jul/2/2013	Jul/2/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type		W Weed	W Weed
Pest Code		IPOLA	POROL
Pest Scientific Name		Ipomoea lacuno>	Portulaca oler>
Pest Name		Pitted morning>	Common purslane
Description		34 DA activati>	34 DA activati>
Rating Date		Jul/2/2013	Jul/2/2013
Rating Type		Avg/Sq Ft	Avg/Sq Ft
Rating Unit		#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a

LSD (P=.05)	0.3	0.0
Standard Deviation	0.2	0.0
CV	385.58	0.0
Bartlett's X2	9.657	0.0
P(Bartlett's X2)	0.209	.
Skewness	4.6306*	.
Kurtosis	24.4467*	.
Replicate F	1.334	0.000
Replicate Prob(F)	0.2704	1.0000
Treatment F	0.777	0.000
Treatment Prob(F)	0.7462	1.0000

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type		W Weed	W Weed
Pest Code		ELEIN	CYPES
Pest Scientific Name		Eleusine indica	Cyperus escule>
Pest Name		Goosegrass	Yellow nutsedge
Description		34 DA activati>	34 DA activati>
Rating Date		Jul/2/2013	Jul/2/2013
Rating Type		Avg/Sq Ft	Avg/Sq Ft
Rating Unit		#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1a

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ELEIN	CYPES
Pest Scientific Name	Eleusine indica	Cyperus escule>
Pest Name	Goosegrass	Yellow nutsedge
Description	34 DA activati>	34 DA activati>
Rating Date	Jul/2/2013	Jul/2/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	1a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	2a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a

LSD (P=.05)	0.2	1.1
Standard Deviation	0.1	0.8
CV	607.2	227.44
Bartlett's X2	2.054	47.413
P(Bartlett's X2)	0.358	0.001*
Skewness	6.5452*	3.5765*
Kurtosis	45.6594*	16.7921*
Replicate F	0.434	0.567
Replicate Prob(F)	0.7294	0.6385
Treatment F	0.906	1.212
Treatment Prob(F)	0.5909	0.2656

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	BRAPP	AMAPA
Pest Scientific Name	Brachiaria pla>	Amaranthus pal>
Pest Name	Broadleaf sign>	Palmer amaranth
Description	34 DA activati>	34 DA activati>
Rating Date	Jul/2/2013	Jul/2/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type		W Weed	W Weed
Pest Code		BRAPP	AMAPA
Pest Scientific Name		Brachiaria pla>	Amaranthus pal>
Pest Name		Broadleaf sign>	Palmer amaranth
Description		34 DA activati>	34 DA activati>
Rating Date		Jul/2/2013	Jul/2/2013
Rating Type		Avg/Sq Ft	Avg/Sq Ft
Rating Unit		#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	1a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	1a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									2a	0a

LSD (P=.05)	1.5	0.0
Standard Deviation	1.0	0.0
CV	194.32	0.0
Bartlett's X2	43.795	0.0
P(Bartlett's X2)	0.001*	.
Skewness	2.5673*	.
Kurtosis	7.5704*	.
Replicate F	2.141	0.000
Replicate Prob(F)	0.1030	1.0000
Treatment F	0.736	0.000
Treatment Prob(F)	0.7926	1.0000

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	CASOB
Pest Scientific Name	Echinochloa cr>	Cassia obtusif>
Pest Name	Common barnyar>	Sickle pod
Description	42 DA activati>	42 DA activati>
Rating Date	Jul/10/2013	Jul/10/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	1a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	1a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0a

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										ECHCG	CASOB
Pest Scientific Name										Echinochloa cr>	Cassia obtusif>
Pest Name										Common barnyar>	Sickle pod
Description										42 DA activati>	42 DA activati>
Rating Date										Jul/10/2013	Jul/10/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	1a	1a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	2a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									1a	0a
LSD (P=.05)										1.0	1.5
Standard Deviation										0.7	1.1
CV										132.23	234.93
Bartlett's X2										23.202	71.989
P(Bartlett's X2)										0.39	0.001*
Skewness										1.369*	3.9741*
Kurtosis										1.5064*	17.9889*
Replicate F										0.888	1.119
Replicate Prob(F)										0.4516	0.3473
Treatment F										0.783	0.790
Treatment Prob(F)										0.7399	0.7317

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SEBEX	IPOLA
Pest Scientific Name	Sesbania exalt>	Ipomoea lacuno>
Pest Name	Hemp sesbania	Pitted morning>
Description	42 DA activati>	42 DA activati>
Rating Date	Jul/10/2013	Jul/10/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	2a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	2a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type		W Weed	W Weed
Pest Code		SEBEX	IPOLA
Pest Scientific Name		Sesbania exalt>	Ipomoea lacuno>
Pest Name		Hemp sesbania	Pitted morning>
Description		42 DA activati>	42 DA activati>
Rating Date		Jul/10/2013	Jul/10/2013
Rating Type		Avg/Sq Ft	Avg/Sq Ft
Rating Unit		#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	2a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	1a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	2a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	1a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	0a
24	Nontreated									1a	0a

LSD (P=.05)	1.3	0.3
Standard Deviation	1.0	0.2
CV	117.75	305.82
Bartlett's X2	34.545	4.352
P(Bartlett's X2)	0.032*	0.738
Skewness	1.3768*	3.3127*
Kurtosis	1.1574*	11.0675*
Replicate F	1.094	0.950
Replicate Prob(F)	0.3575	0.4212
Treatment F	1.101	1.190
Treatment Prob(F)	0.3673	0.2836

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	POROL	ELEIN
Pest Scientific Name	Portulaca oler>	Eleusine indica
Pest Name	Common purslane	Goosegrass
Description	42 DA activati>	42 DA activati>
Rating Date	Jul/10/2013	Jul/10/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										POROL	ELEIN
Pest Scientific Name										Portulaca oler>	Eleusine indica
Pest Name										Common purslane	Goosegrass
Description										42 DA activati>	42 DA activati>
Rating Date										Jul/10/2013	Jul/10/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a
LSD (P=.05)										0.7	0.2
Standard Deviation										0.5	0.1
CV										813.61	440.71
Bartlett's X2										5.119	0.0
P(Bartlett's X2)										0.024*	.
Skewness										9.1978*	4.096*
Kurtosis										87.0364*	15.0914*
Replicate F										1.450	0.725
Replicate Prob(F)										0.2358	0.5405
Treatment F										1.000	0.817
Treatment Prob(F)										0.4773	0.6999

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type		W Weed	W Weed
Pest Code		CYPES	BRAPP
Pest Scientific Name		Cyperus escule>	Brachiaria pla>
Pest Name		Yellow nutsedge	Broadleaf sign>
Description		42 DA activati>	42 DA activati>
Rating Date		Jul/10/2013	Jul/10/2013
Rating Type		Avg/Sq Ft	Avg/Sq Ft
Rating Unit		#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	1a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0a

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										CYPES	BRAPP
Pest Scientific Name										Cyperus escule>	Brachiaria pla>
Pest Name										Yellow nutsedge	Broadleaf sign>
Description										42 DA activati>	42 DA activati>
Rating Date										Jul/10/2013	Jul/10/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	1a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	2a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	3a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	0a
24	Nontreated									2a	0a
LSD (P=.05)										1.4	0.4
Standard Deviation										1.0	0.3
CV										111.85	272.57
Bartlett's X2										58.142	6.079
P(Bartlett's X2)										0.001*	0.638
Skewness										1.9834*	2.9505*
Kurtosis										4.8375*	8.4033*
Replicate F										5.246	0.775
Replicate Prob(F)										0.0026	0.5118
Treatment F										1.720	1.191
Treatment Prob(F)										0.0441	0.2828

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type		W Weed	W Weed
Pest Code		AMAPA	ECHCG
Pest Scientific Name		Amaranthus pal>	Echinochloa cr>
Pest Name		Palmer amaranth	Common barnyar>
Description		42 DA activati>	49 DA activati>
Rating Date		Jul/10/2013	Jul/17/2013
Rating Type		Avg/Sq Ft	Avg/Sq Ft
Rating Unit		#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a		18ab
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a		22ab
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a		0b
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a		4b
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a		31ab
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a		20ab
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a		18ab
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a		37a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A			
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a		0b
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a		30ab
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A			
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a		14ab
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A			
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a		1b
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A			
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a		3b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A			
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a		3b
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a		1b

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										AMAPA	ECHCG
Pest Scientific Name										Amaranthus pal>	Echinochloa cr>
Pest Name										Palmer amaranth	Common barnyar>
Description										42 DA activati>	49 DA activati>
Rating Date										Jul/10/2013	Jul/17/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0b
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	30ab
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	15ab
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	17ab
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	18ab
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	19ab
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	18ab
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0b
24	Nontreated									0a	16ab
LSD (P=.05)										0.0	17.0
Standard Deviation										0.0	12.0
CV										0.0	86.75
Bartlett's X2										0.0	62.942
P(Bartlett's X2)										.	0.001*
Skewness										.	1.4044*
Kurtosis										.	2.0396*
Replicate F										0.000	0.794
Replicate Prob(F)										1.0000	0.5016
Treatment F										0.000	3.576
Treatment Prob(F)										1.0000	0.0001

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CASOB	SEBEX
Pest Scientific Name	Cassia obtusif>	Sesbania exalt>
Pest Name	Sickle pod	Hemp sesbania
Description	49 DA activati>	49 DA activati>
Rating Date	Jul/17/2013	Jul/17/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	1a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1a	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	1a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	1a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	1a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	1a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	1a

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CASOB	SEBEX
Pest Scientific Name	Cassia obtusif>	Sesbania exalt>
Pest Name	Sickle pod	Hemp sesbania
Description	49 DA activati>	49 DA activati>
Rating Date	Jul/17/2013	Jul/17/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	1a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	2a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	1a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	1a	2a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1a	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	1a
24	Nontreated									1a	2a

LSD (P=.05)	1.3	1.8
Standard Deviation	0.9	1.3
CV	197.13	141.4
Bartlett's X2	37.93	49.973
P(Bartlett's X2)	0.003*	0.001*
Skewness	2.9635*	2.8171*
Kurtosis	10.0362*	12.1156*
Replicate F	2.273	1.110
Replicate Prob(F)	0.0877	0.3512
Treatment F	0.823	0.759
Treatment Prob(F)	0.6920	0.7670

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	IPOLA	POROL
Pest Scientific Name	Ipomoea lacuno>	Portulaca oler>
Pest Name	Pitted morning>	Common purslane
Description	49 DA activati>	49 DA activati>
Rating Date	Jul/17/2013	Jul/17/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	2a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	IPOLA	POROL
Pest Scientific Name	Ipomoea lacuno>	Portulaca oler>
Pest Name	Pitted morning>	Common purslane
Description	49 DA activati>	49 DA activati>
Rating Date	Jul/17/2013	Jul/17/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									0a	0a

LSD (P=.05)	0.4	1.2
Standard Deviation	0.3	0.9
CV	266.38	432.37
Bartlett's X2	11.887	38.286
P(Bartlett's X2)	0.372	0.001*
Skewness	2.9648*	7.0609*
Kurtosis	9.4591*	56.1409*
Replicate F	0.271	1.714
Replicate Prob(F)	0.8464	0.1722
Treatment F	0.894	1.330
Treatment Prob(F)	0.6051	0.1816

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ELEIN	CYPES
Pest Scientific Name	Eleusine indica	Cyperus escule>
Pest Name	Goosegrass	Yellow nutsedge
Description	49 DA activati>	49 DA activati>
Rating Date	Jul/17/2013	Jul/17/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	4a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	7a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	1a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	5a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	5a	1a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	4a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	7a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	5a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	3a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	1a

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ELEIN	CYPES
Pest Scientific Name	Eleusine indica	Cyperus escule>
Pest Name	Goosegrass	Yellow nutsedge
Description	49 DA activati>	49 DA activati>
Rating Date	Jul/17/2013	Jul/17/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	6a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	2a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	6a	1a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a	1a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	6a	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	1a
24	Nontreated									2a	0a

LSD (P=.05)	5.9	1.1
Standard Deviation	4.2	0.8
CV	158.59	184.86
Bartlett's X2	25.503	39.705
P(Bartlett's X2)	0.03*	0.012*
Skewness	1.7767*	2.0743*
Kurtosis	2.1136*	4.309*
Replicate F	0.151	0.667
Replicate Prob(F)	0.9285	0.5751
Treatment F	1.663	0.711
Treatment Prob(F)	0.0549	0.8180

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	BRAPP	AMAPA
Pest Scientific Name	Brachiaria pla>	Amaranthus pal>
Pest Name	Broadleaf sign>	Palmer amaranth
Description	49 DA activati>	49 DA activati>
Rating Date	Jul/17/2013	Jul/17/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	12a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	17a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	4a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	12a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	14a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	13a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	12a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	8a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	3a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	2a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	3a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0a

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										BRAPP	AMAPA
Pest Scientific Name										Brachiaria pla>	Amaranthus pal>
Pest Name										Broadleaf sign>	Palmer amaranth
Description										49 DA activati>	49 DA activati>
Rating Date										Jul/17/2013	Jul/17/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	6a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	6a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	3a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	5a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	12a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	11a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	10a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0a	0a
24	Nontreated									25a	0a
LSD (P=.05)										18.6	0.0
Standard Deviation										13.2	0.0
CV										178.49	0.0
Bartlett's X2										106.151	0.0
P(Bartlett's X2)										0.001*	.
Skewness										2.4446*	.
Kurtosis										6.0838*	.
Replicate F										0.845	0.000
Replicate Prob(F)										0.4739	1.0000
Treatment F										0.938	0.000
Treatment Prob(F)										0.5507	1.0000

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	CASOB
Pest Scientific Name	Echinochloa cr>	Cassia obtusif>
Pest Name	Common barnyar>	Sickle pod
Description	59 DA activati>	59 DA activati>
Rating Date	Jul/27/2013	Jul/27/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	2a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	2a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	1a	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	3a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	3a	1a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	2a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	2a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	1a	1a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	2a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	2a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	2a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	3a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	2a	0a

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	ECHCG	CASOB
Pest Scientific Name	Echinochloa cr>	Cassia obtusif>
Pest Name	Common barnyar>	Sickle pod
Description	59 DA activati>	59 DA activati>
Rating Date	Jul/27/2013	Jul/27/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	1a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	8a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	2a	1a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	2a	1a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	2a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	2a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	2a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	0a
24	Nontreated									1a	1a

LSD (P=.05)	3.6	0.7
Standard Deviation	2.5	0.5
CV	132.57	159.42
Bartlett's X2	75.78	7.389
P(Bartlett's X2)	0.001*	0.986
Skewness	5.3209*	1.457*
Kurtosis	39.7455*	1.2349*
Replicate F	1.537	5.876
Replicate Prob(F)	0.2127	0.0012
Treatment F	1.101	0.898
Treatment Prob(F)	0.3670	0.6006

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SEBEX	IPOLA
Pest Scientific Name	Sesbania exalt>	Ipomoea lacuno>
Pest Name	Hemp sesbania	Pitted morning>
Description	59 DA activati>	59 DA activati>
Rating Date	Jul/27/2013	Jul/27/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	0a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	1a	0a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0a	0a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	0a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	0a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	2a	0a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	2a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0a	0a

School of Plant, Environmental, and Soil Sciences

Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	SEBEX	IPOLA
Pest Scientific Name	Sesbania exalt>	Ipomoea lacuno>
Pest Name	Hemp sesbania	Pitted morning>
Description	59 DA activati>	59 DA activati>
Rating Date	Jul/27/2013	Jul/27/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	1a	0a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	2a	0a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	1a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1a	0a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	2a	0a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	1a	0a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	0a
24	Nontreated									1a	0a

LSD (P=.05)	1.2	0.4
Standard Deviation	0.8	0.3
CV	115.32	330.78
Bartlett's X2	14.549	0.0
P(Bartlett's X2)	0.751	.
Skewness	1.0412*	2.8319*
Kurtosis	0.2867	6.1475*
Replicate F	0.098	0.397
Replicate Prob(F)	0.9608	0.7554
Treatment F	1.473	0.636
Treatment Prob(F)	0.1108	0.8875

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	POROL	ELEIN
Pest Scientific Name	Portulaca oler>	Eleusine indica
Pest Name	Common purslane	Goosegrass
Description	59 DA activati>	59 DA activati>
Rating Date	Jul/27/2013	Jul/27/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1b	7a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0b	4a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0b	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0b	2a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0b	11a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0b	11a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0b	7a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0b	11a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0b	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0b	6a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	1a	6a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0b	1a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0b	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0b	3a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0b	1a

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type										W Weed	W Weed
Pest Code										POROL	ELEIN
Pest Scientific Name										Portulaca oler>	Eleusine indica
Pest Name										Common purslane	Goosegrass
Description										59 DA activati>	59 DA activati>
Rating Date										Jul/27/2013	Jul/27/2013
Rating Type										Avg/Sq Ft	Avg/Sq Ft
Rating Unit										#	#
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0b	0a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0b	4a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0b	2a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0b	6a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1b	5a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0b	7a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0b	4a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0b	1a
24	Nontreated									0b	6a
LSD (P=.05)										0.4	6.5
Standard Deviation										0.3	4.6
CV										338.8	107.47
Bartlett's X2										0.853	74.7
P(Bartlett's X2)										0.653	0.001*
Skewness										4.4642*	2.1452*
Kurtosis										20.396*	6.3269*
Replicate F										2.091	0.094
Replicate Prob(F)										0.1094	0.9633
Treatment F										2.909	2.207
Treatment Prob(F)										0.0003	0.0062

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type		W Weed	W Weed
Pest Code		CYPES	BRAPP
Pest Scientific Name		Cyperus escule>	Brachiaria pla>
Pest Name		Yellow nutsedge	Broadleaf sign>
Description		59 DA activati>	59 DA activati>
Rating Date		Jul/27/2013	Jul/27/2013
Rating Type		Avg/Sq Ft	Avg/Sq Ft
Rating Unit		#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	1a
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	1a	0a
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0a	1a
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0a	1a
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	1a	1a
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0a	2a
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	1a
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	1a	2a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0a	0a
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0a	0a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0a	1a
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A		
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	0a	1a
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A		
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	1a	0a
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1a	1a

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed	W Weed
Pest Code	CYPES	BRAPP
Pest Scientific Name	Cyperus escule>	Brachiaria pla>
Pest Name	Yellow nutsedge	Broadleaf sign>
Description	59 DA activati>	59 DA activati>
Rating Date	Jul/27/2013	Jul/27/2013
Rating Type	Avg/Sq Ft	Avg/Sq Ft
Rating Unit	#	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	1a	2a
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0a	1a
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0a	2a
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0a	0a
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	1a	2a
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	1a	2a
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0a	1a
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A		
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	1a	0a
24	Nontreated									1a	1a

LSD (P=.05)	0.8	2.4
Standard Deviation	0.6	1.7
CV	126.47	198.07
Bartlett's X2	11.374	47.904
P(Bartlett's X2)	0.878	0.001*
Skewness	1.4051*	2.7522*
Kurtosis	2.0683*	7.9008*
Replicate F	3.675	3.107
Replicate Prob(F)	0.0162	0.0320
Treatment F	1.864	0.652
Treatment Prob(F)	0.0250	0.8737

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed
Pest Code	AMAPA
Pest Scientific Name	Amaranthus pal>
Pest Name	Palmer amaranth
Description	59 DA activati>
Rating Date	Jul/27/2013
Rating Type	Avg/Sq Ft
Rating Unit	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0ab
2	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	0b
3	Prefix	5.29	L	2	pt/a	1.32	lb ai/a	PRE	A	0b
4	Boundary	6.5	EC	1.5	pt/a	1.22	lb ai/a	PRE	A	0ab
5	Tricor	75	DF	7.1	oz wt/a	0.333	lb ai/a	PRE	A	0b
6	Canopy DF	75	DG	6	oz wt/a	0.28	lb ai/a	PRE	A	0b
7	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	1ab
8	Valor SX	51	WDG	2	oz wt/a	0.064	lb ai/a	PRE	A	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	
9	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	0b
10	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0b
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	
11	Warrant	3	CS	3	pt/a	1.13	lb ai/a	PRE	A	0ab
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	
12	Sharpen	2.85	SC	1	fl oz/a	0.0223	lb ai/a	PRE	A	0b
	Zidua	85	WG	2.5	oz wt/a	0.133	lb ai/a	PRE	A	
13	Zidua	85	WG	1.5	oz wt/a	0.08	lb ai/a	PRE	A	1ab
	Engenia	5	SL	12.8	fl oz/a	0.5	lb ae/a	PRE	A	
14	Fierce	76	WDG	3	oz wt/a	0.143	lb ai/a	PRE	A	0b
15	Envive	41.3	DG	3.5	oz wt/a	0.09	lb ai/a	PRE	A	0b

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Comparison of Residual Herbicides #4

Trial ID:	13GN04MRF
Location:	St. Joseph, LA
Investigator:	Dr. James L. Griffin
Study Director:	Matthew Foster
Sponsor Contact:	LSU AgCenter

Pest Type	W Weed
Pest Code	AMAPA
Pest Scientific Name	Amaranthus pal>
Pest Name	Palmer amaranth
Description	59 DA activati>
Rating Date	Jul/27/2013
Rating Type	Avg/Sq Ft
Rating Unit	#

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
16	Anthem	2.15	SC	8	fl oz/a	0.134	lb ai/a	PRE	A	0b
17	Canopy EX	29.5	WDG	1.5	oz wt/a	0.0277	lb ai/a	PRE	A	0b
18	Authority MTZ	45	DF	14	oz wt/a	0.394	lb ai/a	PRE	A	0b
19	Valor XLT	40.3	WDG	3	oz wt/a	0.0756	lb ai/a	PRE	A	0b
20	Enlite	47.86	WG	2.8	oz wt/a	0.084	lb ai/a	PRE	A	0ab
21	Verdict	5.57	EC	15	fl oz/a	0.65	lb ai/a	PRE	A	0b
22	Dual Magnum	7.62	L	1	pt/a	0.95	lb ai/a	PRE	A	0b
	Canopy DF	75	DG	4	oz wt/a	0.188	lb ai/a	PRE	A	
23	Authority Elite	7	L	28.6	fl oz/a	1.56	lb ai/a	PRE	A	0b
24	Nontreated									1a

LSD (P=.05)	0.4
Standard Deviation	0.3
CV	245.7
Bartlett's X2	0.179
P(Bartlett's X2)	1.00
Skewness	2.4586*
Kurtosis	4.1306*
Replicate F	1.183
Replicate Prob(F)	0.3227
Treatment F	2.189
Treatment Prob(F)	0.0067