
WEED SCIENCE

2011 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 agricultural 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 2010-2011 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 2011 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. Selected weed areas at the Ben Hur Research Farm, the Sugar Research Station, and at several off-station sites have been managed to encourage uniform weed populations. Weed species evaluated for control are presented in Table 4. Specific information on location, soil type, variety, row spacing, treatment date, sprayer type, etc. for all experiments is presented 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.

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http://www.lsuagcenter.com/en/our_offices/departments/SPESS/Weed+Science/Weed+Science+Annual+Reports.htm

Acknowledgments

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BASF
DuPont
Gowan Company
Helena Chemical Company
Monsanto Company

Table 1. Rainfall for the 2011 growing season (March - September) at the Central Station, Ben Hur Research Farm, Baton Rouge, LA.

Day	Month						
	March	April	May	June	July	August	September
	inches						
1	-	-	-	-	-	2.50	-
2	-	-	-	-	-	-	0.84
3	-	0.01	0.22	-	-	-	6.53
4	1.17	0.48	0.01	0.37	-	-	1.10
5	0.95	-	-	-	-	0.13	0.30
6	-	-	-	0.09	-	0.01	-
7	-	-	-	0.70	-	-	-
8	0.59	-	-	0.06	-	0.22	-
9	0.82	-	-	1.38	-	-	-
10	-	-	-	0.01	-	-	-
11	-	-	-	-	0.01	-	-
12	-	-	-	-	0.10	-	-
13	-	-	0.09	-	-	-	-
14	0.05	-	-	-	0.21	0.10	-
15	-	0.84	-	-	0.78	-	-
16	-	-	-	-	0.04	-	-
17	-	-	-	-	0.21	-	-
18	-	-	0.03	-	0.19	0.52	0.22
19	-	-	-	-	-	0.12	0.06
20	-	-	-	-	-	-	0.01
21	-	-	-	0.23	-	0.04	-
22	-	-	-	0.83	1.74	0.11	0.2
23	-	-	-	0.23	0.12	0.02	0.01
24	-	-	-	0.01	0.25	-	-
25	-	-	-	0.01	1.41	-	-
26	-	0.74	-	-	2.85	-	-
27	-	0.01	-	-	-	-	-
28	-	-	-	-	0.27	-	0.73
29	1.51	-	-	-	0.36	-	-
30	1.56	-	-	-	-	-	-
31	0.01	-	-	-	0.39	-	-
Total	6.66	2.08	0.35	3.92	8.93	3.77	10.00

Table 2. Rainfall for the 2011 growing season (March - September) at the Sugar Research Station, St. Gabriel, LA.

Day	Month						
	March	April	May	June	July	August	September
	inches						
1	-	-	-	-	-	-	-
2	-	-	-	-	-	0.01	-
3	-	-	0.11	-	0.10	-	-
4	0.39	0.35	0.01	0.41	-	-	-
5	1.62	-	-	-	-	0.04	-
6	-	-	-	0.07	0.01	0.07	-
7	-	-	-	-	0.01	0.01	-
8	-	-	-	0.65	-	0.11	-
9	-	-	-	0.08	-	0.01	-
10	-	-	-	0.01	-	-	-
11	-	-	-	0.45	-	-	-
12	-	-	-	0.04	0.01	-	-
13	-	-	0.11	-	0.04	-	-
14	-	0.03	0.01	-	0.71	-	-
15	-	0.22	-	-	0.17	-	-
16	-	0.01	-	-	0.71	-	-
17	-	-	-	-	0.10	-	-
18	-	-	-	-	0.02	-	0.14
19	-	-	-	-	0.61	0.14	0.14
20	-	-	-	-	0.01	-	-
21	-	-	-	-	-	-	0.01
22	-	-	-	2.51	0.83	0.85	-
23	-	-	-	0.01	0.05	-	-
24	-	-	-	0.07	0.59	0.01	-
25	-	-	-	-	0.10	-	-
26	-	0.67	-	-	1.00	-	-
27	-	-	-	-	0.02	-	-
28	-	-	-	0.15	0.02	-	-
29	0.59	-	-	0.65	0.08	-	-
30	0.40	-	-	-	0.01	-	-
31	0.01	-	-	-	0.10	-	-
Total	3.01	1.28	0.24	5.10	5.30	1.25	0.29

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
Accent	nicosulfuron	DuPont
Agridex	crop oil concentrate	Helena
Ammonium sulfate	-	American Plant Food Corp.
Asulox, Asulox XP	asulam	UPI
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	chlorimuron + metribuzin	DuPont
Canopy EX	chlorimuron-ethyl + tribenuron-methyl	DuPont
Capreno	tembotrione + thien carbazone-methyl	Bayer Crop Science
Cinch	s-metolachlor	DuPont
Clarity	dicamba	BASF
Classic	chlorimuron-ethyl	DuPont
Command	clomazone	FMC
Corvus	isoxaflutole + thien carbazone-methyl	Bayer Crop Science
Diligent	rimsulfuron + chlorimuron + flumioxazin	DuPont
Direx	diuron	Griffin

Continued.

Table 3. Continued.

Trade name	Common name	Manufacturer
Diuron	diuron	Agrisolutions
Distinct	diflufenzopyr + dicamba	BASF
Dual II Magnum	metolachlor	Syngenta
DuPont K4	hexazinone + diuron	Syngenta
Enlight	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 Agrosiences
Flexstar	fomesafen	Syngenta
Flexstar GT	glyphosate + fomesafen	Syngenta
Gangster FR	cloransulam-methyl	FMC
Gangster V	flumioxazin	FMC
Gramoxone Inteon	paraquat	Syngenta
Harmony GT	thifensulfuron	Dupont
Harness Extra	acetochlor + atrazine	Monsanto
Ignite 280	glufosinate	Bayer Crop Science
Induce	nonionic surfactant	Helena
Karmex	diuron	DuPont
Karmex XP	diuron	DuPont
Latigo	2,4-D + dicamba (acid)	Helena

Continued.

Table 3. Continued.

Trade name	Common name	Manufacturer
Laudis	tembotrione	Bayer CropScience
Lumax	metolachlor + atrazine + mesotrione	Syngenta
Metri DF	metribuzin	UPI
Metribuzin	metribuzin	MANA, Loveland Products
Palisade	trinexapac ethyl	Syngenta
Prefix	metolachlor + fomesafen	Syngenta
Permit	halosulfuron	Gowan
Prowl/Prowl H ₂ O	pendimethalin	BASF
Resource	flumiclorac	Valent USA
Roundup Original Max	glyphosate	Monsanto
Roundup Power Max	glyphosate	Monsanto
Roundup Weather Max	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

Continued.

Table 3. Continued.

Trade name	Common name	Manufacturer
Treflan	trifluralin	Dow AgroSciences
Ultra Blazer	acifluorfen	United Phosphorus Inc.
Unison	2,4-D acid	Helena
Valor SX	flumioxazin	Valent USA
Valor XLT	flumioxazin + chlorimuron ethyl	Valent USA
Velpar	hexazinone	DuPont
Warrant	acetochlor (encapsulated)	Monsanto
Weedar 64	2,4-D dimethylamine salt	Nufarm
Weedmaster	2,4-D + dicamba	Nufarm
Yukon	halosulfuron + dicamba	Gowan
Zidua	pyroxasulfone	BASF

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

Common name	WSSA abbreviation	Scientific name
annual bluegrass	POAAN	<i>Poa annua</i> L.
annual sedge	CYPCP	<i>Cyperus compressus</i> L.
barnyardgrass	ECHCG	<i>Echinochloa crus-galli</i> (L.) Beauv.
bermudagrass	CYNDA	<i>Cynodon dactylon</i> (L.) Pers.
broadleaf signalgrass	BRAPP	<i>Brachiaria platyphylla</i> (Griseb.) Nash
buttercup species	RANSS	<i>Ranunculus</i> species
carpetweed	MOLVE	<i>Mollugo verticillata</i> L.
Carolina geranium	GERCA	<i>Geranium carolinianum</i> L.
common purslane	POROL	<i>Portulacca oleracea</i> L.
curly dock	RUMCR	<i>Rumex crispus</i> L.
cutleaf eveningprimrose	OEOLA	<i>Oenothera laciniata</i> Hill
cutleaf groundcherry	PHYAN	<i>Physalis angulata</i> L.
entireleaf morningglory	IPOHG	<i>Ipomoea hederacea</i> var. <i>integriuscula</i> Gray
fall panicum	PANDI	<i>Panicum dichotomiflorum</i> Michx.
foxtail	SETSP	<i>Setaria</i> species
goosegrass	ELEIN	<i>Eleusine indica</i>
groundcherry	PHYSS	<i>Physalis</i> species
henbit	LAMAM	<i>Lamium amplexicaule</i> L.
hemp sesbania	SEBEX	<i>Sesbania exaltata</i> (Raf.) Rybd. ex A. W. Hill
hophornbeam copperleaf	ACCOS	<i>Acalypha ostryifolia</i> Riddell
itchgrass	ROOEX	<i>Rottboellia cochinchinensis</i> (Lour.) Clayton
ivyleaf morningglory	IPOHE	<i>Ipomoea hederacea</i> (L.) Jacq.
johnsongrass	SORHA	<i>Sorghum halepense</i> (L.) Pers.
large crabgrass	DIGSA	<i>Digitaria sanguinalis</i> (L.) Scop.

Continued.

Table 4. Continued.

Common name	WSSA abbreviation	Scientific name
little barley	HORPU	<i>Hordeum pusillum</i> Nuttall.
medicago (clover)	MEDSS	<i>Medicago</i> species
morningglory species	IPOSS	<i>Ipomoea</i> species
mouseear chickweed	CERVU	<i>Cerastium vulgatum</i> L.
nutsedge	CYPSS	<i>Cyperus</i> species
pitted morningglory	IPOLA	<i>Ipomoea lacunosa</i> L.
prickly sida	SIDSP	<i>Sida spinosa</i> L.
purple nutsedge	CYPRO	<i>Cyperus rotundus</i> L.
purslane speedwell	VERPG	<i>Veronica peregrina</i> L.
red morningglory	IPOCC	<i>Ipomoea coccinea</i> L.
red sprangletop	LEFFI	<i>Leptochloa panicea</i> (Retz.) Ohwi
redweed	MEOCO	<i>Melochia corchorifolia</i> L.
ryegrass, Italian	LOLMU	<i>Lolium perenne</i> L. ssp. <i>Multiflorum</i> (Lam.) Husnot
shepherd's-purse	CAPBP	<i>Capsella bursa-pastoris</i> (L.) Medicus
sicklepod	CASOB	<i>Senna obtusifolia</i> L.
smallflower bittercress	CARPA	<i>Cardamine parviflora</i> L.
smallflower morningglory	IAQTA	<i>Jacquemontia tamnifolia</i> (L.) Griseb.
smellmelon	CUMMD	<i>Cucumis melo</i> L. var. <i>dudaim</i> Naud.
spiny sowthistle	SONAS	<i>Sonchus asper</i> (L.) Hill
spotted burclover	MEDAB	<i>Medicago arabica</i> (L.) Huds.
spotted spurge	EPHMA	<i>Chamaesyce maculata</i> (L.) Small
spreading dayflower	COMDI	<i>Commelina diffusa</i> Burm. f.
velvetleaf	ABUTH	<i>Abutilon theophrasti</i> Medik.

Continued.

Table 4. Continued.

Common name	WSSA abbreviation	Scientific name
Virginia pepperweed	LEPVI	<i>Lepidium virginicum</i> L.
white clover	TRFRE	<i>Trifolium repens</i> L.
wild poinsettia	EPHHL	<i>Euphorbia heterophylla</i> L.
yellow nutsedge	CYPES	<i>Cyperus esculentus</i> 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 ₂ bkpk	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
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
rep	Replication
SC	Soluble concentration
sq	Square
std	Standard
til	Tillers
trctrCA	Tractor compressed air
TRS	Theoretical recoverable sugar
V (x)	Refers to soybean growth stage e.g. V4=vegetative with 3 fully expanded trifoliate leaves

Continued.

Table 5. Continued.

Trt No	Treatment number
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

Bermudagrass Fallow Programs Test
Louisiana State University
School of Plant, Environmental, and Soil Sciences

Experiment number : 10SC05JG
Location..... : St. Gabriel
Experimental design : Randomized Complete Block
Number of reps : 4
Plot size : 18' x 70'
Row width/# per plot : 72"/3
Soil type..... : silt loam
OM (%)..... : 1.0
pH : 5.9
Planting date : 9-10-10
Harvest date..... : 10-19-11
Crop/Variety : Sugarcane/HoCP96-540
Uniform std. treatment..... : N/A

Application type	POST A	POST B
Date applied (mm-dd-yy)	7-12-10	8-11-10
Time (hh:mm-hh:mm)	2:00-2:30pm	9:20-9:40am
Incorporation equipment.....	N/A	N/A
Incorporation depth.....	N/A	N/A
Air/Soil temperature (F)	90/89	81/86
Wind (mph/direction)	8-9/SW	2-3/NE
Relative humidity (%)	54	89
Soil/Leaf surface moist.....	moist/dry	moist/moist
Crop stage/height.....	N/A	N/A
Sprayer type/mph.....	CO ₂ bkpk/3.0	CO ₂ bkpk/3.0
Nozzle type/size.....	FF/11002VS	FF/11002VS
Boom ht/#noz/spacing (in)	18"/4/18"	18"/4/18"
GPA/psi (at nozzle)	15/25	15/25
Applied by	Bauerle	Bauerle

Weed species	population per ft ² /height/# leaves	
CYNDA.....	5-10/2-5"/3-6 tillers	6-10" runners
CYPSS.....	N/A	6-8"/5-6 lf

Rainfall (in.)		
0-24 hr/1-3 days.....	0.00/0.00	0.00/1.63
4-7 days/2nd week.....	1.44/0.16	3.00/1.73
3rd week/4th week.....	0.01/2.60	0.85/0.04

Comments:

School of Plant, Environmental, and Soil Sciences

Bermudagrass Fallow Programs Test

Trial ID: 10SC05JG
Location: St. Gabriel

Study Director: Joseph M. Boudreaux
Investigator: Dr. James L. Griffin

Pest Code	CYNDA	CYNDA	
Rating Date	26/Jul/2010	12/Aug/2010	26/Oct/2010
Rating Data Type	GroundCover	GroundCover	Shoot Count
Rating Unit	%	%	#/45 ft
Trt Treatment No. Name			
1 Destroy Stubble/May Bottom Plow/May Chisel & Disk/June Bed Up/June Roundup/July Roundup/August	5c	17b	85a
2 Destroy Stubble/May Chisel & Disk/June Bed Up/June Roundup/July Roundup/August	4c	28b	85a
3 Destroy Stubble/May Chisel & Disk/June Bed Up/June Rehip/July Roundup/August	39a	28b	76a
4 Destroy Stubble/May Chisel & Disk/June Chisel & Disk/July Bed Up/July Roundup/August	20b	56a	91a
LSD (P=.05)	10.7	10.4	20.7
Standard Deviation	6.7	6.5	12.9
CV	39.57	20.33	15.39
Grand Mean	16.88	32.0	83.94
Bartlett's X2	7.585	1.438	0.66
P(Bartlett's X2)	0.055	0.697	0.883
Replicate F	0.256	4.209	4.941
Replicate Prob(F)	0.8552	0.0406	0.0269
Treatment F	23.733	27.122	0.891
Treatment Prob(F)	0.0001	0.0001	0.4823

School of Plant, Environmental, and Soil Sciences

Bermudagrass Fallow Programs Test

Trial ID: 10SC05JG

Location: St. Gabriel

Study Director: Joseph M. Boudreaux

Investigator: Dr. James L. Griffin

Pest Code	CYNDA	CYNDA	CYNDA
Rating Date	23/Nov/2010	24/Nov/2010	22/Dec/2010
Rating Data Type	GroundCover	Shoot Count	GroundCover
Rating Unit	%	#/45 ft	%
Trt Treatment No. Name			
1 Destroy Stubble/May Bottom Plow/May Chisel & Disk/June Bed Up/June Roundup/July Roundup/August	11a	104a	9a
2 Destroy Stubble/May Chisel & Disk/June Bed Up/June Roundup/July Roundup/August	16a	99a	11a
3 Destroy Stubble/May Chisel & Disk/June Bed Up/June Rehip/July Roundup/August	25a	103a	21a
4 Destroy Stubble/May Chisel & Disk/June Chisel & Disk/July Bed Up/July Roundup/August	21a	108a	15a
LSD (P=.05)	13.8	35.1	18.1
Standard Deviation	8.6	22.0	11.3
CV	47.52	21.26	80.58
Grand Mean	18.13	103.25	14.06
Bartlett's X2	3.154	0.534	6.34
P(Bartlett's X2)	0.368	0.911	0.096
Replicate F	1.216	1.982	1.186
Replicate Prob(F)	0.3588	0.1873	0.3688
Treatment F	1.902	0.116	0.879
Treatment Prob(F)	0.1999	0.9486	0.4874

School of Plant, Environmental, and Soil Sciences

Bermudagrass Fallow Programs Test

Trial ID: 10SC05JG

Location: St. Gabriel

Study Director: Joseph M. Boudreaux

Investigator: Dr. James L. Griffin

Pest Code		CYNDA		
Rating Date		25/Mar/2011	19/May/2011	2/Aug/2011
Rating Data Type		Shoot Count	Control	Stalk Count
Rating Unit		#/45 ft	%	#/45 ft
Trt Treatment No. Name				
1 Destroy Stubble/May Bottom Plow/May Chisel & Disk/June Bed Up/June Roundup/July Roundup/August		157a	93a	210a
2 Destroy Stubble/May Chisel & Disk/June Bed Up/June Roundup/July Roundup/August		143a	91a	210a
3 Destroy Stubble/May Chisel & Disk/June Bed Up/June Rehip/July Roundup/August		133a	85b	213a
4 Destroy Stubble/May Chisel & Disk/June Chisel & Disk/July Bed Up/July Roundup/August		142a	92a	206a
LSD (P=.05)		50.4	5.3	22.0
Standard Deviation		31.5	3.3	13.7
CV		21.94	3.68	6.55
Grand Mean		143.75	90.13	209.56
Bartlett's X2		2.654	3.671	1.806
P(Bartlett's X2)		0.448	0.299	0.614
Replicate F		2.276	1.299	3.742
Replicate Prob(F)		0.1487	0.3334	0.0539
Treatment F		0.400	4.565	0.140
Treatment Prob(F)		0.7567	0.0331	0.9335

School of Plant, Environmental, and Soil Sciences

Bermudagrass Fallow Programs Test

Trial ID: 10SC05JG

Location: St. Gabriel

Study Director: Joseph M. Boudreaux

Investigator: Dr. James L. Griffin

Rating Date	2/Aug/2011	19/Oct/2011	19/Oct/2011
Rating Data Type	Avg PlantHt	Avg Yld/Row	Yield
Rating Unit	cm	lb	tons/A
Sample Size	10		
Trt Treatment No. Name			
1 Destroy Stubble/May Bottom Plow/May Chisel & Disk/June Bed Up/June Roundup/July Roundup/August	200.47a	408a	32.95a
2 Destroy Stubble/May Chisel & Disk/June Bed Up/June Roundup/July Roundup/August	194.95a	427a	34.48a
3 Destroy Stubble/May Chisel & Disk/June Bed Up/June Rehip/July Roundup/August	194.12a	384a	30.99a
4 Destroy Stubble/May Chisel & Disk/June Chisel & Disk/July Bed Up/July Roundup/August	189.61a	408a	32.93a
LSD (P=.05)	17.257	50.1	4.036
Standard Deviation	10.789	28.9	2.333
CV	5.54	7.11	7.1
Grand Mean	194.79	407.09	32.84
Bartlett's X2	0.308	5.831	5.84
P(Bartlett's X2)	0.959	0.12	0.12
Replicate F	3.577	3.388	3.393
Replicate Prob(F)	0.0598	0.0949	0.0947
Treatment F	0.682	1.503	1.503
Treatment Prob(F)	0.5848	0.3066	0.3065

School of Plant, Environmental, and Soil Sciences

Bermudagrass Fallow Programs Test

Trial ID: 10SC05JG

Location: St. Gabriel

Study Director: Joseph M. Boudreaux

Investigator: Dr. James L. Griffin

Rating Date	19/Oct/2011	19/Oct/2011
Rating Data Type	TRS	Sugar Yield
Rating Unit		lb/A
Trt Treatment No. Name		
1 Destroy Stubble/May Bottom Plow/May Chisel & Disk/June Bed Up/June Roundup/July Roundup/August	227.21a	7470ab
2 Destroy Stubble/May Chisel & Disk/June Bed Up/June Roundup/July Roundup/August	226.30a	7799a
3 Destroy Stubble/May Chisel & Disk/June Bed Up/June Rehip/July Roundup/August	205.37a	6305b
4 Destroy Stubble/May Chisel & Disk/June Chisel & Disk/July Bed Up/July Roundup/August	211.96a	6968ab
LSD (P=.05)	22.530	978.2
Standard Deviation	13.021	565.4
CV	5.98	7.92
Grand Mean	217.71	7135.42
Bartlett's X2	4.616	2.514
P(Bartlett's X2)	0.202	0.473
Replicate F	3.788	1.418
Replicate Prob(F)	0.0776	0.3267
Treatment F	2.747	5.292
Treatment Prob(F)	0.1351	0.0402

Johnsongrass POST Control Options in Sugarcane
Louisiana State University
School of Plant, Environmental, and Soil Sciences

Experiment number: 11SC01JG
Location.....: Wilson Judice Farms (Patterson, LA)
Experimental design: Randomized Complete Block
Number of reps: 3
Plot size: 6' x 30'
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: Sugarcane (1st stubble)/N/A
Uniform std. treatment.....: N/A

Application type: POST A
Date applied (mm-dd-yy): 4-13-11
Time (hh:mm-hh:mm): 10:15-11:45am
Incorporation equipment.....: N/A
Incorporation depth.....: N/A
Air/Soil temperature (F): 75/N/A
Wind (mph/direction): 2-5/SE
Relative humidity (%): N/A
Soil/Leaf surface moist.....: dry/dry
Crop stage/height: 18-24"
Sprayer type/mpg.....: CO₂bkpk/3.0
Nozzle type/size.....: FF/8002VS
Boom ht/#noz/spacing (in): 18"/4/18"
GPA/psi (at nozzle): 15/28
Applied by: Bauerle

Weed species: population per ft²/height/# leaves
SORHA: 14-28"/some in boot stage

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

Comments:

School of Plant, Environmental, and Soil Sciences

Johnsongrass PRE and POST Control Options in Sugarcane

Trial ID: 11SC01JG

Study Director: Matthew Bauerle

Location: Wilson Judice Farms

Investigator: Dr. James L. Griffin

Pest Code										SORHA		SORHA
Rating Date										27/Apr/2011	27/Apr/2011	12/May/2011
Rating Data Type										Control	Injury	Control
Rating Unit										%	%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type	Rate	Unit	Rate	Rate	Stage	Code			
1	Corvus	2.63	SC	0.115	lb ai/a	5.6	oz/a	POST	A	59a	58a	53b
	Agridex	100	L	1	% v/v	1	% v/v					
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a					
2	Capreno	3.45	SC	0.081	lb ai/a	3	oz/a	POST	A	44b	40b	40bc
	Agridex	100	L	1	% v/v	1	% v/v					
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a					
3	Laudis	3.5	L	0.082	lb ai/a	3	oz/a	POST	A	65a	17c	33bc
	Agridex	100	L	1	% v/v	1	% v/v					
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a					
4	Callisto	4	L	0.094	lb ai/a	3	oz/a	POST	A	22c	12c	20c
	Agridex	100	L	1	% v/v	1	% v/v					
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a					
5	Asulox	3.34	L	1.67	lb ai/a	2	qt/a	POST	A	47b	17c	78a
	Envoke	75	WG	0.014	lb ai/a	0.3	oz/a	POST	A			
	Agridex	100	L	1	% v/v	1	% v/v					
6	Nontreated									0d	0d	0d
LSD (P=.05)										9.1	6.5	19.4
Standard Deviation										4.9	3.6	10.0
CV										12.33	14.93	26.83
Grand Mean										39.37	24.0	37.36
Bartlett's X2										1.788	2.462	5.029
P(Bartlett's X2)										0.775	0.482	0.17
Replicate F										4.409	2.506	2.201
Replicate Prob(F)										0.0512	0.1311	0.1813
Treatment F										75.822	105.714	21.663
Treatment Prob(F)										0.0001	0.0001	0.0004

School of Plant, Environmental, and Soil Sciences

Johnsongrass PRE and POST Control Options in Sugarcane

Trial ID: 11SC01JG

Study Director: Matthew Bauerle

Location: Wilson Judice Farms

Investigator: Dr. James L. Griffin

Pest Code										SORHA		
Rating Date										12/May/2011	27/May/2011	27/May/2011
Rating Data Type										Injury	Control	Injury
Rating Unit										%	%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type	Unit	Unit	Rate	Rate	Stage	Code			
1	Corvus	2.63	SC	0.115	lb ai/a	5.6	oz/a	POST	A	67a	53b	67a
	Agridex	100	L	1	% v/v	1	% v/v					
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a					
2	Capreno	3.45	SC	0.081	lb ai/a	3	oz/a	POST	A	57a	45b	55b
	Agridex	100	L	1	% v/v	1	% v/v					
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a					
3	Laudis	3.5	L	0.082	lb ai/a	3	oz/a	POST	A	8b	32b	3c
	Agridex	100	L	1	% v/v	1	% v/v					
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a					
4	Callisto	4	L	0.094	lb ai/a	3	oz/a	POST	A	10b	12c	5c
	Agridex	100	L	1	% v/v	1	% v/v					
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a					
5	Asulox	3.34	L	1.67	lb ai/a	2	qt/a	POST	A	8b	75a	8c
	Envoke	75	WG	0.014	lb ai/a	0.3	oz/a	POST	A			
	Agridex	100	L	1	% v/v	1	% v/v					
6	Nontreated									0b	0c	0c
LSD (P=.05)										10.6	20.0	10.6
Standard Deviation										5.8	10.3	5.8
CV										23.38	28.76	25.25
Grand Mean										25.0	35.97	23.06
Bartlett's X2										0.361	4.64	1.954
P(Bartlett's X2)										0.986	0.20	0.744
Replicate F										0.366	3.020	0.164
Replicate Prob(F)										0.7025	0.1133	0.8510
Treatment F										72.780	21.194	77.648
Treatment Prob(F)										0.0001	0.0004	0.0001

School of Plant, Environmental, and Soil Sciences

Johnsongrass PRE and POST Control Options in Sugarcane

Trial ID: 11SC01JG

Study Director: Matthew Bauerle

Location: Wilson Judice Farms

Investigator: Dr. James L. Griffin

Rating Date										8/Aug/2011	8/Aug/2011
Rating Data Type										Shoot Count	Avg PlantHt
Rating Unit										#	cm
Sample Size											10
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code		
1	Corvus	2.63	SC	0.115	lb ai/a	5.6	oz/a	POST	A	210ab	113.62c
	Agridex	100	L	1	% v/v	1	% v/v				
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a				
2	Capreno	3.45	SC	0.081	lb ai/a	3	oz/a	POST	A	226a	124.46b
	Agridex	100	L	1	% v/v	1	% v/v				
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a				
3	Laudis	3.5	L	0.082	lb ai/a	3	oz/a	POST	A	165bc	138.77a
	Agridex	100	L	1	% v/v	1	% v/v				
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a				
4	Callisto	4	L	0.094	lb ai/a	3	oz/a	POST	A	140c	132.00ab
	Agridex	100	L	1	% v/v	1	% v/v				
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a				
5	Asulox	3.34	L	1.67	lb ai/a	2	qt/a	POST	A	157c	138.26a
	Envoke	75	WG	0.014	lb ai/a	0.3	oz/a	POST	A		
	Agridex	100	L	1	% v/v	1	% v/v				
6	Nontreated									172bc	137.15a
LSD (P=.05)										37.5	8.358
Standard Deviation										20.6	4.594
CV										11.55	3.51
Grand Mean										178.5	130.71
Bartlett's X2										5.738	8.683
P(Bartlett's X2)										0.333	0.122
Replicate F										12.126	4.699
Replicate Prob(F)										0.0021	0.0364
Treatment F										7.619	14.103
Treatment Prob(F)										0.0034	0.0003

Sugarcane Response to Herbicides Applied Postemergence
Louisiana State University
 School of Plant, Environmental, and Soil Sciences

Experiment number : 11SC02JG
 Location..... : Sugar Research Station—St. Gabriel, LA
 Experimental design : Randomized Complete Block
 Number of reps : 4
 Plot size : 6' x 30'
 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 : Sugarcane/HoCP 96-540 (2nd stubble)
 Uniform std. treatment..... : N/A

Application type : POST A
 Date applied (mm-dd-yy) : 4-21-11
 Time (hh:mm-hh:mm) : 10:10-10:25am
 Incorporation equipment..... : N/A
 Incorporation depth..... : N/A
 Air/Soil temperature (F) : 83/79
 Wind (mph/direction) : 5-6/SE
 Relative humidity (%) : 62
 Soil/Leaf surface moist..... : dry/dry
 Crop stage/height : 5-6 lf/12-18"
 Sprayer type/mpg..... : CO₂bkpk/3.0
 Nozzle type/size..... : FF/11002VS
 Boom ht/#noz/spacing (in) : 18"/4/18"
 GPA/psi (at nozzle) : 15/28
 Applied by : Bauerle

Weed species : population per ft²/height/# leaves
 CYNDA..... : 4-12" runners
 SORHA : 20-36" boot stage

Rainfall (in.)
 0-24 hr/1-3 days..... : 0.00/0.00
 4-7 days/2nd week..... : 0.67/0.12
 3rd week/4th week..... : 0.00/0.12

Comments:
 Weed control ratings were not made because of variability in weed population.

School of Plant, Environmental, and Soil Sciences

Sugarcane Response to Herbicides Applied Postemergence

Trial ID: 11SC02JG

Study Director: Matthew Bauerle

Location: St. Gabriel, LA

Investigator: Dr. James L. Griffin

Rating Date										5/May/2011	19/May/2011	3/Jun/2011
Rating Data Type										Crop Injury	Crop Injury	Crop Injury
Rating Unit										%	%	%
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl				
No.	Name	Conc	Type	Rate	Unit	Rate	Unit	Stage	Code			
1	Corvus	2.63	SC	0.115	lb ai/a	5.6	oz/a	POST	A	43a	74a	71a
	Agridex	100	L	1	% v/v	1	% v/v					
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a					
2	Capreno	3.45	SC	0.081	lb ai/a	3	oz/a	POST	A	44a	71a	69a
	Agridex	100	L	1	% v/v	1	% v/v					
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a					
3	Laudis	3.5	L	0.082	lb ai/a	3	oz/a	POST	A	11c	11bc	13b
	Agridex	100	L	1	% v/v	1	% v/v					
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a					
4	Callisto	4	L	0.094	lb ai/a	3	oz/a	POST	A	8cd	5cd	14b
	Agridex	100	L	1	% v/v	1	% v/v					
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a					
5	Asulox	3.34	L	1.67	lb ai/a	2	qt/a	POST	A	20b	14b	15b
	Envoke	75	WG	0.014	lb ai/a	0.3	oz/a	POST	A			
	Agridex	100	L	1	% v/v	1	% v/v					
6	Zidua	85	WG	0.16	lb ai/a	3	oz/a	POST	A	9cd	5cd	13b
	Agridex	100	SG	1	% v/v	1	% v/v					
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a					
7	Nontreated									0d	0d	0c
LSD (P=.05)										7.9	5.6	10.0
Standard Deviation										5.3	3.8	6.7
CV										27.84	14.6	24.25
Grand Mean										19.07	25.71	27.68
Bartlett's X2										10.926	4.717	9.319
P(Bartlett's X2)										0.027*	0.451	0.097
Replicate F										2.178	1.690	0.337
Replicate Prob(F)										0.1260	0.2047	0.7988
Treatment F										43.238	295.901	76.480
Treatment Prob(F)										0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Sugarcane Response to Herbicides Applied Postemergence

Trial ID: 11SC02JG

Study Director: Matthew Bauerle

Location: St. Gabriel, LA

Investigator: Dr. James L. Griffin

Rating Date										2/Aug/2011	12/Aug/2011
Rating Data Type										Shoot Count	Avg PlantHt
Rating Unit										#	cm
Sample Size											10
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type	Rate	Unit	Rate	Rate Unit	Stage	Code		
1	Corvus	2.63	SC	0.115	lb ai/a	5.6	oz/a	POST	A	194a	184.09b
	Agridex	100	L	1	% v/v	1	% v/v				
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a				
2	Capreno	3.45	SC	0.081	lb ai/a	3	oz/a	POST	A	189a	187.26b
	Agridex	100	L	1	% v/v	1	% v/v				
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a				
3	Laudis	3.5	L	0.082	lb ai/a	3	oz/a	POST	A	218a	220.28a
	Agridex	100	L	1	% v/v	1	% v/v				
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a				
4	Callisto	4	L	0.094	lb ai/a	3	oz/a	POST	A	195a	222.00a
	Agridex	100	L	1	% v/v	1	% v/v				
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a				
5	Asulox	3.34	L	1.67	lb ai/a	2	qt/a	POST	A	189a	209.42a
	Envoke	75	WG	0.014	lb ai/a	0.3	oz/a	POST	A		
	Agridex	100	L	1	% v/v	1	% v/v				
6	Zidua	85	WG	0.16	lb ai/a	3	oz/a	POST	A	195a	213.74a
	Agridex	100	SG	1	% v/v	1	% v/v				
	Ammonium Sulfate	100	SG	2	lb ai/a	2	lb/a				
7	Nontreated									204a	221.42a
LSD (P=.05)										33.2	12.956
Standard Deviation										22.3	8.721
CV										11.3	4.19
Grand Mean										197.54	208.32
Bartlett's X2										3.004	5.168
P(Bartlett's X2)										0.808	0.522
Replicate F										0.312	1.468
Replicate Prob(F)										0.8162	0.2568
Treatment F										0.831	13.703
Treatment Prob(F)										0.5614	0.0001

At Planting Bermudagrass Test #1
Louisiana State University
School of Plant, Environmental, and Soil Sciences

Experiment number : 11SC05JG
Location : Ronald Hebert Farms
Experimental design : Randomized Complete Block
Number of reps : 4
Plot size : 18' x 50'
Row width/# per plot : 72"/3
Soil type : N/A
OM (%) : N/A
pH : N/A
Planting date : 8-19-11
Harvest date : N/A
Crop/Variety : Sugarcane/N/A
Uniform std. treatment : N/A

Application type	PRE A	POST A
Date applied (mm-dd-yy)	8-19-11	10-17-11
Time (hh:mm-hh:mm)	10:00-12:00pm	1:50-2:20pm
Incorporation equipment.....	Lilliston	N/A
Incorporation depth.....	3"	N/A
Air/Soil temperature (F)	N/A	88
Wind (mph/direction)	N/A	2-3/W
Relative humidity (%)	N/A	80
Soil/Leaf surface moist.....	dry/dry	dry/dry
Crop stage/height.....	N/A	5-8lf/30"
Sprayer type/mpg.....	CO ₂ bkpk/3.0	CO ₂ bkpk/3.0
Nozzle type/size.....	FF/11002VS	FF/11002VS
Boom ht/#noz/spacing (in)	18"/4/18"	18"/4/18"
GPA/psi (at nozzle)	15/28	15/28
Applied by	Bauerle	Bauerle

Weed species : population per ft²/height/# leaves
N/A

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

Comments:

School of Plant, Environmental, and Soil Sciences

At Planting Bermudagrass Test #1

Trial ID: 11SC05JG

Study Director: Matthew Bauerle

Location: Ronald Hebert Farms

Investigator: Dr. James L. Griffin

Pest Code										CYNDA		CYNDA
Crop Code										17/Oct/11		CANE
Rating Date										Control		17/Oct/11
Rating Data Type										%		Injury
Rating Unit										%		5/Nov/11
												Control
												%
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl				
No.	Name	Conc	Type	Rate	Unit	Rate	Rate	Unit	Stage	Code		
1	Treflan	4	EC	4	lb ai/a	4	qt/a		POST	A	91a	0a
	No retreatment at 60 days											86a
2	Treflan	4	EC	4	lb ai/a	4	qt/a		POST	A	95a	0a
	Sencor at 60 days	75	DF	1.13	lb ai/a	1.5	lb/a		POST	B		89a
3	Sencor	75	DF	2.25	lb ai/a	3	lb/a		POST	A	87a	0a
	No retreatment at 60 days											85a
4	Sencor	75	DF	2.25	lb ai/a	3	lb/a		POST	A	90a	0a
	Sencor at 60 days	75	DF	1.13	lb ai/a	1.5	lb/a		POST	B		86a
5	Command	3	ME	1.13	lb ai/a	3	pt/a		POST	A	96a	0a
	Direx	4	L	2.5	lb ai/a	2.5	qt/a		POST	A		92a
	No retreatment at 60 days											
6	Command	3	ME	1.13	lb ai/a	3	pt/a		POST	A	98a	0a
	Direx	4	L	2.5	lb ai/a	2.5	qt/a		POST	A		95a
	Sencor at 60 days	75	DF	1.13	lb ai/a	1.5	lb/a		POST	B		
7	Prowl	3.3	EC	1.65	lb ai/a	2	qt/a		POST	A	85a	0a
	Sencor	75	DF	2.25	lb ai/a	3	lb/a		POST	A		83a
	No retreatment at 60 days											
8	Prowl	3.3	EC	1.65	lb ai/a	2	qt/a		POST	A	90a	0a
	Sencor	75	DF	2.25	lb ai/a	3	lb/a		POST	A		85a
	Sencor at 60 days	75	DF	1.13	lb ai/a	1.5	lb/a		POST	B		
LSD (P=.05)										13.2	0.0	16.8
Standard Deviation										9.0	0.0	11.4
CV										9.85	0.0	13.06
Grand Mean										91.22	0.0	87.44
Bartlett's X2										14.151	0.0	2.321
P(Bartlett's X2)										0.049*	.	0.94
Replicate F										0.885	0.000	0.750
Replicate Prob(F)										0.4651	1.0000	0.5348
Treatment F										0.982	0.000	0.483
Treatment Prob(F)										0.4699	1.0000	0.8363

At Planting Bermudagrass Test #2
Louisiana State University
School of Plant, Environmental, and Soil Sciences

Experiment number: 11SC06JG
Location.....: Mike Melancon Farms
Experimental design: Randomized Complete Block
Number of reps: 4
Plot size: 18' x 50'
Row width/# per plot: 72"/3
Soil type.....: N/A
OM (%).....: N/A
pH: N/A
Planting date: 8-19-11
Harvest date.....: N/A
Crop/Variety: Sugarcane/N/A
Uniform std. treatment.....: N/A

Application type	PRE A	POST A
Date applied (mm-dd-yy)	8-19-11	10-17-11
Time (hh:mm-hh:mm)	2:15-4:15pm	11:15-11:45pm
Incorporation equipment.....	Lilliston	N/A
Incorporation depth.....	3"	N/A
Air/Soil temperature (F)	N/A	N/A
Wind (mph/direction)	N/A	2-3/SW
Relative humidity (%)	N/A	70
Soil/Leaf surface moist.....	dry/dry	dry/dry
Crop stage/height.....	N/A	4-8lf/28-36"
Sprayer type/mph.....	CO ₂ bkpk/3.0	CO ₂ bkpk/3.0
Nozzle type/size.....	FF/11002VS	FF/11002VS
Boom ht/#noz/spacing (in)	18"/4/18"	18"/4/18"
GPA/psi (at nozzle)	15/28	15/28
Applied by	Bauerle	Bauerle

Weed species: population per ft²/height/# leaves
N/A

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

Comments:

School of Plant, Environmental, and Soil Sciences

At Planting Bermudagrass Test #2

Trial ID: 11SC06JG

Study Director: Matthew Bauerle

Location: Mike Melancon Farms

Investigator: Dr. James L. Griffin

Pest Code										CYNDA		CYNDA
Crop Code										17/Oct/11		CANE
Rating Date										Control		17/Oct/11
Rating Data Type										%		Injury
Rating Unit										%		15/Nov/11
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl				
No.	Name	Conc	Type	Rate	Unit	Rate	Rate	Unit	Stage	Code		Control
1	Treflan	4	EC	4	lb ai/a	4	qt/a		POST	A	100a	0a
	No retreatment at 60 days											100a
2	Treflan	4	EC	4	lb ai/a	4	qt/a		POST	A	100a	6a
	Sencor at 60 days	75	DF	1.13	lb ai/a	1.5	lb/a		POST	B		100a
3	Sencor	75	DF	2.25	lb ai/a	3	lb/a		POST	A	100a	3a
	No retreatment at 60 days											100a
4	Sencor	75	DF	2.25	lb ai/a	3	lb/a		POST	A	100a	4a
	Sencor at 60 days	75	DF	1.13	lb ai/a	1.5	lb/a		POST	B		100a
5	Command	3	ME	1.13	lb ai/a	3	pt/a		POST	A	100a	6a
	Direx	4	L	2.5	lb ai/a	2.5	qt/a		POST	A		100a
	No retreatment at 60 days											
6	Command	3	ME	1.13	lb ai/a	3	pt/a		POST	A	100a	9a
	Direx	4	L	2.5	lb ai/a	2.5	qt/a		POST	A		100a
	Sencor at 60 days	75	DF	1.13	lb ai/a	1.5	lb/a		POST	B		
7	Prowl	3.3	EC	1.65	lb ai/a	2	qt/a		POST	A	100a	3a
	Sencor	75	DF	2.25	lb ai/a	3	lb/a		POST	A		100a
	No retreatment at 60 days											
8	Prowl	3.3	EC	1.65	lb ai/a	2	qt/a		POST	A	100a	5a
	Sencor	75	DF	2.25	lb ai/a	3	lb/a		POST	A		100a
	Sencor at 60 days	75	DF	1.13	lb ai/a	1.5	lb/a		POST	B		
LSD (P=.05)											0.0	9.5
Standard Deviation											0.0	6.4
CV											0.0	147.01
Grand Mean											100.0	4.38
Bartlett's X2											0.0	1.084
P(Bartlett's X2)											.	0.982
Replicate F											0.000	0.050
Replicate Prob(F)											1.0000	0.9846
Treatment F											0.000	0.734
Treatment Prob(F)											1.0000	0.6460

School of Plant, Environmental, and Soil Sciences

At Planting Bermudagrass Test #2

Trial ID: 11SC06JG

Study Director: Matthew Bauerle

Location: Mike Melancon Farms

Investigator: Dr. James L. Griffin

Crop Code	CANE									
Rating Date	15/Nov/2011									
Rating Data Type	Injury									
Rating Unit	%									
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	Treflan No retreatment at 60 days	4	EC	4	lb ai/a	4	qt/a	POST	A	4a
2	Treflan Sencor at 60 days	4 75	EC DF	4 1.13	lb ai/a lb ai/a	4 1.5	qt/a lb/a	POST POST	A B	8a
3	Sencor No retreatment at 60 days	75	DF	2.25	lb ai/a	3	lb/a	POST	A	3a
4	Sencor Sencor at 60 days	75 75	DF DF	2.25 1.13	lb ai/a lb ai/a	3 1.5	lb/a lb/a	POST POST	A B	1a
5	Command Direx No retreatment at 60 days	3 4	ME L	1.13 2.5	lb ai/a lb ai/a	3 2.5	pt/a qt/a	POST POST	A A	8a
6	Command Direx Sencor at 60 days	3 4 75	ME L DF	1.13 2.5 1.13	lb ai/a lb ai/a lb ai/a	3 2.5 1.5	pt/a qt/a lb/a	POST POST POST	A A B	5a
7	Prowl Sencor No retreatment at 60 days	3.3 75	EC DF	1.65 2.25	lb ai/a lb ai/a	2 3	qt/a lb/a	POST POST	A A	4a
8	Prowl Sencor Sencor at 60 days	3.3 75 75	EC DF DF	1.65 2.25 1.13	lb ai/a lb ai/a lb ai/a	2 3 1.5	qt/a lb/a lb/a	POST POST POST	A A B	4a
LSD (P=.05)										7.7
Standard Deviation										5.2
CV										118.95
Grand Mean										4.38
Bartlett's X2										4.965
P(Bartlett's X2)										0.664
Replicate F										5.308
Replicate Prob(F)										0.0070
Treatment F										0.725
Treatment Prob(F)										0.6525

Nutsedge Control in Plant Cane – Fall Application
Louisiana State University
School of Plant, Environmental, and Soil Sciences

Experiment number : 11SC07JG
Location..... : Plaquemine, LA
Experimental design : Randomized Complete Block
Number of reps : 4
Plot size : 18' x 100'
Row width/# per plot : 72"/3
Soil type..... : N/A
OM (%)..... : N/A
pH : N/A
Planting date : N/A
Harvest date : N/A
Crop/Variety : Sugarcane/N/A
Uniform std. treatment..... : Sencor 2.0 lb/A

Application type : POST A
Date applied (mm-dd-yy) : 10-18-11
Time (hh:mm-hh:mm) : 1:15-2:10pm
Incorporation equipment..... : N/A
Incorporation depth..... : N/A
Air/Soil temperature (F) : 72/78
Wind (mph/direction) : 5-6/N
Relative humidity (%) : 72
Soil/Leaf surface moist..... : moist/moist
Crop stage/height : 5-7lf/20-28"
Sprayer type/mpg..... : CO₂bkpk/3.0
Nozzle type/size..... : FF/11002VS
Boom ht/#noz/spacing (in) : 18"/4/18"
GPA/psi (at nozzle) : 15/28
Applied by : Bauerle

Weed species : population per ft²/height/# leaves
CYPRO..... : 0-1/3-4"/4-6

Rainfall (in.)
0-24 hr/1-3 days..... : 0.00/0.00
4-7 days/2nd week..... : 0.05/0.19
3rd week/4th week..... : 1.14/0.42

Comments:

School of Plant, Environmental, and Soil Sciences

Nutsedge Control in Plant Cane - Fall Application

Trial ID: 11SC07JG

Study Director: Matthew Bauerle

Location: Plaquemine, LA

Investigator: Dr. James L. Griffin

										CYPRO		CYPRO
Pest Code											CANE	
Crop Code										1/Nov/2011	1/Nov/2011	15/Nov/2011
Rating Date										Control	Injury	Control
Rating Data Type										%	%	%
Rating Unit												
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Permit Induce	75	DF	0.047 0.25	lb ai/a % v/v	1 0.25	oz wt/a % v/v	POST	A	29b	3b	63a
2	Permit Induce	75	DF	0.0623 0.25	lb ai/a % v/v	1.33 0.25	oz wt/a % v/v	POST	A	35b	5b	68a
3	Yukon Induce	67.5	DF	0.253 0.25	lb ai/a % v/v	6 0.25	oz wt/a % v/v	POST	A	33b	0b	67a
4	Yukon Induce	67.5	DF	0.337 0.25	lb ai/a % v/v	8 0.25	oz wt/a % v/v	POST	A	35b	0b	65a
5	Authority MTZ Induce	45	DF	0.506 0.25	lb ai/a % v/v	18 0.25	oz wt/a % v/v	POST	A	60a	39a	58a
6	Authority MTZ Induce	45	DF	0.675 0.25	lb ai/a % v/v	24 0.25	oz wt/a % v/v	POST	A	55a	38a	59a
7	Authority MTZ Induce	45	DF	0.84 0.25	lb ai/a % v/v	30 0.25	oz wt/a % v/v	POST	A	60a	36a	61a
8	Envoke Induce	75	DF	0.007 0.25	lb ai/a % v/v	0.15 0.25	oz wt/a % v/v	POST	A	29b	0b	60a
9	Envoke Induce	75	DF	0.0094 0.25	lb ai/a % v/v	0.2 0.25	oz wt/a % v/v	POST	A	33b	0b	56a
10	Envoke Induce	75	DF	0.014 0.25	lb ai/a % v/v	0.3 0.25	oz wt/a % v/v	POST	A	35b	5b	66a
11	Nontreated									0c	0b	0b
LSD (P=,05)										8.2	4.7	7.4
Standard Deviation										5.7	3.3	5.1
CV										15.48	28.91	9.08
Grand Mean										36.59	11.36	56.55
Bartlett's X2										4.454	1.788	3.592
P(Bartlett's X2)										0.879	0.878	0.936
Replicate F										0.260	5.053	0.734
Replicate Prob(F)										0.8538	0.0060	0.5398
Treatment F										36.627	105.884	55.712
Treatment Prob(F)										0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Nutsedge Control in Plant Cane - Fall Application

Trial ID: 11SC07JG

Study Director: Matthew Bauerle

Location: Plaquemine, LA

Investigator: Dr. James L. Griffin

Crop Code										CANE
Rating Date										15/Nov/2011
Rating Data Type										Injury
Rating Unit										%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	Permit Induce	75	DF	0.047 0.25	lb ai/a % v/v	1 0.25	oz wt/a % v/v	POST	A	3bc
2	Permit Induce	75	DF	0.0623 0.25	lb ai/a % v/v	1.33 0.25	oz wt/a % v/v	POST	A	1bc
3	Yukon Induce	67.5	DF	0.253 0.25	lb ai/a % v/v	6 0.25	oz wt/a % v/v	POST	A	0c
4	Yukon Induce	67.5	DF	0.337 0.25	lb ai/a % v/v	8 0.25	oz wt/a % v/v	POST	A	0c
5	Authority MTZ Induce	45	DF	0.506 0.25	lb ai/a % v/v	18 0.25	oz wt/a % v/v	POST	A	25a
6	Authority MTZ Induce	45	DF	0.675 0.25	lb ai/a % v/v	24 0.25	oz wt/a % v/v	POST	A	25a
7	Authority MTZ Induce	45	DF	0.84 0.25	lb ai/a % v/v	30 0.25	oz wt/a % v/v	POST	A	25a
8	Envoke Induce	75	DF	0.007 0.25	lb ai/a % v/v	0.15 0.25	oz wt/a % v/v	POST	A	3bc
9	Envoke Induce	75	DF	0.0094 0.25	lb ai/a % v/v	0.2 0.25	oz wt/a % v/v	POST	A	3bc
10	Envoke Induce	75	DF	0.014 0.25	lb ai/a % v/v	0.3 0.25	oz wt/a % v/v	POST	A	9b
11	Nontreated									0c
LSD (P=,05)										5.4
Standard Deviation										3.7
CV										44.22
Grand Mean										8.41
Bartlett's X2										2.386
P(Bartlett's X2)										0.881
Replicate F										1.151
Replicate Prob(F)										0.3448
Treatment F										34.545
Treatment Prob(F)										0.0001

Bermudagrass Herbicide Application Timing Spring Test #1 (Demo)
Louisiana State University
School of Plant, Environmental, and Soil Sciences

Experiment number : 11SC08JG
Location..... : Ronald Hebert Farms -- Jeanerette, LA
Experimental design : Randomized Complete Block
Number of reps : 1
Plot size : 36' x 100'
Row width/# per plot : 72"/6
Soil type..... : N/A
OM (%)..... : N/A
pH : N/A
Planting date : N/A
Harvest date..... : N/A
Crop/Variety : Sugarcane/HoCP 96-226
Uniform std. treatment..... : N/A

Application type	POST A	POST B	POST C
Date applied (mm-dd-yy)	2-17-11	3-2-11	3-16-11
Time (hh:mm-hh:mm)	11:00-12:00 pm	11:45-12:15 pm	12:00-12:15 pm
Incorporation equipment.....	N/A	N/A	N/A
Incorporation depth.....	N/A	N/A	N/A
Air/Soil temperature (F)	N/A	N/A	N/A
Wind (mph/direction)	N/A	3-4/E	3-4/SE
Relative humidity (%)	N/A	N/A	N/A
Soil/Leaf surface moist.....	moist/N/A	dry/dry	dry/dry
Crop stage/height.....	none present	3-4 lf/6-8"	3-4 lf/8-10"
Sprayer type/mpg.....	CO ₂ bkp/3.0	CO ₂ bkp/3.0	CO ₂ bkp/3.0
Nozzle type/size.....	FF/11002VS	FF/11002VS	FF/11002VS
Boom ht/#noz/spacing (in)	18"/4/18"	18"/4/18"	18"/4/18"
GPA/psi (at nozzle)	15/28	15/28	15/28
Applied by	Bauerle	Bauerle	Bauerle

Weed species	% ground cover/height/# leaves		
CYNDA.....	none present	<5%/1-3"/no runners	45%/2-4"/6-10" runners

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

Comments:

Data collected from this test were combined with data from 11SC09JG to allow for analysis using two replications. Results reported for 11SC10JG.

Bermudagrass Herbicide Application Timing Spring Test #2 (Demo)

Louisiana State University

School of Plant, Environmental, and Soil Sciences

Experiment number : 11SC09JG
 Location : Phillip Luke Farms -- Franklin LA
 Experimental design : Randomized Complete Block
 Number of reps : 1
 Plot size : 36' x 100'
 Row width/# per plot : 72"/6
 Soil type : N/A
 OM (%) : N/A
 pH : N/A
 Planting date : N/A
 Harvest date : N/A
 Crop/Variety : Sugarcane
 Uniform std. treatment : N/A

Application type	POST B	POST C
Date applied (mm-dd-yy)	3-2-11	3-6-11
Time (hh:mm-hh:mm)	1:45-2:15 pm	2:30-2:45 pm
Incorporation equipment.....	N/A	N/A
Incorporation depth.....	N/A	N/A
Air/Soil temperature (F)	N/A	N/A
Wind (mph/direction)	N/A	1-2/SE
Relative humidity (%)	N/A	N/A
Soil/Leaf surface moist.....	dry/dry	dry/dry
Crop stage/height	1-2 lf/2-3"	2-3 lf/6-8"
Sprayer type/mpg.....	CO ₂ bkpk/3.0	CO ₂ bkpk/3.0
Nozzle type/size.....	FF/11002VS	FF/11002VS
Boom ht/#noz/spacing (in)	18"/4/18"	18"/4/18"
GPA/psi (at nozzle)	15/28	15/28
Applied by	Bauerle	Bauerle

Weed species	% ground cover/height/# leaves
CYNDA.....	<5%/2-3"/no runners 20%/2-3"/2-4" runners

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

Comments:

Prior to POST B, sugarcane stubble was clipped and burned. New shoots of sugarcane and bermudagrass were present and showed some burn injury. Bermudagrass was killed where burn was good. Prior to POST C, rows were off-barred. Data collected from this test were combined with data from 11SC08JG to allow for analysis using two replications. Results reported for 11SC10JG.

School of Plant, Environmental, and Soil Sciences

Bermudagrass Herbicide Application Timing Spring Test

Trial ID: 11SC10JG

Study Director: Matthew Bauerle

Location:

Investigator: Dr. James L. Griffin

Pest Code										CYNDA	CYNDA	CYNDA	CYNDA	CYNDA	CANE
Crop Code										2 WAT	4 WAT	6 WAT	8 WAT	10 WAT	2 WAT
Description										Control	Control	Control	Control	Control	Injury
Rating Data Type										%	%	%	%	%	%
Rating Unit															
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
1	Sencor	75	DF	2.25	lb ai/a	3	lb/a	2/15/11	A		45a-d	10b	20a	20	
2	Command Direx	3 4	ME L	1.13 2.5	lb ai/a	3 2.5	pt/a qt/a	2/15/11 2/15/11	A A		68abc	40ab	20a	15	
3	Prowl Sencor	3.3 75	EC DF	1.65 2.25	lb ai/a	2 3	qt/a lb/a	2/15/11 2/15/11	A A		33cd	10b	20a	15	
4	Command Sencor	3 75	ME DF	1.13 0.75	lb ai/a	3 1	pt/a lb/a	2/15/11 2/15/11	A A		50a-d	25ab	30a	25	
5	Sencor	75	DF	2.25	lb ai/a	3	lb/a	3/1/11	B	58a	28d	35ab	25a	.	0c
6	Command Direx	3 4	ME L	1.13 2.5	lb ai/a	3 2.5	pt/a qt/a	3/1/11 3/1/11	B B	75a	63a-d	53ab	38a	.	10bc
7	Prowl Sencor	3.3 75	EC DF	1.65 2.25	lb ai/a	2 3	qt/a lb/a	3/1/11 3/1/11	B B	53a	48a-d	38ab	30a	.	0c
8	Command Sencor	3 75	ME DF	1.13 0.75	lb ai/a	3 1	pt/a lb/a	3/1/11 3/1/11	B B	73a	50a-d	58a	38a	.	8c
9	Sencor	75	DF	2.25	lb ai/a	3	lb/a	3/15/11	C	23a	38bcd	30ab		.	0c
10	Command Direx	3 4	ME L	1.13 2.5	lb ai/a	3 2.5	pt/a qt/a	3/15/11 3/15/11	C C	60a	70ab	45ab		.	30a
11	Prowl Sencor	3.3 75	EC DF	1.65 2.25	lb ai/a	2 3	qt/a lb/a	3/15/11 3/15/11	C C	28a	43a-d	30ab		.	0c
12	Command Sencor	3 75	ME DF	1.13 0.75	lb ai/a	3 1	pt/a lb/a	3/15/11 3/15/11	C C	60a	75a	58a		.	18b
LSD (P=.05)										32.2	19.7	23.4	32.8	.	7.7
Standard Deviation										13.6	8.3	9.9	10.3	.	3.3
CV										25.49	16.44	27.57	37.48	.	40.29
Grand Mean										53.44	50.71	35.83	27.5	18.75	8.13
Bartlett's X2										7.24	3.554	1.402	0.758	.	0.645
P(Bartlett's X2)										0.404	0.737	0.924	0.684	.	0.724
Replicate F										0.076	2.533	2.732	1.471		0.000
Replicate Prob(F)										0.7910	0.1555	0.1424	0.3120		1.0000
Treatment F										3.946	6.641	5.293	1.042		22.250
Treatment Prob(F)										0.0453	0.0096	0.0182	0.5371		0.0003

School of Plant, Environmental, and Soil Sciences

Bermudagrass Herbicide Application Timing Spring Test

Trial ID: 11SC10JG

Study Director: Matthew Bauerle

Location:

Investigator: Dr. James L. Griffin

Crop Code										CANE	CANE	CANE	CANE	CANE
Description										4 WAT	6 WAT	8 WAT	10 WAT	
Rating Date														8/Aug/2011
Rating Data Type										Injury	Injury	Injury	Injury	Average Ht
Rating Unit										%	%	%	%	in
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
1	Sencor	75	DF	2.25	lb ai/a	3	lb/a	2/15/11 A	A	0b	0a	0b	0a	84.1a
2	Command Direx	3 4	ME L	1.13 2.5	lb ai/a	3 2.5	pt/a qt/a	2/15/11 A 2/15/11 A	A	0b	0a	0b	0a	73.2a
3	Prowl Sencor	3.3 75	EC DF	1.65 2.25	lb ai/a	2 3	qt/a lb/a	2/15/11 A 2/15/11 A	A	0b	0a	0b	0a	68.7a
4	Command Sencor	3 75	ME DF	1.13 0.75	lb ai/a	3 1	pt/a lb/a	2/15/11 A 2/15/11 A	A	0b	0a	0b	0a	78.1a
5	Sencor	75	DF	2.25	lb ai/a	3	lb/a	3/1/11 B	B	0b	0a	0b	0a	77.6a
6	Command Direx	3 4	ME L	1.13 2.5	lb ai/a	3 2.5	pt/a qt/a	3/1/11 B 3/1/11 B	B	0b	15a	0b	0a	78.7a
7	Prowl Sencor	3.3 75	EC DF	1.65 2.25	lb ai/a	2 3	qt/a lb/a	3/1/11 B 3/1/11 B	B	0b	0a	3b	0a	80.4a
8	Command Sencor	3 75	ME DF	1.13 0.75	lb ai/a	3 1	pt/a lb/a	3/1/11 B 3/1/11 B	B	0b	0a	0b	0a	77.6a
9	Sencor	75	DF	2.25	lb ai/a	3	lb/a	3/15/11 C	C	0b	0a	0b		81.4a
10	Command Direx	3 4	ME L	1.13 2.5	lb ai/a	3 2.5	pt/a qt/a	3/15/11 C 3/15/11 C	C	23a	18a	18a		77.2a
11	Prowl Sencor	3.3 75	EC DF	1.65 2.25	lb ai/a	2 3	qt/a lb/a	3/15/11 C 3/15/11 C	C	0b	5a	5b		76.0a
12	Command Sencor	3 75	ME DF	1.13 0.75	lb ai/a	3 1	pt/a lb/a	3/15/11 C 3/15/11 C	C	15ab	0a	3b		78.0a
LSD (P=.05)										9.1	20.1	8.3	0.0	14.87
Standard Deviation										3.8	8.5	3.5	0.0	6.29
CV										122.82	271.29	153.36	0.0	8.1
Grand Mean										3.13	3.13	2.29	0.0	77.59
Bartlett's X2										0.0	2.677	0.772	0.0	1.35
P(Bartlett's X2)										.	0.262	0.856	.	0.987
Replicate F										0.636	0.130	0.084	0.000	10.757
Replicate Prob(F)										0.4512	0.7286	0.7799	1.0000	0.0135
Treatment F										7.579	1.111	4.133	0.000	0.771
Treatment Prob(F)										0.0065	0.4613	0.0353	1.0000	0.6646

School of Plant, Environmental, and Soil Sciences

Bermudagrass Herbicide Application Timing Spring Test

Trial ID: 11SC10JG

Study Director: Matthew Bauerle

Location:

Investigator: Dr. James L. Griffin

Pest Code											CYNDA
Crop Code											CANE
Rating Date											8/Aug/2011 8/Aug/2011
Rating Data Type											Population Control
Rating Unit											#/40 ft %
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code		
1	Sencor	75	DF	2.25	lb ai/a	3	lb/a	2/15/11 A	242a	70a	
2	Command Direx	3 4	ME L	1.13 2.5	lb ai/a	3 2.5	pt/a qt/a	2/15/11 A 2/15/11 A	209a	60a	
3	Prowl Sencor	3.3 75	EC DF	1.65 2.25	lb ai/a	2 3	qt/a lb/a	2/15/11 A 2/15/11 A	285a	60a	
4	Command Sencor	3 75	ME DF	1.13 0.75	lb ai/a	3 1	pt/a lb/a	2/15/11 A 2/15/11 A	220a	85a	
5	Sencor	75	DF	2.25	lb ai/a	3	lb/a	3/1/11 B	235a	75a	
6	Command Direx	3 4	ME L	1.13 2.5	lb ai/a	3 2.5	pt/a qt/a	3/1/11 B 3/1/11 B	258a	72a	
7	Prowl Sencor	3.3 75	EC DF	1.65 2.25	lb ai/a	2 3	qt/a lb/a	3/1/11 B 3/1/11 B	255a	77a	
8	Command Sencor	3 75	ME DF	1.13 0.75	lb ai/a	3 1	pt/a lb/a	3/1/11 B 3/1/11 B	223a	75a	
9	Sencor	75	DF	2.25	lb ai/a	3	lb/a	3/15/11 C	245a	78a	
10	Command Direx	3 4	ME L	1.13 2.5	lb ai/a	3 2.5	pt/a qt/a	3/15/11 C 3/15/11 C	255a	70a	
11	Prowl Sencor	3.3 75	EC DF	1.65 2.25	lb ai/a	2 3	qt/a lb/a	3/15/11 C 3/15/11 C	284a	68a	
12	Command Sencor	3 75	ME DF	1.13 0.75	lb ai/a	3 1	pt/a lb/a	3/15/11 C 3/15/11 C	253a	79a	
LSD (P=.05)										64.2	22.7
Standard Deviation										27.2	9.6
CV										11.0	13.28
Grand Mean										246.92	72.25
Bartlett's X2										3.15	3.042
P(Bartlett's X2)										0.871	0.881
Replicate F										1.238	5.881
Replicate Prob(F)										0.3027	0.0457
Treatment F										1.488	1.189
Treatment Prob(F)										0.3072	0.4233

Comparison of GAT Soybean Systems
Louisiana State University
School of Plant, Environmental, and Soil Sciences

Experiment number : 11SB01JG
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 : 6-13-11
Harvest date..... : N/A
Crop/Variety : Soybeans/GAT Line (provided by DuPont)
Uniform std. treatment..... : N/A

Application type	PRE A	POST B	POST C
Date applied (mm-dd-yy)	6-13-11	6-30-11	7-5-11
Time (hh:mm-hh:mm)	3:30-3:45pm	11:30-11:45am	2:00-2:10pm
Incorporation equipment.....	N/A	N/A	N/A
Incorporation depth.....	N/A	N/A	N/A
Air/Soil temperature (F)	91/99	87/90	92/96
Wind (mph/direction)	5-6/SW	3-4/NW	5-6/W
Relative humidity (%)	48	57	42
Soil/Leaf surface moist.....	N/A	dry/dry	dry/dry
Crop stage/height.....	N/A	V3-V4/6-8"	V5-V6/12-15"
Sprayer type/mph.....	CO ₂ bkipk/3.0	CO ₂ bkipk/3.0	CO ₂ bkipk/3.0
Nozzle type/size.....	FF/11002VS	FF/11002VS	FF/11002VS
Boom ht/#noz/spacing (in)	18"/4/18"	18"/4/18"	18"/4/18"
GPA/psi (at nozzle)	15/28	15/28	15/28
Applied by	Bauerle	Bauerle	Bauerle

Weed species	population per ft ² /height/# leaves		
SEBEX	N/A	1-2/2-8"/2-6	0-1/6-12"/3-5
IPOSS	N/A	0-1/1-3"/2-4	0-1/2-3"/2-4
SIDSP	N/A	2-4/1-3"/2-4	N/A
AMASS	N/A	2-5/1-2"/2-4	N/A
ECHCG	N/A	1-2/1-6"/2-6	0-1/2-6"/3-6

Rainfall (in.)			
0-24 hr/1-3 days.....	0.00/0.00	0.00/0.00	0.00/0.00
4-7 days/2nd week.....	0.00/1.35	0.00/0.32	0.11/1.43
3rd week/4th week.....	0.00/0.01	1.22/2.11	2.11/3.52

Comments:

School of Plant, Environmental, and Soil Sciences

Comparison of GAT Soybean Systems

Trial ID: 11SB01JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX
Rating Date										30/Jun/2011	30/Jun/2011
Rating Data Type										Control	Control
Rating Unit										%	%
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type	Rate	Unit	Rate	Unit	Stage	Code		
1	Diligent	37.87	WP	0.095	lb ai/a	4	oz wt/a	PRE	A	94a	63a
	DPX-Q8V50-003										
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C		
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C		
2	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	B	0b	0b
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	B		
3	Valor	51	SG	0.064	lb ai/a	2	oz wt/a	PRE	A	94a	57a
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C		
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C		
4	Diligent	37.87	WP	0.095	lb ai/a	4	oz wt/a	PRE	A	95a	70a
	DPX-Q8V50-003										
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C		
	Synchrony XP	28.40	WG	0.0106	lb ai/a	0.60	oz wt/a	POSPOS	C		
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C		
5	Nontreated									0b	0b
LSD (P=.05)										1.5	18.7
Standard Deviation										0.8	10.0
CV										1.44	26.21
Grand Mean										56.6	38.0
Bartlett's X2										0.0	4.593
P(Bartlett's X2)										1.00	0.101
Replicate F										0.000	0.958
Replicate Prob(F)										1.0000	0.4237
Treatment F										12014.350	37.076
Treatment Prob(F)										0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Comparison of GAT Soybean Systems

Trial ID: 11SB01JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										AMASS	SIDSP
										30/Jun/2011	30/Jun/2011
										Control	Control
										%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type	Rate	Unit	Rate	Rate Unit	Stage	Code		
1	Diligent	37.87	WP	0.095	lb ai/a	4	oz wt/a	PRE	A	99a	100a
	DPX-Q8V50-003										
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C		
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C		
2	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	B	0b	0b
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	B		
3	Valor	51	SG	0.064	lb ai/a	2	oz wt/a	PRE	A	100a	100a
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C		
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C		
4	Diligent	37.87	WP	0.095	lb ai/a	4	oz wt/a	PRE	A	100a	100a
	DPX-Q8V50-003										
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C		
	Synchrony XP	28.40	WG	0.0106	lb ai/a	0.60	oz wt/a	POSPOS	C		
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C		
5	Nontreated									0b	0b
LSD (P=.05)										1.0	0.0
Standard Deviation										0.5	0.0
CV										0.86	0.0
Grand Mean										59.87	60.0
Bartlett's X2										0.0	0.0
P(Bartlett's X2)										.	.
Replicate F										1.000	0.000
Replicate Prob(F)										0.4096	1.0000
Treatment F										33601.000	0.000
Treatment Prob(F)										0.0001	1.0000

School of Plant, Environmental, and Soil Sciences

Comparison of GAT Soybean Systems

Trial ID: 11SB01JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										IPOSS	
											GLXMA
											BSOY
										30/Jun/2011	30/Jun/2011
										Control	Injury
										%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type	Unit	Unit	Rate	Rate	Stage	Code		
1	Diligent	37.87	WP	0.095	lb ai/a	4	oz wt/a	PRE	A	93a	0a
	DPX-Q8V50-003										
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C		
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C		
2	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	B	0b	0a
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	B		
3	Valor	51	SG	0.064	lb ai/a	2	oz wt/a	PRE	A	84a	0a
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C		
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C		
4	Diligent	37.87	WP	0.095	lb ai/a	4	oz wt/a	PRE	A	88a	0a
	DPX-Q8V50-003										
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C		
	Synchrony XP	28.40	WG	0.0106	lb ai/a	0.60	oz wt/a	POSPOS	C		
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C		
5	Nontreated									0b	0a
LSD (P=.05)										10.0	0.0
Standard Deviation										5.3	0.0
CV										10.01	0.0
Grand Mean										53.2	0.0
Bartlett's X2										1.127	0.0
P(Bartlett's X2)										0.569	.
Replicate F										1.926	0.000
Replicate Prob(F)										0.2076	1.0000
Treatment F										250.656	0.000
Treatment Prob(F)										0.0001	1.0000

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Comparison of GAT Soybean Systems

Trial ID: 11SB01JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX	AMASS
Rating Date										13/Jul/2011	13/Jul/2011	13/Jul/2011
Rating Data Type										Control	Control	Control
Rating Unit										%	%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type	Rate	Unit	Rate	Rate	Stage	Code			
1	Diligent	37.87	WP	0.095	lb ai/a	4	oz wt/a	PRE	A	98a	79a	100a
	DPX-Q8V50-003											
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C			
2	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	B	99a	75a	100a
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	B			
3	Valor	51	SG	0.064	lb ai/a	2	oz wt/a	PRE	A	99a	88a	100a
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C			
4	Diligent	37.87	WP	0.095	lb ai/a	4	oz wt/a	PRE	A	99a	87a	100a
	DPX-Q8V50-003											
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C			
	Synchrony XP	28.40	WG	0.0106	lb ai/a	0.60	oz wt/a	POSPOS	C			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C			
5	Nontreated									0b	0b	0b
LSD (P=.05)										3.1	11.6	0.0
Standard Deviation										1.7	6.2	0.0
CV										2.1	9.32	0.0
Grand Mean										79.13	66.0	80.0
Bartlett's X2										2.704	1.749	0.0
P(Bartlett's X2)										0.44	0.626	.
Replicate F										0.458	0.069	0.000
Replicate Prob(F)										0.6483	0.9342	1.0000
Treatment F										2122.145	110.185	0.000
Treatment Prob(F)										0.0001	0.0001	1.0000

School of Plant, Environmental, and Soil Sciences

Comparison of GAT Soybean Systems

Trial ID: 11SB01JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										SIDSP	IPOSS	GLXMA
												BSOY
										13/Jul/2011	13/Jul/2011	13/Jul/2011
										Control	Control	Injury
										%	%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type	Unit	Unit	Rate	Rate	Stage	Code			
1	Diligent	37.87	WP	0.095	lb ai/a	4	oz wt/a	PRE	A	100a	88a	0a
	DPX-Q8V50-003											
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C			
2	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	B	99a	90a	0a
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	B			
3	Valor	51	SG	0.064	lb ai/a	2	oz wt/a	PRE	A	100a	91a	0a
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C			
4	Diligent	37.87	WP	0.095	lb ai/a	4	oz wt/a	PRE	A	100a	95a	0a
	DPX-Q8V50-003											
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C			
	Synchrony XP	28.40	WG	0.0106	lb ai/a	0.60	oz wt/a	POSPOS	C			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C			
5	Nontreated									0b	0b	0a
LSD (P=.05)										1.0	8.9	0.0
Standard Deviation										0.5	4.7	0.0
CV										0.65	6.48	0.0
Grand Mean										79.87	72.87	0.0
Bartlett's X2										0.0	0.974	0.0
P(Bartlett's X2)										.	0.808	.
Replicate F										1.000	7.512	0.000
Replicate Prob(F)										0.4096	0.0146	1.0000
Treatment F										22426.000	224.361	0.000
Treatment Prob(F)										0.0001	0.0001	1.0000

School of Plant, Environmental, and Soil Sciences

Comparison of GAT Soybean Systems

Trial ID: 11SB01JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX	AMASS
Rating Date										20/Jul/2011	20/Jul/2011	20/Jul/2011
Rating Data Type										Control	Control	Control
Rating Unit										%	%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type	Rate	Unit	Rate	Rate	Stage	Code			
1	Diligent	37.87	WP	0.095	lb ai/a	4	oz wt/a	PRE	A	98a	92a	100a
	DPX-Q8V50-003											
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C			
2	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	B	100a	68b	100a
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	B			
3	Valor	51	SG	0.064	lb ai/a	2	oz wt/a	PRE	A	100a	85a	100a
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C			
4	Diligent	37.87	WP	0.095	lb ai/a	4	oz wt/a	PRE	A	100a	96a	100a
	DPX-Q8V50-003											
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C			
	Synchrony XP	28.40	WG	0.0106	lb ai/a	0.60	oz wt/a	POSPOS	C			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C			
5	Nontreated									0b	0c	0b
LSD (P=.05)										2.4	13.8	0.0
Standard Deviation										1.3	7.3	0.0
CV										1.62	10.72	0.0
Grand Mean										79.67	68.27	80.0
Bartlett's X2										0.0	1.818	0.0
P(Bartlett's X2)										.	0.611	.
Replicate F										1.000	0.591	0.000
Replicate Prob(F)										0.4096	0.5763	1.0000
Treatment F										3571.000	87.737	0.000
Treatment Prob(F)										0.0001	0.0001	1.0000

School of Plant, Environmental, and Soil Sciences

Comparison of GAT Soybean Systems

Trial ID: 11SB01JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										SIDSP	IPOSS	GLXMA
												BSOY
										20/Jul/2011	20/Jul/2011	20/Jul/2011
										Control	Control	Injury
										%	%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type	Unit	Unit	Rate	Rate	Stage	Code			
1	Diligent	37.87	WP	0.095	lb ai/a	4	oz wt/a	PRE	A	100a	95a	0a
	DPX-Q8V50-003											
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C			
2	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	B	100a	98a	0a
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	B			
3	Valor	51	SG	0.064	lb ai/a	2	oz wt/a	PRE	A	100a	100a	0a
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C			
4	Diligent	37.87	WP	0.095	lb ai/a	4	oz wt/a	PRE	A	100a	100a	0a
	DPX-Q8V50-003											
	Roundup Powermax	5.5	SL	0.95	lb ai/a	22	fl oz/a	POSPOS	C			
	Synchrony XP	28.40	WG	0.0106	lb ai/a	0.60	oz wt/a	POSPOS	C			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	POSPOS	C			
5	Nontreated									0b	0b	0a
LSD (P=.05)										0.0	7.1	0.0
Standard Deviation										0.0	3.8	0.0
CV										0.0	4.78	0.0
Grand Mean										80.0	78.67	0.0
Bartlett's X2										0.0	1.946	0.0
P(Bartlett's X2)										.	0.163	.
Replicate F										0.000	1.882	0.000
Replicate Prob(F)										1.0000	0.2138	1.0000
Treatment F										0.000	410.412	0.000
Treatment Prob(F)										1.0000	0.0001	1.0000

PRE/POST Comparisons Test
Louisiana State University
School of Plant, Environmental, and Soil Sciences

Experiment number : 11SB04JG
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 : 6-14-11
Harvest date..... : N/A
Crop/Variety : Soybean/AsGrow 5503RR
Uniform std. treatment..... : N/A

Application type	PRE A	POST B
Date applied (mm-dd-yy)	6-14-11	7-5-11
Time (hh:mm-hh:mm)	1:45-2:30pm	3:15- 3:45 pm
Incorporation equipment.....	N/A	N/A
Incorporation depth.....	N/A	N/A
Air/Soil temperature (F)	90/97	84/97
Wind (mph/direction)	5-6/SW	9-10/NE
Relative humidity (%)	53	61
Soil/Leaf surface moist.....	dry/N/A	dry/dry
Crop stage/height.....	N/A	N/A
Sprayer type/mpg.....	CO ₂ bkpk/3.0	CO ₂ bkpk/3.0
Nozzle type/size.....	FF/11002VS	FF/11002VS
Boom ht/#noz/spacing (in)	18"/4/18"	18"/4/18"
GPA/psi (at nozzle)	15/28	15/28
Applied by	Bauerle	Bauerle

Weed species	population per ft ² /height/# leaves	
ECHCG	N/A	0-1/2-3"/3-4
SEBEX	N/A	1-2/2-8"/4-5
AMASS	N/A	0-1/1-3"/3-5
SIDSP	N/A	1-2/1-3"/3-4
IPOHE	N/A	1-2/2-4"/2-5

Rainfall (in.)		
0-24 hr/1-3 days.....	0.00/0.00	0.00/0.00
4-7 days/2nd week.....	0.23/1.08	0.11/1.43
3rd week/4th week.....	0.00/0.11	6.37/3.52

Comments:

School of Plant, Environmental, and Soil Sciences

PRE/POST Comparisons Test

Trial ID: 11SB04JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX	AMASS
Rating Date										5/Jul/2011	5/Jul/2011	5/Jul/2011
Rating Data Type										Control	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 Roundup Weathermax	41.3 5.5	DF L	0.09 0.95	lb ai/a lb ai/a	3.5 22	oz/a oz/a	PRE POST	A B	95a	45b-e	100a
2	Enlight Roundup Weathermax	47.86 5.5	DF L	0.084 0.95	lb ai/a lb ai/a	2.8 22	oz/a oz/a	PRE POST	A B	98a	64abc	100a
3	Canopy DF Roundup Weathermax	75 5.5	DF L	0.28 0.95	lb ai/a lb ai/a	6 22	oz/a oz/a	PRE POST	A B	91a	49b-e	100a
4	Canopy EX Roundup Weathermax	29.5 5.5	WDG L	0.0277 0.95	lb ai/a lb ai/a	1.5 22	oz/a oz/a	PRE POST	A B	85b	28def	95b
5	Sencor Roundup Weathermax	75 5.5	DF L	0.5 0.95	lb ai/a lb ai/a	10.7 22	oz/a oz/a	PRE POST	A B	96a	61a-d	100a
6	Authority MTZ Roundup Weathermax	45 5.5	DF L	0.394 0.95	lb ai/a lb ai/a	14 22	oz/a oz/a	PRE POST	A B	96a	38cde	100a
7	Prefix Roundup Weathermax	5.29 5.5	L L	1.32 0.95	lb ai/a lb ai/a	2 22	pt/a oz/a	PRE POST	A B	96a	36cde	99a
8	Valor SX Roundup Weathermax	51 5.5	DF L	0.064 0.95	lb ai/a lb ai/a	2 22	oz/a oz/a	PRE POST	A B	94a	69abc	100a
9	Boundary Roundup Weathermax	6.5 5.5	L L	1.22 0.95	lb ai/a lb ai/a	1.5 22	pt/a oz/a	PRE POST	A B	96a	54a-e	100a
10	Valor XLT Roundup Weathermax	40 5.5	DF L	0.075 0.95	lb ai/a lb ai/a	3 22	oz/a oz/a	PRE POST	A B	96a	65abc	100a
11	Cinch Roundup Weathermax	7.64 5.5	L L	0.955 0.95	lb ai/a lb ai/a	16 22	oz/a oz/a	PRE POST	A B	96a	25ef	96ab
12	Gangster V Gangster FR Roundup Weathermax	51 84 5.5	DF DF L	0.096 0.0315 0.95	lb ai/a lb ai/a lb ai/a	3 0.6 22	oz/a oz/a oz/a	PRE PRE POST	A A B	98a	79ab	100a
13	Fierce Roundup Weathermax	76 5.5	WDG L	0.142 0.95	lb ai/a lb ai/a	3 22	oz wt/a oz/a	PRE POST	A B	98a	88a	100a

School of Plant, Environmental, and Soil Sciences

PRE/POST Comparisons Test

Trial ID: 11SB04JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX	AMASS	
Rating Date										5/Jul/2011	5/Jul/2011	5/Jul/2011	
Rating Data Type										Control	Control	Control	
Rating Unit										%	%	%	
Trt	Treatment	Form	Form		Rate	Other	Other	Growth	Appl				
No.	Name	Conc	Type	Rate	Unit	Rate	Rate	Unit	Stage	Code			
14	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a		PRE	A	95a	43cde	98ab
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a		POST	B			
15	No PRE										0c	0f	0c
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a		POST	B			
16	Nontreated										0c	0f	0c
LSD (P=.05)										5.6	22.4	2.5	
Standard Deviation										3.9	15.7	1.7	
CV										4.72	33.88	1.98	
Grand Mean										83.13	46.33	86.72	
Bartlett's X2										22.424	15.198	2.122	
P(Bartlett's X2)										0.033*	0.295	0.548	
Replicate F										3.919	2.496	3.353	
Replicate Prob(F)										0.0144	0.0718	0.0270	
Treatment F										275.676	10.264	1556.294	
Treatment Prob(F)										0.0001	0.0001	0.0001	

School of Plant, Environmental, and Soil Sciences

PRE/POST Comparisons Test

Trial ID: 11SB04JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										SIDSP	IPOHE	GLXMA
Crop Code												BSOY
BBCH Scale												
Rating Date										5/Jul/2011	5/Jul/2011	5/Jul/2011
Rating Data Type										Control	Control	Injury
Rating Unit										%	%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code			
1	Envive	41.3	DF	0.09	lb ai/a	3.5	oz/a	PRE	A	99a	93ab	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B			
2	Enlight	47.86	DF	0.084	lb ai/a	2.8	oz/a	PRE	A	98a	92ab	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B			
3	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	93ab	66c	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B			
4	Canopy EX	29.5	WDG	0.0277	lb ai/a	1.5	oz/a	PRE	A	79bc	74abc	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B			
5	Sencor	75	DF	0.5	lb ai/a	10.7	oz/a	PRE	A	96ab	81abc	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B			
6	Authority MTZ	45	DF	0.394	lb ai/a	14	oz/a	PRE	A	96ab	86abc	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B			
7	Prefix	5.29	L	1.32	lb ai/a	2	pt/a	PRE	A	88ab	64c	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B			
8	Valor SX	51	DF	0.064	lb ai/a	2	oz/a	PRE	A	97a	98ab	3b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B			
9	Boundary	6.5	L	1.22	lb ai/a	1.5	pt/a	PRE	A	96ab	73bc	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B			
10	Valor XLT	40	DF	0.075	lb ai/a	3	oz/a	PRE	A	100a	93ab	4b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B			
11	Cinch	7.64	L	0.955	lb ai/a	16	oz/a	PRE	A	68c	78abc	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B			
12	Gangster V	51	DF	0.096	lb ai/a	3	oz/a	PRE	A	100a	99a	9a
	Gangster FR	84	DF	0.0315	lb ai/a	0.6	oz/a	PRE	A			
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B			
13	Fierce	76	WDG	0.142	lb ai/a	3	oz wt/a	PRE	A	99a	96ab	11a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B			

School of Plant, Environmental, and Soil Sciences

PRE/POST Comparisons Test

Trial ID: 11SB04JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

											SIDSP	IPOHE	GLXMA
													BSOY
											5/Jul/2011	5/Jul/2011	5/Jul/2011
											Control	Control	Injury
											%	%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl				
No.	Name	Conc	Type	Rate	Unit	Rate	Rate	Unit	Stage	Code			
14	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a		PRE	A	95ab	68c	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a		POST	B			
15	No PRE										0d	0d	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a		POST	B			
16	Nontreated										0d	0d	0b
LSD (P=.05)											11.5	15.4	4.1
Standard Deviation											8.0	10.8	2.9
CV											9.85	14.87	181.36
Grand Mean											81.34	72.42	1.59
Bartlett's X2											42.702	35.604	3.407
P(Bartlett's X2)											0.001*	0.001*	0.333
Replicate F											0.349	1.360	1.579
Replicate Prob(F)											0.7899	0.2672	0.2077
Treatment F											67.409	32.260	5.314
Treatment Prob(F)											0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

PRE/POST Comparisons Test

Trial ID: 11SB04JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX
Rating Date										13/Jul/2011	13/Jul/2011
Rating Data 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	DF	0.09	lb ai/a	3.5	oz/a	PRE	A	100a	69ab
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
2	Enlight	47.86	DF	0.084	lb ai/a	2.8	oz/a	PRE	A	100a	89a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
3	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	100a	63ab
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
4	Canopy EX	29.5	WDG	0.0277	lb ai/a	1.5	oz/a	PRE	A	100a	66ab
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
5	Sencor	75	DF	0.5	lb ai/a	10.7	oz/a	PRE	A	100a	88a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
6	Authority MTZ	45	DF	0.394	lb ai/a	14	oz/a	PRE	A	100a	73ab
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
7	Prefix	5.29	L	1.32	lb ai/a	2	pt/a	PRE	A	100a	75ab
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
8	Valor SX	51	DF	0.064	lb ai/a	2	oz/a	PRE	A	100a	87a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
9	Boundary	6.5	L	1.22	lb ai/a	1.5	pt/a	PRE	A	100a	75ab
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
10	Valor XLT	40	DF	0.075	lb ai/a	3	oz/a	PRE	A	100a	94a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
11	Cinch	7.64	L	0.955	lb ai/a	16	oz/a	PRE	A	100a	70ab
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
12	Gangster V	51	DF	0.096	lb ai/a	3	oz/a	PRE	A	100a	90a
	Gangster FR	84	DF	0.0315	lb ai/a	0.6	oz/a	PRE	A		
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
13	Fierce	76	WDG	0.142	lb ai/a	3	oz wt/a	PRE	A	100a	92a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		

School of Plant, Environmental, and Soil Sciences

PRE/POST Comparisons Test

Trial ID: 11SB04JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX
Rating Date										13/Jul/2011	13/Jul/2011
Rating Data Type										Control	Control
Rating Unit										%	%
Trt	Treatment	Form	Form		Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type	Rate	Unit	Rate	Rate Unit	Stage	Code		
14	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a	PRE	A	100a	64ab
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
15	No PRE									98a	46b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
16	Nontreated									0b	0c
LSD (P=.05)										1.8	18.5
Standard Deviation										1.3	12.9
CV										1.34	18.15
Grand Mean										93.59	71.16
Bartlett's X2										0.0	12.693
P(Bartlett's X2)										.	0.551
Replicate F										1.000	0.590
Replicate Prob(F)										0.4016	0.6248
Treatment F										1595.667	12.748
Treatment Prob(F)										0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

PRE/POST Comparisons Test

Trial ID: 11SB04JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										AMASS	SIDSP
Rating Date										13/Jul/2011	13/Jul/2011
Rating Data Type										Control	Control
Rating Unit										%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code		
1	Envive	41.3	DF	0.09	lb ai/a	3.5	oz/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
2	Enlight	47.86	DF	0.084	lb ai/a	2.8	oz/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
3	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
4	Canopy EX	29.5	WDG	0.0277	lb ai/a	1.5	oz/a	PRE	A	100a	91b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
5	Sencor	75	DF	0.5	lb ai/a	10.7	oz/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
6	Authority MTZ	45	DF	0.394	lb ai/a	14	oz/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
7	Prefix	5.29	L	1.32	lb ai/a	2	pt/a	PRE	A	100a	96a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
8	Valor SX	51	DF	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
9	Boundary	6.5	L	1.22	lb ai/a	1.5	pt/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
10	Valor XLT	40	DF	0.075	lb ai/a	3	oz/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
11	Cinch	7.64	L	0.955	lb ai/a	16	oz/a	PRE	A	100a	96a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
12	Gangster V	51	DF	0.096	lb ai/a	3	oz/a	PRE	A	100a	100a
	Gangster FR	84	DF	0.0315	lb ai/a	0.6	oz/a	PRE	A		
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
13	Fierce	76	WDG	0.142	lb ai/a	3	oz wt/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		

School of Plant, Environmental, and Soil Sciences

PRE/POST Comparisons Test

Trial ID: 11SB04JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										AMASS	SIDSP
Rating Date										13/Jul/2011	13/Jul/2011
Rating Data Type										Control	Control
Rating Unit										%	%
Trt	Treatment	Form	Form		Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type	Rate	Unit	Rate	Rate Unit	Stage	Code		
14	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
15	No PRE									100a	76c
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
16	Nontreated									0b	0d
LSD (P=.05)										0.0	3.7
Standard Deviation										0.0	2.6
CV										0.0	2.84
Grand Mean										93.75	91.19
Bartlett's X2										0.0	5.648
P(Bartlett's X2)										.	0.13
Replicate F										0.000	0.904
Replicate Prob(F)										1.0000	0.4466
Treatment F										0.000	374.138
Treatment Prob(F)										1.0000	0.0001

School of Plant, Environmental, and Soil Sciences

PRE/POST Comparisons Test

Trial ID: 11SB04JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										IPOHE	
Crop Code										GLXMA	
BBCH Scale										BSOY	
Rating Date										13/Jul/2011	
Rating Data Type										Control	
Rating Unit										Injury	
										%	
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code		
1	Envive	41.3	DF	0.09	lb ai/a	3.5	oz/a	PRE	A	79ab	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
2	Enlight	47.86	DF	0.084	lb ai/a	2.8	oz/a	PRE	A	89ab	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
3	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	76ab	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
4	Canopy EX	29.5	WDG	0.0277	lb ai/a	1.5	oz/a	PRE	A	79ab	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
5	Sencor	75	DF	0.5	lb ai/a	10.7	oz/a	PRE	A	78ab	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
6	Authority MTZ	45	DF	0.394	lb ai/a	14	oz/a	PRE	A	80ab	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
7	Prefix	5.29	L	1.32	lb ai/a	2	pt/a	PRE	A	68ab	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
8	Valor SX	51	DF	0.064	lb ai/a	2	oz/a	PRE	A	100a	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
9	Boundary	6.5	L	1.22	lb ai/a	1.5	pt/a	PRE	A	74ab	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
10	Valor XLT	40	DF	0.075	lb ai/a	3	oz/a	PRE	A	99a	4ab
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
11	Cinch	7.64	L	0.955	lb ai/a	16	oz/a	PRE	A	86ab	1b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
12	Gangster V	51	DF	0.096	lb ai/a	3	oz/a	PRE	A	99a	3b
	Gangster FR	84	DF	0.0315	lb ai/a	0.6	oz/a	PRE	A		
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
13	Fierce	76	WDG	0.142	lb ai/a	3	oz wt/a	PRE	A	93ab	8a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		

School of Plant, Environmental, and Soil Sciences

PRE/POST Comparisons Test

Trial ID: 11SB04JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										IPOHE		
Crop Code										GLXMA		
BBCH Scale										BSOY		
Rating Date										13/Jul/2011	13/Jul/2011	
Rating Data Type										Control	Injury	
Rating Unit										%	%	
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type	Rate	Unit	Rate	Rate	Unit	Stage	Code		
14	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a		PRE	A	63ab	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a		POST	B		
15	No PRE										56b	0b
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a		POST	B		
16	Nontreated										0c	0b
LSD (P=.05)										21.9	4.0	
Standard Deviation										15.3	2.8	
CV										20.19	296.15	
Grand Mean										75.95	0.94	
Bartlett's X2										35.126	4.089	
P(Bartlett's X2)										0.001*	0.252	
Replicate F										1.856	1.757	
Replicate Prob(F)										0.1506	0.1690	
Treatment F										9.727	2.216	
Treatment Prob(F)										0.0001	0.0202	

School of Plant, Environmental, and Soil Sciences

PRE/POST Comparisons Test

Trial ID: 11SB04JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX
Rating Date										29/Jul/2011	29/Jul/2011
Rating Data 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	DF	0.09	lb ai/a	3.5	oz/a	PRE	A	100a	71abc
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
2	Enlight	47.86	DF	0.084	lb ai/a	2.8	oz/a	PRE	A	100a	95ab
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
3	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	100a	92ab
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
4	Canopy EX	29.5	WDG	0.0277	lb ai/a	1.5	oz/a	PRE	A	100a	80abc
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
5	Sencor	75	DF	0.5	lb ai/a	10.7	oz/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
6	Authority MTZ	45	DF	0.394	lb ai/a	14	oz/a	PRE	A	100a	87ab
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
7	Prefix	5.29	L	1.32	lb ai/a	2	pt/a	PRE	A	100a	65bc
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
8	Valor SX	51	DF	0.064	lb ai/a	2	oz/a	PRE	A	100a	87ab
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
9	Boundary	6.5	L	1.22	lb ai/a	1.5	pt/a	PRE	A	100a	73abc
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
10	Valor XLT	40	DF	0.075	lb ai/a	3	oz/a	PRE	A	100a	98a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
11	Cinch	7.64	L	0.955	lb ai/a	16	oz/a	PRE	A	100a	66bc
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
12	Gangster V	51	DF	0.096	lb ai/a	3	oz/a	PRE	A	100a	93ab
	Gangster FR	84	DF	0.0315	lb ai/a	0.6	oz/a	PRE	A		
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
13	Fierce	76	WDG	0.142	lb ai/a	3	oz wt/a	PRE	A	100a	95ab
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		

School of Plant, Environmental, and Soil Sciences

PRE/POST Comparisons Test

Trial ID: 11SB04JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX
Rating Date										29/Jul/2011	29/Jul/2011
Rating Data 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	0.133	lb ai/a	2.5	oz wt/a	PRE	A	100a	65bc
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
15	No PRE									100a	55c
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
16	Nontreated									0b	0d
LSD (P=.05)										0.0	18.1
Standard Deviation										0.0	12.7
CV										0.0	16.6
Grand Mean										93.75	76.25
Bartlett's X2										0.0	13.876
P(Bartlett's X2)										.	0.383
Replicate F										0.000	1.193
Replicate Prob(F)										1.0000	0.3232
Treatment F										0.000	15.142
Treatment Prob(F)										1.0000	0.0001

School of Plant, Environmental, and Soil Sciences

PRE/POST Comparisons Test

Trial ID: 11SB04JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										AMASS	SIDSP
Rating Date										29/Jul/2011	29/Jul/2011
Rating Data 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	DF	0.09	lb ai/a	3.5	oz/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
2	Enlight	47.86	DF	0.084	lb ai/a	2.8	oz/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
3	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
4	Canopy EX	29.5	WDG	0.0277	lb ai/a	1.5	oz/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
5	Sencor	75	DF	0.5	lb ai/a	10.7	oz/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
6	Authority MTZ	45	DF	0.394	lb ai/a	14	oz/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
7	Prefix	5.29	L	1.32	lb ai/a	2	pt/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
8	Valor SX	51	DF	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
9	Boundary	6.5	L	1.22	lb ai/a	1.5	pt/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
10	Valor XLT	40	DF	0.075	lb ai/a	3	oz/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
11	Cinch	7.64	L	0.955	lb ai/a	16	oz/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
12	Gangster V	51	DF	0.096	lb ai/a	3	oz/a	PRE	A	100a	100a
	Gangster FR	84	DF	0.0315	lb ai/a	0.6	oz/a	PRE	A		
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
13	Fierce	76	WDG	0.142	lb ai/a	3	oz wt/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		

School of Plant, Environmental, and Soil Sciences

PRE/POST Comparisons Test

Trial ID: 11SB04JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										AMASS	SIDSP
Rating Date										29/Jul/2011	29/Jul/2011
Rating Data Type										Control	Control
Rating Unit										%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type	Rate	Unit	Rate	Rate	Unit	Stage	Code	
14	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a	PRE	A	100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
15	No PRE									100a	100a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
16	Nontreated									0b	0b
LSD (P=.05)										0.0	0.0
Standard Deviation										0.0	0.0
CV										0.0	0.0
Grand Mean										93.75	93.75
Bartlett's X2										0.0	0.0
P(Bartlett's X2)										.	.
Replicate F										0.000	0.000
Replicate Prob(F)										1.0000	1.0000
Treatment F										0.000	0.000
Treatment Prob(F)										1.0000	1.0000

School of Plant, Environmental, and Soil Sciences

PRE/POST Comparisons Test

Trial ID: 11SB04JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										IPOHE	
Pest Code										GLXMA	
Crop Code										BSOY	
BBCH Scale										29/Jul/2011	
Rating Date										29/Jul/2011	
Rating Data Type										Control	
Rating Unit										Injury	
										%	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Envive	41.3	DF	0.09	lb ai/a	3.5	oz/a	PRE	A	94a	3c
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
2	Enlight	47.86	DF	0.084	lb ai/a	2.8	oz/a	PRE	A	100a	1c
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
3	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	99a	0c
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
4	Canopy EX	29.5	WDG	0.0277	lb ai/a	1.5	oz/a	PRE	A	91a	0c
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
5	Sencor	75	DF	0.5	lb ai/a	10.7	oz/a	PRE	A	91a	3c
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
6	Authority MTZ	45	DF	0.394	lb ai/a	14	oz/a	PRE	A	100a	0c
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
7	Prefix	5.29	L	1.32	lb ai/a	2	pt/a	PRE	A	94a	1c
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
8	Valor SX	51	DF	0.064	lb ai/a	2	oz/a	PRE	A	99a	4bc
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
9	Boundary	6.5	L	1.22	lb ai/a	1.5	pt/a	PRE	A	99a	0c
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
10	Valor XLT	40	DF	0.075	lb ai/a	3	oz/a	PRE	A	100a	9ab
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
11	Cinch	7.64	L	0.955	lb ai/a	16	oz/a	PRE	A	99a	1c
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
12	Gangster V	51	DF	0.096	lb ai/a	3	oz/a	PRE	A	100a	5bc
	Gangster FR	84	DF	0.0315	lb ai/a	0.6	oz/a	PRE	A		
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		
13	Fierce	76	WDG	0.142	lb ai/a	3	oz wt/a	PRE	A	100a	12a
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B		

School of Plant, Environmental, and Soil Sciences

PRE/POST Comparisons Test

Trial ID: 11SB04JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

											IPOHE	
Pest Code												GLXMA
Crop Code												BSOY
BBCH Scale											29/Jul/2011	29/Jul/2011
Rating Date											Control	Injury
Rating Data Type											%	%
Rating Unit												
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code			
14	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a	PRE	A	86a	0c	
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B			
15	No PRE									85a	0c	
	Roundup Weathermax	5.5	L	0.95	lb ai/a	22	oz/a	POST	B			
16	Nontreated									0b	0c	
LSD (P=.05)											12.1	4.4
Standard Deviation											8.5	3.1
CV											9.45	125.97
Grand Mean											89.7	2.42
Bartlett's X2											36.146	6.94
P(Bartlett's X2)											0.001*	0.543
Replicate F											0.812	1.090
Replicate Prob(F)											0.4938	0.3633
Treatment F											33.257	5.489
Treatment Prob(F)											0.0001	0.0001

DTS Systems for Control of Glyphosate Resistant Weeds
Louisiana State University
School of Plant, Environmental, and Soil Sciences

Experiment number : 11SB05JG
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" (30" wheel tracks)/7
Soil type..... : clay loam
OM (%)..... : 1.9
pH : 6.3
Planting date : 6-13-11
Harvest date : N/A
Crop/Variety : Soybeans/Monsanto Line
Uniform std. treatment..... : N/A

Application type	PRE A	POST B	POST C
Date applied (mm-dd-yy)	6-13-11	7-5-11	7-19-11
Time (hh:mm-hh:mm)	4:30-5:15pm	10:30-11:30am	10:30-11:00am
Incorporation equipment.....	N/A	N/A	N/A
Incorporation depth.....	N/A	N/A	N/A
Air/Soil temperature (F)	91/100	88/87	76/84
Wind (mph/direction)	5-6/SW	2-3/NE	6-7/NW
Relative humidity (%)	48	51	91
Soil/Leaf surface moist.....	dry/N/A	dry/dry	moist/dry
Crop stage/height.....	N/A	V5-V6/12-15"	R1/16-20"
Sprayer type/mph.....	CO ₂ bkpk/3.0	CO ₂ bkpk/2.23	CO ₂ bkpk/2.23
Nozzle type/size.....	FF/11002VS	FF/TTI110015	FF/TTI110015
Boom ht/#noz/spacing (in)	18"/4/18"	18"/4/18"	18"/4/18"
GPA/psi (at nozzle)	15/28	15/28	15/28
Applied by	Bauerle	Bauerle	Bauerle

Weed species	population per ft ² /height/# leaves		
SEBEX	N/A	1-2/2-20"/4-5	0-1/5-18"/3-8
ECHCG	N/A	1-2/2-4"/3-4	N/A
AMASS	N/A	3-4/1-4"/3-5	N/A
SIDSP	N/A	2-3/1-4"/3-4	N/A
IPOLA	N/A	3-4/2-6"/2-5	N/A

Rainfall (in.)			
0-24 hr/1-3 days.....	0.00/0.00	0.00/0.00	0.00/1.74
4-7 days/2nd week.....	0.00/1.31	0.11/1.43	4.63/3.52
3rd week/4th week.....	0.00/0.01	6.37/3.52	0.36/0.10

Comments:

Pitted morningglory population was not consistent and ratings were not made. On July 13, soybean injury for Clarity treatments consisted of slight stunting and rolling of leaves in the terminal. Where Flexstar and Warrant were applied, a speckling of contacted leaves was observed. This injury was evident at the remaining rating dates and on July 29, a slight delay in canopy closure was observed. On July 29, chlorosis of top leaves was observed where Roundup Weathermax was applied twice at 44 oz/A following Valor preemergence (treatment 1).

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX	AMASS
Rating Date										5/Jul/2011	5/Jul/2011	5/Jul/2011
Rating Data Type										Control	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	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	94a	34ab	100a
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	2-4" pig	B			
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	10 DAB	C			
2	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	79a	23bc	54c
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
3	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	64b	33ab	55c
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ai/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			
4	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	87a	70a	86ab
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ae/a	2-4" pig	B			
5	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	86a	48ab	72b
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			
6	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	90a	64a	88ab
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C			
7	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	90a	64a	84ab
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX	AMASS
Rating Date										5/Jul/2011	5/Jul/2011	5/Jul/2011
Rating Data Type										Control	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	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	90a	65a	95a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			
9	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	98a	65a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
10	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	98a	45ab	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C			
11	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	90a	34ab	99a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			
12	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	93a	35ab	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C			
13	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	96a	38ab	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C			
14	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	90a	21bc	99a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX	AMASS
Rating Date										5/Jul/2011	5/Jul/2011	5/Jul/2011
Rating Data Type										Control	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	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	96a	45ab	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			
16	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	91a	45ab	99a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Classic	25	DF	0.00516	lb ai/a	0.33	oz/a	2-4" pig	B			
17	Prefix	5.29	EC	0.99	lb ai/a	1.5	pt/a	PRE	A	96a	11bc	93a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C			
18	Nontreated									0c	0c	0d
LSD (P=.05)										12.6	21.4	12.1
Standard Deviation										8.9	15.1	8.6
CV										10.53	36.97	10.14
Grand Mean										84.76	40.94	84.54
Bartlett's X2										40.405	17.757	53.413
P(Bartlett's X2)										0.001*	0.338	0.001*
Replicate F										0.735	0.220	2.074
Replicate Prob(F)										0.5362	0.8823	0.1152
Treatment F										25.705	6.797	36.256
Treatment Prob(F)										0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										SIDSP	GLXMA	ECHCG
Crop Code											BSOY	
BBCH Scale										5/Jul/2011	5/Jul/2011	13/Jul/2011
Rating Date										Control	Injury	Control
Rating Data Type										%	%	%
Rating Unit												
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code			
1	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	0a	100a
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	2-4" pig	B			
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	10 DAB	C			
2	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	60de	0a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
3	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	54e	0a	99a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ai/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			
4	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	86ab	0a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ae/a	2-4" pig	B			
5	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	71bcd	0a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			
6	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	81abc	0a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C			
7	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	85ab	0a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										SIDSP	GLXMA	ECHCG
Crop Code											BSOY	
BBCH Scale										5/Jul/2011	5/Jul/2011	13/Jul/2011
Rating Date										Control	Injury	Control
Rating Data Type										%	%	%
Rating Unit												
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code			
8	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	91a	0a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			
9	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	0a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
10	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	0a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C			
11	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	99a	0a	99a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			
12	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	0a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C			
13	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	0a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C			
14	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	0a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										SIDSP	GLXMA	ECHCG
Pest Code											BSOY	
Crop Code												
BBCH Scale												
Rating Date										5/Jul/2011	5/Jul/2011	13/Jul/2011
Rating Data Type										Control	Injury	Control
Rating Unit										%	%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code			
15	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	0a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B			
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B			
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B			
16	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	99a	0a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Classic	25	DF	0.00516	lb ai/a	0.33	oz/a	2-4" pig	B			
17	Prefix	5.29	EC	0.99	lb ai/a	1.5	pt/a	PRE	A	68cde	0a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B			
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C			
18	Nontreated									0f	0a	0b
LSD (P=.05)										11.9	0.0	1.0
Standard Deviation										8.4	0.0	0.7
CV										10.15	0.0	0.73
Grand Mean										82.93	0.0	94.28
Bartlett's X2										25.074	0.0	3.05
P(Bartlett's X2)										0.005*	.	0.218
Replicate F										0.165	0.000	2.363
Replicate Prob(F)										0.9192	1.0000	0.0831
Treatment F										37.314	0.000	4619.597
Treatment Prob(F)										0.0001	1.0000	0.0001

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										SEBEX	AMASS
Rating Date										13/Jul/2011	13/Jul/2011
Rating Data 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	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	90bc	100a
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	10 DAB	C		
2	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	97a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
3	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	93abc	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ai/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
4	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	99a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ae/a	2-4" pig	B		
5	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	94abc	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
6	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	97a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C		
7	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	99a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										SEBEX	AMASS
Rating Date										13/Jul/2011	13/Jul/2011
Rating Data Type										Control	Control
Rating Unit										%	%
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code		
8	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
9	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	95abc	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
10	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	95ab	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
11	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	96ab	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
12	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	93abc	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
13	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	94abc	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C		
14	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	98a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										SEBEX	AMASS
										13/Jul/2011	13/Jul/2011
										Control	Control
										%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code		
15	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
16	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	89c	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Classic	25	DF	0.00516	lb ai/a	0.33	oz/a	2-4" pig	B		
17	Prefix	5.29	EC	0.99	lb ai/a	1.5	pt/a	PRE	A	60d	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
18	Nontreated									0e	0b
LSD (P=.05)										4.0	0.0
Standard Deviation										2.8	0.0
CV										3.22	0.0
Grand Mean										88.01	94.44
Bartlett's X2										23.621	0.0
P(Bartlett's X2)										0.072	.
Replicate F										3.633	0.000
Replicate Prob(F)										0.0194	1.0000
Treatment F										280.539	0.000
Treatment Prob(F)										0.0001	1.0000

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										SIDSP	
Pest Code											GLXMA
Crop Code											BSOY
BBCH Scale											
Rating Date										13/Jul/2011	13/Jul/2011
Rating Data Type										Control	Injury
Rating Unit										%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code		
1	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	6ab
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	10 DAB	C		
2	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	100a	3b
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
3	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	98a	4b
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ai/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
4	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	3b
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ae/a	2-4" pig	B		
5	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	0b
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
6	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	1b
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C		
7	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	13a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										SIDSP	
Pest Code											
Crop Code										GLXMA	
BBCH Scale										BSOY	
Rating Date										13/Jul/2011	13/Jul/2011
Rating Data Type										Control	Injury
Rating Unit										%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code		
8	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	13a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
9	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	3b
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
10	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	3b
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
11	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	4b
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
12	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	0b
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
13	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	0b
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C		
14	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	12a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										SIDSP	
Pest Code											GLXMA
Crop Code											BSOY
BBCH Scale											
Rating Date										13/Jul/2011	13/Jul/2011
Rating Data Type										Control	Injury
Rating Unit										%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code		
15	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	11a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
16	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	7ab
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Classic	25	DF	0.00516	lb ai/a	0.33	oz/a	2-4" pig	B		
17	Prefix	5.29	EC	0.99	lb ai/a	1.5	pt/a	PRE	A	100a	0b
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
18	Nontreated									0b	0b
LSD (P=.05)										1.8	4.6
Standard Deviation										1.2	3.2
CV										1.3	71.92
Grand Mean										94.3	4.51
Bartlett's X2										0.0	9.329
P(Bartlett's X2)										.	0.675
Replicate F										1.045	1.538
Replicate Prob(F)										0.3817	0.2170
Treatment F										1476.418	8.356
Treatment Prob(F)										0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX
Rating Date										20/Jul/2011	20/Jul/2011
Rating Data 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	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	94a
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	10 DAB	C		
2	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	100a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
3	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	100a	99a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ai/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
4	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ae/a	2-4" pig	B		
5	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	98a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
6	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	99a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C		
7	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX
Rating Date										20/Jul/2011	20/Jul/2011
Rating Data 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	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	99a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
9	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	98a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
10	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	98a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
11	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
12	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	99a	99a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
13	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	98a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C		
14	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										ECHCG	SEBEX
										20/Jul/2011	20/Jul/2011
										Control	Control
										%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code		
15	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
16	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	91a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Classic	25	DF	0.00516	lb ai/a	0.33	oz/a	2-4" pig	B		
17	Prefix	5.29	EC	0.99	lb ai/a	1.5	pt/a	PRE	A	100a	63b
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
18	Nontreated									0b	0c
LSD (P=.05)										1.6	5.6
Standard Deviation										1.1	3.9
CV										1.21	4.33
Grand Mean										94.12	91.0
Bartlett's X2										6.241	22.255
P(Bartlett's X2)										0.283	0.004*
Replicate F										0.671	0.846
Replicate Prob(F)										0.5739	0.4758
Treatment F										1707.584	152.822
Treatment Prob(F)										0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										AMASS	SIDSP
Rating Date										20/Jul/2011	20/Jul/2011
Rating Data Type										Control	Control
Rating Unit										%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code		
1	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	10 DAB	C		
2	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	100a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
3	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	100a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ai/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
4	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	99a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ae/a	2-4" pig	B		
5	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
6	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C		
7	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										AMASS	SIDSP
Rating Date										20/Jul/2011	20/Jul/2011
Rating Data 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	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
9	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
10	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
11	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
12	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
13	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C		
14	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										AMASS	SIDSP
Rating Date										20/Jul/2011	20/Jul/2011
Rating Data Type										Control	Control
Rating Unit										%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code		
15	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
16	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Classic	25	DF	0.00516	lb ai/a	0.33	oz/a	2-4" pig	B		
17	Prefix	5.29	EC	0.99	lb ai/a	1.5	pt/a	PRE	A	100a	99a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
18	Nontreated									0b	0b
LSD (P=.05)										0.0	1.3
Standard Deviation										0.0	0.9
CV										0.0	0.93
Grand Mean										94.44	94.3
Bartlett's X2										0.0	0.0
P(Bartlett's X2)										.	1.00
Replicate F										0.000	0.694
Replicate Prob(F)										1.0000	0.5601
Treatment F										0.000	2895.601
Treatment Prob(F)										1.0000	0.0001

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										ECHCG	
Pest Code										GLXMA	
Crop Code										BSOY	
BBCH Scale										20/Jul/2011 29/Jul/2011	
Rating Date										Injury	
Rating Data Type										Control	
Rating Unit										%	
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code		
1	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	0d	100a
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	10 DAB	C		
2	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	0d	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
3	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	0d	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ai/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
4	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	0d	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ae/a	2-4" pig	B		
5	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	0d	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
6	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	10ab	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C		
7	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	6bc	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										ECHCG	
Pest Code										GLXMA	
Crop Code										BSOY	
BBCH Scale										20/Jul/2011	
Rating Date										29/Jul/2011	
Rating Data Type										Injury	
Rating Unit										Control	
										%	
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code		
8	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	3cd	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
9	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	1d	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
10	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	5cd	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
11	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	0d	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
12	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	10ab	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
13	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	12a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C		
14	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	1d	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code											ECHCG
Crop Code											GLXMA
BBCH Scale											BSOY
Rating Date											20/Jul/2011 29/Jul/2011
Rating Data 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	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	2d	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
16	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	0d	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Classic	25	DF	0.00516	lb ai/a	0.33	oz/a	2-4" pig	B		
17	Prefix	5.29	EC	0.99	lb ai/a	1.5	pt/a	PRE	A	0d	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
18	Nontreated									0d	0b
LSD (P=.05)										3.4	0.0
Standard Deviation										2.4	0.0
CV										82.96	0.0
Grand Mean										2.84	94.44
Bartlett's X2										5.85	0.0
P(Bartlett's X2)										0.664	.
Replicate F										0.668	0.000
Replicate Prob(F)										0.5757	1.0000
Treatment F										12.027	0.000
Treatment Prob(F)										0.0001	1.0000

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										SEBEX	AMASS
Rating Date										29/Jul/2011	29/Jul/2011
Rating Data 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	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	98a	100a
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	10 DAB	C		
2	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	100a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
3	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	100a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ai/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
4	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ae/a	2-4" pig	B		
5	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
6	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C		
7	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										SEBEX	AMASS
Rating Date										29/Jul/2011	29/Jul/2011
Rating Data Type										Control	Control
Rating Unit										%	%
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code		
8	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	100a
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
9	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
10	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
11	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
12	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
13	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C		
14	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										SEBEX	AMASS
										29/Jul/2011	29/Jul/2011
										Control	Control
										%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code		
15	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
16	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	90a	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Classic	25	DF	0.00516	lb ai/a	0.33	oz/a	2-4" pig	B		
17	Prefix	5.29	EC	0.99	lb ai/a	1.5	pt/a	PRE	A	63b	100a
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
18	Nontreated									0c	0b
LSD (P=.05)										5.6	0.0
Standard Deviation										3.9	0.0
CV										4.25	0.0
Grand Mean										91.66	94.44
Bartlett's X2										5.498	0.0
P(Bartlett's X2)										0.064	.
Replicate F										0.834	0.000
Replicate Prob(F)										0.4821	1.0000
Treatment F										158.755	0.000
Treatment Prob(F)										0.0001	1.0000

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										SIDSP	
Pest Code											GLXMA
Crop Code											BSOY
BBCH Scale											
Rating Date										29/Jul/2011	29/Jul/2011
Rating Data Type										Control	Injury
Rating Unit										%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code		
1	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	6a
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	1.54	lb ae/a	44	oz/a	10 DAB	C		
2	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	100a	0b
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
3	Clarity	4	SL	0.5	lb ae/a	16	oz/a	PRE	A	100a	0b
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ai/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
4	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	0b
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	0.5	lb ae/a	2-4" pig	B		
5	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	0b
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
6	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	4ab
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C		
7	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	2ab
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										SIDSP	
Pest Code											GLXMA
Crop Code											BSOY
BBCH Scale											
Rating Date										29/Jul/2011	29/Jul/2011
Rating Data Type										Control	Injury
Rating Unit										%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code		
8	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A	100a	3ab
	CANG	100	AD	2.5	% v/v	2.5	% v/v	PRE	A		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
9	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	1ab
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
10	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	3ab
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
11	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	0b
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
12	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	3ab
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
13	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	1ab
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	10 DAB	C		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	10 DAB	C		
14	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	0b
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		

School of Plant, Environmental, and Soil Sciences

DTS Systems for Control of Glyphosate Resistant Weeds

Trial ID: 11SB05JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										SIDSP	
Pest Code											
Crop Code										GLXMA	
BBCH Scale										BSOY	
Rating Date										29/Jul/2011	29/Jul/2011
Rating Data Type										Control	Injury
Rating Unit										%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl		
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code		
15	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	2ab
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Clarity	4	SL	0.5	lb ae/a	16	oz/a	2-4" pig	B		
	Flexstar	1.88	SL	0.294	lb ai/a	1.25	pt/a	2-4" pig	B		
	Warrant	3	CS	1.13	lb ai/a	3	pt/a	2-4" pig	B		
16	Valor	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	100a	0b
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Classic	25	DF	0.00516	lb ai/a	0.33	oz/a	2-4" pig	B		
17	Prefix	5.29	EC	0.99	lb ai/a	1.5	pt/a	PRE	A	100a	1ab
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	2-4" pig	B		
	Roundup Weathermax	4.5	SL	0.77	lb ae/a	22	oz/a	10 DAB	C		
18	Nontreated									0b	0b
LSD (P=.05)										0.0	3.3
Standard Deviation										0.0	2.3
CV										0.0	168.37
Grand Mean										94.44	1.37
Bartlett's X2										0.0	2.419
P(Bartlett's X2)										.	0.983
Replicate F										0.000	0.109
Replicate Prob(F)										1.0000	0.9545
Treatment F										0.000	2.145
Treatment Prob(F)										1.0000	0.0201

Evaluation of Zidua in Soybean
Louisiana State University
School of Plant, Environmental, and Soil Sciences

Experiment number : 11SB06JG
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" (30" wheel tracks)/7
Soil type..... : clay loam
OM (%)..... : 1.9
pH : 6.3
Planting date : 6-14-11
Harvest date..... : N/A
Crop/Variety : Soybean/ AsGrow 5503RR
Uniform std. treatment..... : N/A

Application type	PRE A	POST B	POST C
Date applied (mm-dd-yy)	6-14-11	7-5-11	7-19-11
Time (hh:mm-hh:mm)	10:00-10:30am	2:10-2:30pm	10:15-10:30am
Incorporation equipment.....	N/A	N/A	N/A
Incorporation depth.....	N/A	N/A	N/A
Air/Soil temperature (F)	86/89	92/96	82/82
Wind (mph/direction)	3-4/NW	5-6/W	4-5/SE
Relative humidity (%)	59	42	74
Soil/Leaf surface moist.....	dry/N/A	dry/dry	moist/dry
Crop stage/height.....	N/A	V5-V6/12-15"	R1/16-20"
Sprayer type/mph.....	CO ₂ bkp/3.0	CO ₂ bkp/3.0	CO ₂ bkp/3.0
Nozzle type/size.....	FF/11002VS	FF/11002VS	FF/11002VS
Boom ht/#noz/spacing (in)	18"/4/18"	18"/4/18"	18"/4/18"
GPA/psi (at nozzle)	15/28	15/28	15/28
Applied by	Bauerle	Bauerle	Bauerle

Weed species	population per ft ² /height/# leaves		
ECHCG	N/A	2-3/2-5"/3-4	N/A
SEBEX	N/A	0-1/3-6"/4-5	0-1/5-12"/4-8
AMASS	N/A	0-1/2-4"/2-4	N/A
SIDSP	N/A	0-1/2-4"/3-4	N/A
IPOLA	N/A	1-2/2-5"/2-4	1-5/1-5"/1-7

Rainfall (in.)			
0-24 hr/1-3 days.....	0.00/0.00	0.00/0.00	0.00/1.74
4-7 days/2nd week.....	0.23/1.08	0.11/1.43	4.63/3.52
3rd week/4th week.....	0.00/0.11	6.37/3.52	0.36/ 0.10

Comments:

School of Plant, Environmental, and Soil Sciences

Evaluation of Zidua in Soybean

Trial ID: 11SB06JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX	AMASS
Rating Date										5/Jul/2011	5/Jul/2011	5/Jul/2011
Rating Data Type										Control	Control	Control
Rating Unit										%	%	%
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl				
No.	Name	Conc	Type	Rate	Unit	Rate	Unit	Stage	Code			
1	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a	PRE	A	96a	35a	99a
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
2	Zidua	85	WG	0.106	lb ai/a	2.0	oz wt/a	PRE	A	96a	50a	100a
	Sharpen	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
3	Zidua	85	WG	0.106	lb ai/a	2.0	oz wt/a	PRE	A	96a	40a	99a
	Zidua	85	WG	0.053	lb ai/a	1	oz wt/a	3-4 WAP	B			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
4	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a	PRE	A	96a	50a	100a
	Zidua	85	WG	0.053	lb ai/a	1	oz wt/a	3-4 WAP	B			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
5	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B	0b	0b	0b
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	5-6 WAP	C			
6	Nontreated									0b	0b	0b
LSD (P=.05)										3.2	20.4	1.9
Standard Deviation										2.1	13.5	1.3
CV										3.29	46.42	1.95
Grand Mean										64.17	29.17	66.25
Bartlett's X2										0.0	3.789	0.0
P(Bartlett's X2)										1.00	0.285	1.00
Replicate F										0.625	1.000	2.500
Replicate Prob(F)										0.6098	0.4199	0.0991
Treatment F										2223.375	11.873	6321.000
Treatment Prob(F)										0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Evaluation of Zidua in Soybean

Trial ID: 11SB06JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										SIDSP	IPOLA	GLXMA
												BSOY
										5/Jul/2011	5/Jul/2011	5/Jul/2011
										Control	Control	Injury
										%	%	%
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl				
No.	Name	Conc	Type	Rate	Unit	Rate	Unit	Stage	Code			
1	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a	PRE	A	99a	40b	0a
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
2	Zidua	85	WG	0.106	lb ai/a	2.0	oz wt/a	PRE	A	100a	78a	0a
	Sharpen	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
3	Zidua	85	WG	0.106	lb ai/a	2.0	oz wt/a	PRE	A	99a	49b	0a
	Zidua	85	WG	0.053	lb ai/a	1	oz wt/a	3-4 WAP	B			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
4	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a	PRE	A	100a	46b	0a
	Zidua	85	WG	0.053	lb ai/a	1	oz wt/a	3-4 WAP	B			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
5	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B	0b	0c	0a
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	5-6 WAP	C			
6	Nontreated									0b	0c	0a
LSD (P=.05)										1.9	12.1	0.0
Standard Deviation										1.3	8.1	0.0
CV										1.95	22.76	0.0
Grand Mean										66.25	35.42	0.0
Bartlett's X2										0.0	3.108	0.0
P(Bartlett's X2)										1.00	0.375	.
Replicate F										2.500	1.731	0.000
Replicate Prob(F)										0.0991	0.2036	1.0000
Treatment F										6321.000	56.564	0.000
Treatment Prob(F)										0.0001	0.0001	1.0000

School of Plant, Environmental, and Soil Sciences

Evaluation of Zidua in Soybean

Trial ID: 11SB06JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX	AMASS
Rating Date										13/Jul/2011	13/Jul/2011	13/Jul/2011
Rating Data Type										Control	Control	Control
Rating Unit										%	%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type	Unit	Unit	Rate	Rate	Stage	Code			
1	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a	PRE	A	100a	49ab	98a
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
2	Zidua	85	WG	0.106	lb ai/a	2.0	oz wt/a	PRE	A	100a	68a	100a
	Sharpen	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
3	Zidua	85	WG	0.106	lb ai/a	2.0	oz wt/a	PRE	A	99a	56ab	100a
	Zidua	85	WG	0.053	lb ai/a	1	oz wt/a	3-4 WAP	B			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
4	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a	PRE	A	100a	65a	100a
	Zidua	85	WG	0.053	lb ai/a	1	oz wt/a	3-4 WAP	B			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
5	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B	96b	36b	98a
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	5-6 WAP	C			
6	Nontreated									0c	0c	0b
LSD (P=.05)										2.1	17.0	2.5
Standard Deviation										1.4	11.3	1.7
CV										1.69	24.8	2.02
Grand Mean										82.5	45.63	82.5
Bartlett's X2										0.0	10.5	0.0
P(Bartlett's X2)										1.00	0.033*	1.00
Replicate F										1.429	1.072	1.000
Replicate Prob(F)										0.2737	0.3907	0.4199
Treatment F										3364.714	19.665	2354.400
Treatment Prob(F)										0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Evaluation of Zidua in Soybean

Trial ID: 11SB06JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

										SIDSP	IPOLA	GLXMA
Pest Code												BSOY
Crop Code												13/Jul/2011
BBCH Scale												Injury
Rating Date										13/Jul/2011	13/Jul/2011	13/Jul/2011
Rating Data Type										Control	Control	%
Rating Unit										%	%	%
Trt	Treatment	Form	Form		Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type		Unit	Rate	Rate Unit	Stage	Code			
1	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a	PRE	A	98a	58b	0a
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
2	Zidua	85	WG	0.106	lb ai/a	2.0	oz wt/a	PRE	A	99a	85a	0a
	Sharpen	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
3	Zidua	85	WG	0.106	lb ai/a	2.0	oz wt/a	PRE	A	100a	61b	0a
	Zidua	85	WG	0.053	lb ai/a	1	oz wt/a	3-4 WAP	B			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
4	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a	PRE	A	99a	65b	0a
	Zidua	85	WG	0.053	lb ai/a	1	oz wt/a	3-4 WAP	B			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
5	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B	84b	50b	0a
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	5-6 WAP	C			
6	Nontreated									0c	0c	0a
LSD (P=.05)										5.8	15.4	0.0
Standard Deviation										3.8	10.2	0.0
CV										4.8	19.18	0.0
Grand Mean										79.79	53.13	0.0
Bartlett's X2										5.664	3.057	0.0
P(Bartlett's X2)										0.129	0.548	.
Replicate F										0.261	2.043	0.000
Replicate Prob(F)										0.8526	0.1510	1.0000
Treatment F										427.123	31.395	0.000
Treatment Prob(F)										0.0001	0.0001	1.0000

School of Plant, Environmental, and Soil Sciences

Evaluation of Zidua in Soybean

Trial ID: 11SB06JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX	AMASS
Rating Date										29/Jul/2011	29/Jul/2011	29/Jul/2011
Rating Data Type										Control	Control	Control
Rating Unit										%	%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type	Unit	Unit	Rate	Rate	Stage	Code			
1	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a	PRE	A	100a	64a	100a
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
2	Zidua	85	WG	0.106	lb ai/a	2.0	oz wt/a	PRE	A	100a	69a	100a
	Sharpen	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
3	Zidua	85	WG	0.106	lb ai/a	2.0	oz wt/a	PRE	A	99a	66a	100a
	Zidua	85	WG	0.053	lb ai/a	1	oz wt/a	3-4 WAP	B			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
4	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a	PRE	A	99a	81a	100a
	Zidua	85	WG	0.053	lb ai/a	1	oz wt/a	3-4 WAP	B			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
5	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B	100a	74a	100a
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	5-6 WAP	C			
6	Nontreated									0b	0b	0b
LSD (P=.05)										1.6	15.6	0.0
Standard Deviation										1.1	10.3	0.0
CV										1.28	17.51	0.0
Grand Mean										82.79	58.96	83.33
Bartlett's X2										3.437	9.553	0.0
P(Bartlett's X2)										0.179	0.049*	.
Replicate F										2.297	5.143	0.000
Replicate Prob(F)										0.1192	0.0121	1.0000
Treatment F										5821.776	32.750	0.000
Treatment Prob(F)										0.0001	0.0001	1.0000

School of Plant, Environmental, and Soil Sciences

Evaluation of Zidua in Soybean

Trial ID: 11SB06JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										SIDSP	IPOLA	GLXMA
Crop Code												BSOY
BBCH Scale												
Rating Date										29/Jul/2011	29/Jul/2011	29/Jul/2011
Rating Data Type										Control	Control	Injury
Rating Unit										%	%	%
Trt	Treatment	Form	Form		Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code			
1	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a	PRE	A	100a	59a	5a
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
2	Zidua	85	WG	0.106	lb ai/a	2.0	oz wt/a	PRE	A	100a	80a	4a
	Sharpen	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
3	Zidua	85	WG	0.106	lb ai/a	2.0	oz wt/a	PRE	A	100a	58a	9a
	Zidua	85	WG	0.053	lb ai/a	1	oz wt/a	3-4 WAP	B			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
4	Zidua	85	WG	0.133	lb ai/a	2.5	oz wt/a	PRE	A	100a	75a	11a
	Zidua	85	WG	0.053	lb ai/a	1	oz wt/a	3-4 WAP	B			
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B			
	Quest	50	SL	0.25	% v/v	0.25	% v/v	3-4 WAP	B			
5	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4 WAP	B	100a	70a	6a
	Roundup Powermax	4.5	SL	0.77	lb ae/a	22	fl oz/a	5-6 WAP	C			
6	Nontreated									0b	0b	0a
LSD (P=.05)										0.0	18.6	7.9
Standard Deviation										0.0	12.3	5.2
CV										0.0	21.69	91.6
Grand Mean										83.33	56.88	5.71
Bartlett's X2										0.0	0.894	7.58
P(Bartlett's X2)										.	0.827	0.108
Replicate F										0.000	0.244	0.087
Replicate Prob(F)										1.0000	0.8642	0.9662
Treatment F										0.000	22.473	2.031
Treatment Prob(F)										1.0000	0.0001	0.1321

Roundup Formulations Test
Louisiana State University
School of Plant, Environmental, and Soil Sciences

Experiment number : 11SB07JG
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 : 6-14-11
Harvest date : N/A
Crop/Variety : Soybean/AsGrow 5503RR
Uniform std. treatment..... : N/A

Application type : POST A
Date applied (mm-dd-yy) : 6-30-11
Time (hh:mm-hh:mm) : 10:00-11:00am
Incorporation equipment..... : N/A
Incorporation depth..... : N/A
Air/Soil temperature (F) : 86/88
Wind (mph/direction) : 4-5/W
Relative humidity (%) : 64
Soil/Leaf surface moist..... : dry/dry
Crop stage/height..... : V3-V4/6-8"
Sprayer type/mph..... : CO₂bkpk/3.0
Nozzle type/size..... : FF/11002VS
Boom ht/#noz/spacing (in) : 18"/4/18"
GPA/psi (at nozzle) : 15/28
Applied by : Bauerle

Weed species : population per ft²/height/# leaves
ECHCG : 2-4/2-6"/3-7
SEBEX : 2-5/2-8"/2-10
IPOSS : 1-3/2-5"/3-8
SIDSP : 1-3/1-2"/2-3
AMASS : 2-5/1-2"/2-4

Rainfall (in.)
0-24 hr/1-3 days..... : 0.00/0.00
4-7 days/2nd week..... : 0.00/0.32
3rd week/4th week..... : 1.22/2.11

Comments:

On the July 20 rating, weeds represented those present at time of herbicide application of June 30 along with a new flush.

School of Plant, Environmental, and Soil Sciences

Roundup Formulations Test

Trial ID: 11SB07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farms

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX	AMASS
Rating Date										10/Jul/2011	10/Jul/2011	10/Jul/2011
Rating Data Type										Control	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	MON 76238	4.5	SL	0.5	lb ae/a	0.5	lb ae/a	POST	A	100a	46ab	99a
2	MON 76237	4.5	SL	0.5	lb ae/a	0.5	lb ae/a	POST	A	100a	53ab	100a
3	MON 76640	4.5	SL	0.5	lb ae/a	0.5	lb ae/a	POST	A	100a	53ab	100a
4	MON 76701	4.5	SL	0.5	lb ae/a	0.5	lb ae/a	POST	A	100a	50ab	100a
5	MON 76660	4.5	SL	0.5	lb ae/a	0.5	lb ae/a	POST	A	100a	54ab	100a
6	MON 76702	4.5	SL	0.5	lb ae/a	0.5	lb ae/a	POST	A	100a	45b	100a
7	MON 76667	4.5	SL	0.5	lb ae/a	0.5	lb ae/a	POST	A	100a	45b	100a
8	MON 76703	4.5	SL	0.5	lb ae/a	0.5	lb ae/a	POST	A	100a	51ab	100a
9	MON 76238	4.5	SL	0.75	lb ae/a	0.75	lb ae/a	POST	A	100a	55ab	100a
10	MON 76237	4.5	SL	0.75	lb ae/a	0.75	lb ae/a	POST	A	100a	53ab	100a
11	MON 76640	4.5	SL	0.75	lb ae/a	0.75	lb ae/a	POST	A	100a	68ab	100a
12	MON 76701	4.5	SL	0.75	lb ae/a	0.75	lb ae/a	POST	A	100a	66ab	100a
13	MON 76660	4.5	SL	0.75	lb ae/a	0.75	lb ae/a	POST	A	100a	70a	100a
14	MON 76702	4.5	SL	0.75	lb ae/a	0.75	lb ae/a	POST	A	100a	56ab	100a
15	MON 76667	4.5	SL	0.75	lb ae/a	0.75	lb ae/a	POST	A	100a	64ab	100a
16	MON 76703	4.5	SL	0.75	lb ae/a	0.75	lb ae/a	POST	A	100a	53ab	100a
17	Nontreated									0b	0c	0b
LSD (P=.05)										0.0	13.8	0.9
Standard Deviation										0.0	9.6	0.6
CV										0.0	18.61	0.64
Grand Mean										94.12	51.76	94.04
Bartlett's X2										0.0	7.899	0.0
P(Bartlett's X2)										.	0.928	.
Replicate F										0.000	1.924	1.000
Replicate Prob(F)										1.0000	0.1383	0.4010
Treatment F										0.000	10.175	6391.000
Treatment Prob(F)										1.0000	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Roundup Formulations Test

Trial ID: 11SB07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farms

Investigator: Dr. James L. Griffin

											SIDSP	IPOSS	GLXMA BSOY 10/Jul/2011 Injury %
Pest Code											10/Jul/2011 Control %	10/Jul/2011 Control %	10/Jul/2011 Injury %
Crop Code													
BBCH Scale													
Rating Date													
Rating Data Type													
Rating Unit													
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl					
No.	Name	Conc	Type	Rate	Unit	Rate	Rate	Unit	Stage	Code			
1	MON 76238	4.5	SL	0.5	lb ae/a	0.5	lb ae/a		POST	A	99a	60a	0a
2	MON 76237	4.5	SL	0.5	lb ae/a	0.5	lb ae/a		POST	A	100a	51a	0a
3	MON 76640	4.5	SL	0.5	lb ae/a	0.5	lb ae/a		POST	A	100a	61a	0a
4	MON 76701	4.5	SL	0.5	lb ae/a	0.5	lb ae/a		POST	A	100a	53a	0a
5	MON 76660	4.5	SL	0.5	lb ae/a	0.5	lb ae/a		POST	A	100a	60a	0a
6	MON 76702	4.5	SL	0.5	lb ae/a	0.5	lb ae/a		POST	A	100a	48a	0a
7	MON 76667	4.5	SL	0.5	lb ae/a	0.5	lb ae/a		POST	A	100a	44a	0a
8	MON 76703	4.5	SL	0.5	lb ae/a	0.5	lb ae/a		POST	A	100a	55a	0a
9	MON 76238	4.5	SL	0.75	lb ae/a	0.75	lb ae/a		POST	A	100a	53a	0a
10	MON 76237	4.5	SL	0.75	lb ae/a	0.75	lb ae/a		POST	A	100a	58a	1a
11	MON 76640	4.5	SL	0.75	lb ae/a	0.75	lb ae/a		POST	A	100a	56a	0a
12	MON 76701	4.5	SL	0.75	lb ae/a	0.75	lb ae/a		POST	A	100a	55a	0a
13	MON 76660	4.5	SL	0.75	lb ae/a	0.75	lb ae/a		POST	A	100a	60a	3a
14	MON 76702	4.5	SL	0.75	lb ae/a	0.75	lb ae/a		POST	A	100a	54a	0a
15	MON 76667	4.5	SL	0.75	lb ae/a	0.75	lb ae/a		POST	A	100a	55a	0a
16	MON 76703	4.5	SL	0.75	lb ae/a	0.75	lb ae/a		POST	A	100a	60a	0a
17	Nontreated										0b	0b	0a
LSD (P=.05)											0.9	14.2	1.9
Standard Deviation											0.6	10.0	1.3
CV											0.64	19.22	599.07
Grand Mean											94.04	51.84	0.22
Bartlett's X2											0.0	12.514	1.326
P(Bartlett's X2)											.	0.64	0.25
Replicate F											1.000	4.289	1.895
Replicate Prob(F)											0.4010	0.0092	0.1431
Treatment F											6391.000	8.089	1.000
Treatment Prob(F)											0.0001	0.0001	0.4727

School of Plant, Environmental, and Soil Sciences

Roundup Formulations Test

Trial ID: 11SB07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farms

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX	AMASS
Rating Date										20/Jul/2011	20/Jul/2011	20/Jul/2011
Rating Data Type										Control	Control	Control
Rating Unit										%	%	%
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl				
No.	Name	Conc	Type	Rate	Unit	Rate	Unit	Stage	Code			
1	MON 76238	4.5	SL	0.5	lb ae/a	0.5	lb ae/a	POST	A	100a	49ab	99a
2	MON 76237	4.5	SL	0.5	lb ae/a	0.5	lb ae/a	POST	A	100a	51ab	100a
3	MON 76640	4.5	SL	0.5	lb ae/a	0.5	lb ae/a	POST	A	100a	48ab	100a
4	MON 76701	4.5	SL	0.5	lb ae/a	0.5	lb ae/a	POST	A	100a	49ab	100a
5	MON 76660	4.5	SL	0.5	lb ae/a	0.5	lb ae/a	POST	A	100a	49ab	100a
6	MON 76702	4.5	SL	0.5	lb ae/a	0.5	lb ae/a	POST	A	100a	41b	100a
7	MON 76667	4.5	SL	0.5	lb ae/a	0.5	lb ae/a	POST	A	100a	50ab	100a
8	MON 76703	4.5	SL	0.5	lb ae/a	0.5	lb ae/a	POST	A	100a	46ab	100a
9	MON 76238	4.5	SL	0.75	lb ae/a	0.75	lb ae/a	POST	A	100a	60ab	100a
10	MON 76237	4.5	SL	0.75	lb ae/a	0.75	lb ae/a	POST	A	100a	58ab	100a
11	MON 76640	4.5	SL	0.75	lb ae/a	0.75	lb ae/a	POST	A	100a	70a	100a
12	MON 76701	4.5	SL	0.75	lb ae/a	0.75	lb ae/a	POST	A	100a	59ab	100a
13	MON 76660	4.5	SL	0.75	lb ae/a	0.75	lb ae/a	POST	A	100a	66a	100a
14	MON 76702	4.5	SL	0.75	lb ae/a	0.75	lb ae/a	POST	A	100a	61ab	100a
15	MON 76667	4.5	SL	0.75	lb ae/a	0.75	lb ae/a	POST	A	100a	63ab	100a
16	MON 76703	4.5	SL	0.75	lb ae/a	0.75	lb ae/a	POST	A	100a	50ab	100a
17	Nontreated									0b	0c	0b
LSD (P=.05)										0.0	13.6	0.9
Standard Deviation										0.0	9.6	0.6
CV										0.0	18.69	0.64
Grand Mean										94.12	51.1	94.04
Bartlett's X2										0.0	22.05	0.0
P(Bartlett's X2)										.	0.107	.
Replicate F										0.000	1.154	1.000
Replicate Prob(F)										1.0000	0.3370	0.4010
Treatment F										0.000	10.312	6391.000
Treatment Prob(F)										1.0000	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Roundup Formulations Test

Trial ID: 11SB07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farms

Investigator: Dr. James L. Griffin

											SIDSP	IPOSS	GLXMA BSOY 20/Jul/2011 Injury %
Pest Code											20/Jul/2011 Control %	20/Jul/2011 Control %	20/Jul/2011 Injury %
Crop Code													
BBCH Scale													
Rating Date													
Rating Data Type													
Rating Unit													
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl					
No.	Name	Conc	Type	Rate	Unit	Rate	Rate	Unit	Stage	Code			
1	MON 76238	4.5	SL	0.5	lb ae/a	0.5	lb ae/a		POST	A	99a	56a	0a
2	MON 76237	4.5	SL	0.5	lb ae/a	0.5	lb ae/a		POST	A	100a	51a	0a
3	MON 76640	4.5	SL	0.5	lb ae/a	0.5	lb ae/a		POST	A	100a	55a	0a
4	MON 76701	4.5	SL	0.5	lb ae/a	0.5	lb ae/a		POST	A	100a	54a	0a
5	MON 76660	4.5	SL	0.5	lb ae/a	0.5	lb ae/a		POST	A	100a	54a	0a
6	MON 76702	4.5	SL	0.5	lb ae/a	0.5	lb ae/a		POST	A	100a	45a	0a
7	MON 76667	4.5	SL	0.5	lb ae/a	0.5	lb ae/a		POST	A	100a	43a	0a
8	MON 76703	4.5	SL	0.5	lb ae/a	0.5	lb ae/a		POST	A	100a	48a	0a
9	MON 76238	4.5	SL	0.75	lb ae/a	0.75	lb ae/a		POST	A	100a	51a	0a
10	MON 76237	4.5	SL	0.75	lb ae/a	0.75	lb ae/a		POST	A	100a	52a	0a
11	MON 76640	4.5	SL	0.75	lb ae/a	0.75	lb ae/a		POST	A	100a	59a	0a
12	MON 76701	4.5	SL	0.75	lb ae/a	0.75	lb ae/a		POST	A	100a	53a	0a
13	MON 76660	4.5	SL	0.75	lb ae/a	0.75	lb ae/a		POST	A	100a	56a	0a
14	MON 76702	4.5	SL	0.75	lb ae/a	0.75	lb ae/a		POST	A	100a	51a	0a
15	MON 76667	4.5	SL	0.75	lb ae/a	0.75	lb ae/a		POST	A	100a	51a	0a
16	MON 76703	4.5	SL	0.75	lb ae/a	0.75	lb ae/a		POST	A	100a	55a	0a
17	Nontreated										0b	0b	0a
LSD (P=.05)											0.9	13.4	0.0
Standard Deviation											0.6	9.4	0.0
CV											0.64	19.18	0.0
Grand Mean											94.04	48.99	0.0
Bartlett's X2											0.0	17.338	0.0
P(Bartlett's X2)											.	0.299	.
Replicate F											1.000	6.759	0.000
Replicate Prob(F)											0.4010	0.0007	1.0000
Treatment F											6391.000	7.978	0.000
Treatment Prob(F)											0.0001	0.0001	1.0000

Glyphosate Susceptible/Resistant Johnsongrass Seedling Test #1
Louisiana State University
School of Plant, Environmental, and Soil Sciences

Experiment number : 11GH01JG
Location : LSU Greenhouse Complex
Experimental design : Randomized Complete Block
Number of reps : 4
Plot size : 1 gallon pot
Row width/# per plot : N/A
Soil type : 2 river silt:1 Jiffy Mix Plus
OM (%) : N/A
pH : N/A
Planting date : 11-22-10
Harvest date : N/A
Crop/Variety : N/A/N/A
Uniform std. treatment : N/A

Application type : POST A
Date applied (mm-dd-yy) : 12-15-10
Time (hh:mm-hh:mm) : 1:00-1:30pm
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 : moist/dry
Crop stage/height : N/A
Sprayer type/mph : CO₂bkpk/3.0
Nozzle type/size : FF/11002VS
Boom ht/#noz/spacing (in) : 18"/4/18"
GPA/psi (at nozzle) : 15/28
Applied by : Bauerle

Weed species : population per ft²/height/# leaves
SORHA : 4-5lf

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

Comments:

School of Plant, Environmental, and Soil Sciences

Glyphosate Susceptible/Resistant Seedling Test #1

Trial ID: 11GH01JG

Study Director: Matthew Bauerle

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

Pest Code										SORHA	SORHA	SORHA
Rating Date										15/Dec/2010	15/Dec/2010	5/Jan/2011
Rating Data Type										collar ht	plant ht	collar ht
Rating Unit										mm	mm	mm
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Touchdown Induce Suseptible	600	L	26 0.25	g ae/ha % v/v	0.593 0.25	oz/a % v/v	5-6lf	POST A	120ab	555abc	808a
2	Touchdown Induce Suseptible	600	L	53 0.25	g ae/ha % v/v	1.21 0.25	oz/a % v/v	5-6lf	POST A	128ab	570abc	721a
3	Touchdown Induce Suseptible	600	L	105 0.25	g ae/ha % v/v	2.4 0.25	oz/a % v/v	5-6lf	POST A	136ab	584ab	756a
4	Touchdown Induce Suseptible	600	L	210 0.25	g ae/ha % v/v	4.8 0.25	oz/a % v/v	5-6lf	POST A	136ab	589a	569abc
5	Touchdown Induce Suseptible	600	L	420 0.25	g ae/ha % v/v	9.6 0.25	oz/a % v/v	5-6lf	POST A	125ab	513a-d	220cd
6	Touchdown Induce Suseptible	600	L	840 0.25	g ae/ha % v/v	19.2 0.25	oz/a % v/v	5-6lf	POST A	143a	580ab	43d
7	Touchdown Induce Suseptible	600	L	1680 0.25	g ae/ha % v/v	38.3 0.25	oz/a % v/v	5-6lf	POST A	119ab	534a-d	35d
8	Nontreated Suseptible									128ab	521a-d	621ab
9	Touchdown Induce Resistant	600	L	26 0.25	g ae/ha % v/v	0.593 0.25	oz/a % v/v	5-6lf	POST A	106ab	462a-d	530abc
10	Touchdown Induce Resistant	600	L	53 0.25	g ae/ha % v/v	1.21 0.25	oz/a % v/v	5-6lf	POST A	93b	378cd	499abc
11	Touchdown Induce Resistant	600	L	105 0.25	g ae/ha % v/v	2.4 0.25	oz/a % v/v	5-6lf	POST A	94b	404a-d	626ab

School of Plant, Environmental, and Soil Sciences

Glyphosate Susceptible/Resistant Seedling Test #1

Trial ID: 11GH01JG

Study Director: Matthew Bauerle

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

Pest Code										SORHA	SORHA	SORHA
Rating Date										15/Dec/2010	15/Dec/2010	5/Jan/2011
Rating Data Type										collar ht	plant ht	collar ht
Rating Unit										mm	mm	mm
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
12	Touchdown Induce Resistant	600	L	210 0.25	g ae/ha % v/v	4.8 0.25	oz/a % v/v	5-6lf	POST A	88b	356d	421a-d
13	Touchdown Induce Resistant	600	L	420 0.25	g ae/ha % v/v	9.6 0.25	oz/a % v/v	5-6lf	POST A	100ab	408a-d	316bcd
14	Touchdown Induce Resistant	600	L	840 0.25	g ae/ha % v/v	19.2 0.25	oz/a % v/v	5-6lf	POST A	91b	385cd	206cd
15	Touchdown Induce Resistant	600	L	1680 0.25	g ae/ha % v/v	38.3 0.25	oz/a % v/v	5-6lf	POST A	91b	389cd	105d
16	Touchdown Induce Resistant	600	L	3360 0.25	g ae/ha % v/v	77 0.25	oz/a % v/v	5-6lf	POST A	93b	389cd	69d
17	Touchdown Induce Resistant	600	L	6720 0.25	g ae/ha % v/v	153 0.25	oz/a % v/v	5-6lf	POST A	104ab	398bcd	30d
18	Nontreated Resistant									104ab	426a-d	560abc
LSD (P=.05)										27.4	110.1	245.2
Standard Deviation										19.2	77.1	171.6
CV										17.28	16.44	43.28
Grand Mean										110.9	468.83	396.4
Bartlett's X2										20.569	15.351	31.589
P(Bartlett's X2)										0.246	0.57	0.017*
Replicate F										28.795	26.383	5.879
Replicate Prob(F)										0.0001	0.0001	0.0016
Treatment F										3.659	4.838	9.985
Treatment Prob(F)										0.0002	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Glyphosate Susceptible/Resistant Seedling Test #1

Trial ID: 11GH01JG

Study Director: Matthew Bauerle

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

Pest Code										SORHA	SORHA	SORHA	SORHA
Rating Date										5/Jan/11	5/Jan/11	5/Jan/11	19/Jan/11
Rating Data Type										plant ht	collar ht	plant ht	dryweight
Rating Unit										mm	change	change	g
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	Touchdown Induce Suseptible	600	L	26 0.25	g ae/ha % v/v	0.593 0.25	oz/a % v/v	5-6lf	POST A	1368a	688a	813a	12.44a
2	Touchdown Induce Suseptible	600	L	53 0.25	g ae/ha % v/v	1.21 0.25	oz/a % v/v	5-6lf	POST A	1188a	594ab	618a	9.24ab
3	Touchdown Induce Suseptible	600	L	105 0.25	g ae/ha % v/v	2.4 0.25	oz/a % v/v	5-6lf	POST A	1071a	620a	488ab	4.85abc
4	Touchdown Induce Suseptible	600	L	210 0.25	g ae/ha % v/v	4.8 0.25	oz/a % v/v	5-6lf	POST A	1015ab	433abc	426ab	8.67abc
5	Touchdown Induce Suseptible	600	L	420 0.25	g ae/ha % v/v	9.6 0.25	oz/a % v/v	5-6lf	POST A	565bc	95cde	53bcd	4.45abc
6	Touchdown Induce Suseptible	600	L	840 0.25	g ae/ha % v/v	19.2 0.25	oz/a % v/v	5-6lf	POST A	158c	-100e	-423d	2.11bc
7	Touchdown Induce Suseptible	600	L	1680 0.25	g ae/ha % v/v	38.3 0.25	oz/a % v/v	5-6lf	POST A	148c	-84e	-386cd	0.59c
8	Nontreated Suseptible									1208a	494ab	686a	9.79ab
9	Touchdown Induce Resistant	600	L	26 0.25	g ae/ha % v/v	0.593 0.25	oz/a % v/v	5-6lf	POST A	1244a	424abc	782a	9.87ab
10	Touchdown Induce Resistant	600	L	53 0.25	g ae/ha % v/v	1.21 0.25	oz/a % v/v	5-6lf	POST A	1169a	406abc	790a	6.34abc
11	Touchdown Induce Resistant	600	L	105 0.25	g ae/ha % v/v	2.4 0.25	oz/a % v/v	5-6lf	POST A	1165a	533ab	761a	6.96abc

School of Plant, Environmental, and Soil Sciences

Glyphosate Susceptible/Resistant Seedling Test #1

Trial ID: 11GH01JG

Study Director: Matthew Bauerle

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

Pest Code Rating Date Rating Data Type Rating Unit										SORHA 5/Jan/11 plant ht mm	SORHA 5/Jan/11 collar ht change	SORHA 5/Jan/11 plant ht change	SORHA 19/Jan/11 dryweight g
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
12	Touchdown Induce Resistant	600	L	210 0.25	g ae/ha % v/v	4.8 0.25	oz/a % v/v	5-6lf	POST A	1003ab	334a-d	646a	5.81abc
13	Touchdown Induce Resistant	600	L	420 0.25	g ae/ha % v/v	9.6 0.25	oz/a % v/v	5-6lf	POST A	913ab	216b-e	505ab	5.43abc
14	Touchdown Induce Resistant	600	L	840 0.25	g ae/ha % v/v	19.2 0.25	oz/a % v/v	5-6lf	POST A	473c	115cde	88bc	1.88bc
15	Touchdown Induce Resistant	600	L	1680 0.25	g ae/ha % v/v	38.3 0.25	oz/a % v/v	5-6lf	POST A	224c	14de	-165cd	0.87c
16	Touchdown Induce Resistant	600	L	3360 0.25	g ae/ha % v/v	77 0.25	oz/a % v/v	5-6lf	POST A	181c	-24e	-208cd	0.92c
17	Touchdown Induce Resistant	600	L	6720 0.25	g ae/ha % v/v	153 0.25	oz/a % v/v	5-6lf	POST A	114c	-74e	-284cd	0.54c
18	Nontreated Resistant									1156a	456abc	730a	8.67abc
LSD (P=.05)										345.7	235.9	334.6	4.687
Standard Deviation										241.9	165.1	234.1	3.280
CV										30.33	57.82	71.2	59.37
Grand Mean										797.71	285.5	328.87	5.52
Bartlett's X2										13.85	30.799	21.553	33.354
P(Bartlett's X2)										0.678	0.021*	0.203	0.01*
Replicate F										2.955	3.648	1.233	4.552
Replicate Prob(F)										0.0415	0.0188	0.3078	0.0071
Treatment F										14.439	10.477	14.999	5.249
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Glyphosate Susceptible/Resistant Johnsongrass Seedling Test #2

Louisiana State University

School of Plant, Environmental, and Soil Sciences

Experiment number : 11GH02JG
Location : LSU Greenhouse Complex
Experimental design : Randomized Complete Block
Number of reps : 4
Plot size : 1 gallon pot
Row width/# per plot : N/A
Soil type : 2 river silt: 1 Jiffy Mix Plus
OM (%) : N/A
pH : N/A
Planting date : 3-1-11
Harvest date : N/A
Crop/Variety : N/A/N/A
Uniform std. treatment : N/A

Application type : POST A
Date applied (mm-dd-yy) : 3-23-11
Time (hh:mm-hh:mm) : 10:45-11:15am
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 : moist/dry
Crop stage/height : N/A
Sprayer type/mph : CO₂bkpk/3.0
Nozzle type/size : FF/11002VS
Boom ht/#noz/spacing (in) : 18"/4/18"
GPA/psi (at nozzle) : 15/28
Applied by : Bauerle

Weed species : population per ft²/height/# leaves
SORHA : 4-5lf/some with 2 tillers

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

Comments:

School of Plant, Environmental, and Soil Sciences

Glyphosate Susceptible/Resistant Johnsongrass Seedling Test #2

Trial ID: 11GH02JG

Study Director: Matthew Bauerle

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

Rating Date										23/Mar/2011	23/Mar/2011	14/Apr/2011
Rating Data Type										col height	leaf height	col height
Rating Unit										mm	mm	mm
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Touchdown Induce Suseptible	600	L	26 0.25	g ae/ha % v/v	0.593 0.25	oz/a % v/v	5-6lf	POST A	141a	598a	649abc
2	Touchdown Induce Suseptible	600	L	53 0.25	g ae/ha % v/v	1.21 0.25	oz/a % v/v	5-6lf	POST A	144a	580a	585abc
3	Touchdown Induce Suseptible	600	L	105 0.25	g ae/ha % v/v	2.4 0.25	oz/a % v/v	5-6lf	POST A	154a	616a	726ab
4	Touchdown Induce Suseptible	600	L	210 0.25	g ae/ha % v/v	4.8 0.25	oz/a % v/v	5-6lf	POST A	158a	628a	505abc
5	Touchdown Induce Suseptible	600	L	420 0.25	g ae/ha % v/v	9.6 0.25	oz/a % v/v	5-6lf	POST A	151a	621a	205bc
6	Touchdown Induce Suseptible	600	L	840 0.25	g ae/ha % v/v	19.2 0.25	oz/a % v/v	5-6lf	POST A	146a	665a	
7	Touchdown Induce Suseptible	600	L	1680 0.25	g ae/ha % v/v	38.3 0.25	oz/a % v/v	5-6lf	POST A	154a	613a	
8	Nontreated Suseptible									149a	608a	789ab
9	Touchdown Induce Resistant	600	L	26 0.25	g ae/ha % v/v	0.593 0.25	oz/a % v/v	5-6lf	POST A	134a	538a	650abc
10	Touchdown Induce Resistant	600	L	53 0.25	g ae/ha % v/v	1.21 0.25	oz/a % v/v	5-6lf	POST A	131a	533a	868a
11	Touchdown Induce Resistant	600	L	105 0.25	g ae/ha % v/v	2.4 0.25	oz/a % v/v	5-6lf	POST A	141a	561a	885a
12	Touchdown Induce Resistant	600	L	210 0.25	g ae/ha % v/v	4.8 0.25	oz/a % v/v	5-6lf	POST A	145a	545a	621abc

School of Plant, Environmental, and Soil Sciences

Glyphosate Susceptible/Resistant Johnsongrass Seedling Test #2

Trial ID: 11GH02JG

Study Director: Matthew Bauerle

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

Rating Date										23/Mar/2011	23/Mar/2011	14/Apr/2011
Rating Data Type										col height	leaf height	col height
Rating Unit										mm	mm	mm
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
13	Touchdown Induce Resistant	600	L	420	g ae/ha 0.25 % v/v	9.6 0.25	oz/a % v/v	5-6lf	POST A	143a	526a	656abc
14	Touchdown Induce Resistant	600	L	840	g ae/ha 0.25 % v/v	19.2 0.25	oz/a % v/v	5-6lf	POST A	144a	593a	722ab
15	Touchdown Induce Resistant	600	L	1680	g ae/ha 0.25 % v/v	38.3 0.25	oz/a % v/v	5-6lf	POST A	143a	556a	534abc
16	Touchdown Induce Resistant	600	L	3360	g ae/ha 0.25 % v/v	77 0.25	oz/a % v/v	5-6lf	POST A	145a	599a	424abc
17	Touchdown Induce Resistant	600	L	6720	g ae/ha 0.25 % v/v	153 0.25	oz/a % v/v	5-6lf	POST A	128a	510a	105c
18	Nontreated Resistant									145a	566a	640abc
19	Select Induce Susceptible	240	EC	210	g ai/ha 0.25 % v/v	12 0.25	oz/a % v/v	5-6lf	POST A	140a	583a	
20	Select Induce Resistant	240	EC	210	g ai/ha 0.25 % v/v	12 0.25	oz/a % v/v	5-6lf	POST A	131a	504a	119c
LSD (P=.05)										23.2	107.9	336.5
Standard Deviation										16.4	76.3	235.5
CV										11.46	13.23	41.35
Grand Mean										143.25	577.0	569.52
Bartlett's X2										18.167	17.136	36.193
P(Bartlett's X2)										0.511	0.581	0.003*
Replicate F										14.637	13.588	2.028
Replicate Prob(F)										0.0001	0.0001	0.1237
Treatment F										0.924	1.263	4.018
Treatment Prob(F)										0.5573	0.2441	0.0001

School of Plant, Environmental, and Soil Sciences

Glyphosate Susceptible/Resistant Johnsongrass Seedling Test #2

Trial ID: 11GH02JG

Study Director: Matthew Bauerle

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

Rating Date										14/Apr/2011	4/May/2011
Rating Data Type										leaf height	dry weight
Rating Unit										mm	g/plant
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Touchdown Induce Suseptible	600	L	26 0.25	g ae/ha % v/v	0.593 0.25	oz/a % v/v	5-6lf	POST A	1230ab	9a-d
2	Touchdown Induce Suseptible	600	L	53 0.25	g ae/ha % v/v	1.21 0.25	oz/a % v/v	5-6lf	POST A	1085ab	8a-d
3	Touchdown Induce Suseptible	600	L	105 0.25	g ae/ha % v/v	2.4 0.25	oz/a % v/v	5-6lf	POST A	1078ab	7bcd
4	Touchdown Induce Suseptible	600	L	210 0.25	g ae/ha % v/v	4.8 0.25	oz/a % v/v	5-6lf	POST A	1028ab	6bcd
5	Touchdown Induce Suseptible	600	L	420 0.25	g ae/ha % v/v	9.6 0.25	oz/a % v/v	5-6lf	POST A	515c	3cd
6	Touchdown Induce Suseptible	600	L	840 0.25	g ae/ha % v/v	19.2 0.25	oz/a % v/v	5-6lf	POST A		1d
7	Touchdown Induce Suseptible	600	L	1680 0.25	g ae/ha % v/v	38.3 0.25	oz/a % v/v	5-6lf	POST A		1d
8	Nontreated Suseptible									1250ab	8a-d
9	Touchdown Induce Resistant	600	L	26 0.25	g ae/ha % v/v	0.593 0.25	oz/a % v/v	5-6lf	POST A	1193ab	8a-d
10	Touchdown Induce Resistant	600	L	53 0.25	g ae/ha % v/v	1.21 0.25	oz/a % v/v	5-6lf	POST A	1544a	17a
11	Touchdown Induce Resistant	600	L	105 0.25	g ae/ha % v/v	2.4 0.25	oz/a % v/v	5-6lf	POST A	1509a	13abc
12	Touchdown Induce Resistant	600	L	210 0.25	g ae/ha % v/v	4.8 0.25	oz/a % v/v	5-6lf	POST A	1186ab	11a-d

School of Plant, Environmental, and Soil Sciences

Glyphosate Susceptible/Resistant Johnsongrass Seedling Test #2

Trial ID: 11GH02JG

Study Director: Matthew Bauerle

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

Rating Date										14/Apr/2011	4/May/2011
Rating Data Type										leaf height	dry weight
Rating Unit										mm	g/plant
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
13	Touchdown Induce Resistant	600	L	420	g ae/ha	9.6	oz/a	5-6lf	POST A	1230ab	7bcd
				0.25	% v/v	0.25	% v/v				
14	Touchdown Induce Resistant	600	L	840	g ae/ha	19.2	oz/a	5-6lf	POST A	1002ab	5bcd
				0.25	% v/v	0.25	% v/v				
15	Touchdown Induce Resistant	600	L	1680	g ae/ha	38.3	oz/a	5-6lf	POST A	1038ab	5bcd
				0.25	% v/v	0.25	% v/v				
16	Touchdown Induce Resistant	600	L	3360	g ae/ha	77	oz/a	5-6lf	POST A	813bc	3cd
				0.25	% v/v	0.25	% v/v				
17	Touchdown Induce Resistant	600	L	6720	g ae/ha	153	oz/a	5-6lf	POST A	378c	1d
				0.25	% v/v	0.25	% v/v				
18	Nontreated Resistant									1331ab	14ab
19	Select Induce Susceptible	240	EC	210	g ai/ha	12	oz/a	5-6lf	POST A		
				0.25	% v/v	0.25	% v/v				
20	Select Induce Resistant	240	EC	210	g ai/ha	12	oz/a	5-6lf	POST A	467c	
				0.25	% v/v	0.25	% v/v				
LSD (P=.05)										359.2	6.1
Standard Deviation										251.3	4.3
CV										23.9	60.92
Grand Mean										1051.44	7.03
Bartlett's X2										26.796	61.199
P(Bartlett's X2)										0.044*	0.001*
Replicate F										3.037	0.966
Replicate Prob(F)										0.0389	0.4159
Treatment F										7.188	4.433
Treatment Prob(F)										0.0001	0.0001

Residual Activity of Herbicides for Use in DTS Soybean
Louisiana State University
School of Plant, Environmental, and Soil Sciences

Experiment number : 11GN07JG
Location..... : Ben Hur Research Farm
Experimental design : Randomized Complete Block
Number of reps : 3
Plot size : 11.25' x 30' (6' x 30' treated)
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) : 6-14-11
Time (hh:mm-hh:mm) : 3:30-5:00pm
Incorporation equipment..... : N/A
Incorporation depth..... : N/A
Air/Soil temperature (F) : 91/101
Wind (mph/direction) : 6-7/SW
Relative humidity (%) : 48
Soil/Leaf surface moist..... : dry/N/A
Crop stage/height..... : N/A
Sprayer type/mph..... : CO₂bkp/3.0
Nozzle type/size..... : FF/11002VS
Boom ht/#noz/spacing (in) : 18"/4/18"
GPA/psi (at nozzle) : 15/28
Applied by : Bauerle

Weed species : population per ft²/height/# leaves
N/A

Rainfall (in.)
0-24 hr/1-3 days..... : 0.00/0.00
4-7 days/2nd week..... : 0.23/1.08
3rd week/4th week..... : 0.00/0.11

Comments:

Weed control ratings were made on July 5, 13, 20, and 29 and on August 5 (52 days after application). Variability in control tended to increase across the growing season. This is to be expected based on residual activity of the herbicides and lack of a soybean crop to provide competition with weeds. The pitted morningglory (IPOLA) data were especially variable and reflective of the variable population in the experiment.

School of Plant, Environmental, and Soil Sciences

Residual Activity of Herbicides for Use in DTS Soybean

Trial ID: 11GN07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX	AMASS	SIDSP
Rating Date										5/Jul/2011	5/Jul/2011	5/Jul/2011	5/Jul/2011
Rating Data Type										Control	Control	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	Clarity CANG	4 100	SL AD	0.5 2.5	lb ae/a % v/v	16	oz/a % v/v	PRE PRE	A A	92b	40def	40b	37b
2	Clarity CANG	4 100	SL AD	1 2.5	lb ae/a % v/v	32	oz/a % v/v	PRE PRE	A A	97ab	73abc	85a	85a
3	Valor SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	98ab	67a-d	100a	100a
4	Valor SX Clarity	51 4	WG SL	0.064 1	lb ai/a lb ae/a	2 32	oz/a oz/a	PRE PRE	A A	100a	91a	100a	100a
5	Valor XLT	40.3	WG	0.0756	lb ai/a	3	oz/a	PRE	A	98ab	70a-d	100a	100a
6	Valor XLT Clarity	40.3 4	WG SL	0.0756 1	lb ai/a lb ae/a	3 32	oz/a oz/a	PRE PRE	A A	98ab	91a	100a	100a
7	Prefix	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	95ab	33ef	93a	85a
8	Prefix Clarity	5.29 4	EC SL	1.32 1	lb ai/a lb ae/a	2 32	pt/a oz/a	PRE PRE	A A	100a	76ab	100a	98a
9	Dual Magnum	7.62	EC	0.95	lb ai/a	1	pt/a	PRE	A	98ab	50b-e	95a	85a
10	Dual Magnum Clarity	7.62 4	EC SL	0.95 1	lb ai/a lb ae/a	1 32	pt/a oz/a	PRE PRE	A A	100a	90a	100a	97a
11	Warrant	3	CS	1.13	lb ai/a	3	pt/a	PRE	A	97ab	23efg	97a	82a
12	Warrant Clarity	3 4	CS SL	1.13 1	lb ai/a lb ae/a	3 32	pt/a oz/a	PRE PRE	A A	100a	85a	100a	95a
13	Warrant Valor SX	3 51	CS WG	1.13 0.064	lb ai/a lb ai/a	3 2	pt/a oz/a	PRE PRE	A A	100a	95a	100a	100a
14	Authority MTZ	45	DF	0.31	lb ai/a	11	oz/a	PRE	A	100a	43c-f	97a	93a
15	Warrant Valor SX Clarity	3 51 4	CS WG SL	1.13 0.064 1	lb ai/a lb ai/a lb ae/a	3 2 32	pt/a oz/a oz/a	PRE PRE PRE	A A A	100a	100a	100a	100a
16	Authority MTZ Clarity	45 4	DF SL	0.31 1	lb ai/a lb ae/a	11 32	oz/a oz/a	PRE PRE	A A	99a	92a	100a	100a
17	Fierce	76	WG	0.142	lb ai/a	3	oz/a	PRE	A	100a	92a	100a	100a

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Residual Activity of Herbicides for Use in DTS Soybean

Trial ID: 11GN07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX	AMASS	SIDSP
Rating Date										5/Jul/2011	5/Jul/2011	5/Jul/2011	5/Jul/2011
Rating Data Type										Control	Control	Control	Control
Rating Unit										%	%	%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl				
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code				
18	Fierce	76	WG	0.142	lb ai/a	3	oz/a	PRE	A	100a	98a	100a	100a
	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A				
19	Metribuzin	4	SC	0.334	lb ai/a	10.7	oz/a	PRE	A	100a	87a	100a	100a
20	Metribuzin	4	SC	0.334	lb ai/a	10.7	oz/a	PRE	A	100a	93a	100a	100a
	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A				
21	Zidua	85	WG	0.12	lb ai/a	2.26	oz/a	PRE	A	98ab	15fg	93a	93a
22	Zidua	85	WG	0.12	lb ai/a	2.26	oz/a	PRE	A	98ab	72abc	100a	98a
	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A				
23	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	97ab	52b-e	98a	100a
24	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	100a	91a	100a	99a
	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A				
25	Nontreated									0c	0g	0c	0c
LSD (P=.05)										4.3	20.6	9.3	12.0
Standard Deviation										2.6	12.5	5.6	7.3
CV										2.75	18.2	6.14	8.12
Grand Mean										94.61	68.76	91.91	89.91
Bartlett's X2										6.467	24.717	16.754	27.519
P(Bartlett's X2)										0.84	0.17	0.019*	0.004*
Replicate F										0.807	1.132	0.303	1.533
Replicate Prob(F)										0.4522	0.3308	0.7401	0.2262
Treatment F										174.255	15.849	48.348	29.592
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

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Residual Activity of Herbicides for Use in DTS Soybean

Trial ID: 11GN07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code Rating Date Rating Data Type Rating Unit										IPOLA 5/Jul/2011 Control %	ECHCG 13/Jul/2011 Control %	SEBEX 13/Jul/2011 Control %
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Clarity CANG	4 100	SL AD	0.5 2.5	lb ae/a % v/v	16 2.5	oz/a % v/v	PRE PRE	A A	20bc	77b	55d-h
2	Clarity CANG	4 100	SL AD	1 2.5	lb ae/a % v/v	32 2.5	oz/a % v/v	PRE PRE	A A	90a	92a	70a-g
3	Valor SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	72a	96a	66b-g
4	Valor SX Clarity	51 4	WG SL	0.064 1	lb ai/a lb ae/a	2 32	oz/a oz/a	PRE PRE	A A	100a	100a	86abc
5	Valor XLT	40.3	WG	0.0756	lb ai/a	3	oz/a	PRE	A	93a	91a	80a-e
6	Valor XLT Clarity	40.3 4	WG SL	0.0756 1	lb ai/a lb ae/a	3 32	oz/a oz/a	PRE PRE	A A	100a	100a	91ab
7	Prefix	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	70a	100a	47gh
8	Prefix Clarity	5.29 4	EC SL	1.32 1	lb ai/a lb ae/a	2 32	pt/a oz/a	PRE PRE	A A	95a	100a	75a-g
9	Dual Magnum	7.62	EC	0.95	lb ai/a	1	pt/a	PRE	A	48ab	99a	50fgh
10	Dual Magnum Clarity	7.62 4	EC SL	0.95 1	lb ai/a lb ae/a	1 32	pt/a oz/a	PRE PRE	A A	98a	100a	78a-f
11	Warrant	3	CS	1.13	lb ai/a	3	pt/a	PRE	A	53ab	97a	33h
12	Warrant Clarity	3 4	CS SL	1.13 1	lb ai/a lb ae/a	3 32	pt/a oz/a	PRE PRE	A A	90a	98a	76a-f
13	Warrant Valor SX	3 51	CS WG	1.13 0.064	lb ai/a lb ai/a	3 2	pt/a oz/a	PRE PRE	A A	98a	98a	89abc
14	Authority MTZ	45	DF	0.31	lb ai/a	11	oz/a	PRE	A	93a	100a	52e-h
15	Warrant Valor SX Clarity	3 51 4	CS WG SL	1.13 0.064 1	lb ai/a lb ai/a lb ae/a	3 2 32	pt/a oz/a oz/a	PRE PRE PRE	A A A	100a	98a	98a
16	Authority MTZ Clarity	45 4	DF SL	0.31 1	lb ai/a lb ae/a	11 32	oz/a oz/a	PRE PRE	A A	100a	97a	82a-d
17	Fierce	76	WG	0.142	lb ai/a	3	oz/a	PRE	A	97a	100a	89abc

School of Plant, Environmental, and Soil Sciences

Residual Activity of Herbicides for Use in DTS Soybean

Trial ID: 11GN07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										IPOLA	ECHCG	SEBEX
Rating Date										5/Jul/2011	13/Jul/2011	13/Jul/2011
Rating Data Type										Control	Control	Control
Rating Unit										%	%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
18	Fierce Clarity	76 4	WG SL	0.142 1	lb ai/a lb ae/a	3 32	oz/a oz/a	PRE PRE	A A	100a	99a	98a
19	Metribuzin	4	SC	0.334	lb ai/a	10.7	oz/a	PRE	A	93a	94a	73a-g
20	Metribuzin Clarity	4 4	SC SL	0.334 1	lb ai/a lb ae/a	10.7 32	oz/a oz/a	PRE PRE	A A	90a	100a	83a-d
21	Zidua	85	WG	0.12	lb ai/a	2.26	oz/a	PRE	A	60ab	97a	33h
22	Zidua Clarity	85 4	WG SL	0.12 1	lb ai/a lb ae/a	2.26 32	oz/a oz/a	PRE PRE	A A	96a	100a	73a-g
23	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	85a	89a	60c-g
24	Canopy DF Clarity	75 4	DF SL	0.28 1	lb ai/a lb ae/a	6 32	oz/a oz/a	PRE PRE	A A	100a	98a	88abc
25	Nontreated									0c	0c	0i
LSD (P=.05)										30.7	7.6	17.3
Standard Deviation										18.4	4.6	10.5
CV										22.51	4.96	15.2
Grand Mean										81.71	92.81	68.97
Bartlett's X2										41.499	35.435	29.687
P(Bartlett's X2)										0.001*	0.001*	0.159
Replicate F										0.475	0.295	6.325
Replicate Prob(F)										0.6262	0.7456	0.0036
Treatment F										6.245	56.764	14.813
Treatment Prob(F)										0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Residual Activity of Herbicides for Use in DTS Soybean

Trial ID: 11GN07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code Rating Date Rating Data Type Rating Unit											AMASS 13/Jul/2011 Control %	SIDSP 13/Jul/2011 Control %	IPOLA 13/Jul/2011 Control %
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	Clarity CANG	4 100	SL AD	0.5 2.5	lb ae/a % v/v	16 2.5	oz/a % v/v	PRE PRE	A A	50c	42d	10e	
2	Clarity CANG	4 100	SL AD	1 2.5	lb ae/a % v/v	32 2.5	oz/a % v/v	PRE PRE	A A	63b	60c		
3	Valor SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	98a	98a	65bcd	
4	Valor SX Clarity	51 4	WG SL	0.064 1	lb ai/a lb ae/a	2 32	oz/a oz/a	PRE PRE	A A	100a	100a		
5	Valor XLT	40.3	WG	0.0756	lb ai/a	3	oz/a	PRE	A	95a	95a		
6	Valor XLT Clarity	40.3 4	WG SL	0.0756 1	lb ai/a lb ae/a	3 32	oz/a oz/a	PRE PRE	A A	100a	98a		
7	Prefix	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	95a	85ab	70a-d	
8	Prefix Clarity	5.29 4	EC SL	1.32 1	lb ai/a lb ae/a	2 32	pt/a oz/a	PRE PRE	A A	100a	95a		
9	Dual Magnum	7.62	EC	0.95	lb ai/a	1	pt/a	PRE	A	88a	77abc	50d	
10	Dual Magnum Clarity	7.62 4	EC SL	0.95 1	lb ai/a lb ae/a	1 32	pt/a oz/a	PRE PRE	A A	100a	83ab	90abc	
11	Warrant	3	CS	1.13	lb ai/a	3	pt/a	PRE	A	95a	67bc	48d	
12	Warrant Clarity	3 4	CS SL	1.13 1	lb ai/a lb ae/a	3 32	pt/a oz/a	PRE PRE	A A	100a	90ab	60cd	
13	Warrant Valor SX	3 51	CS WG	1.13 0.064	lb ai/a lb ai/a	3 2	pt/a oz/a	PRE PRE	A A	100a	100a	75a-d	
14	Authority MTZ	45	DF	0.31	lb ai/a	11	oz/a	PRE	A	97a	80abc		
15	Warrant Valor SX Clarity	3 51 4	CS WG SL	1.13 0.064 1	lb ai/a lb ai/a lb ae/a	3 2 32	pt/a oz/a oz/a	PRE PRE PRE	A A A	100a	100a		
16	Authority MTZ Clarity	45 4	DF SL	0.31 1	lb ai/a lb ae/a	11 32	oz/a oz/a	PRE PRE	A A	98a	98a	90abc	
17	Fierce	76	WG	0.142	lb ai/a	3	oz/a	PRE	A	100a	100a	90abc	

School of Plant, Environmental, and Soil Sciences

Residual Activity of Herbicides for Use in DTS Soybean

Trial ID: 11GN07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										AMASS	SIDSP	IPOLA
Rating Date										13/Jul/2011	13/Jul/2011	13/Jul/2011
Rating Data Type										Control	Control	Control
Rating Unit										%	%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type	Rate	Unit	Rate	Rate	Stage	Code			
18	Fierce	76	WG	0.142	lb ai/a	3	oz/a	PRE	A	100a	100a	100a
	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A			
19	Metribuzin	4	SC	0.334	lb ai/a	10.7	oz/a	PRE	A	100a	100a	70a-d
20	Metribuzin	4	SC	0.334	lb ai/a	10.7	oz/a	PRE	A	100a	100a	75a-d
	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A			
21	Zidua	85	WG	0.12	lb ai/a	2.26	oz/a	PRE	A	83a	83ab	
22	Zidua	85	WG	0.12	lb ai/a	2.26	oz/a	PRE	A	100a	98a	95ab
	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A			
23	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	93a	93a	60cd
24	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	100a	93a	85abc
	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A			
25	Nontreated									0d	0e	0e
LSD (P=.05)										10.3	15.7	18.0
Standard Deviation										6.2	9.5	9.7
CV										6.89	11.1	14.61
Grand Mean										90.27	85.47	66.62
Bartlett's X2										25.496	25.996	2.118
P(Bartlett's X2)										0.002*	0.038*	0.833
Replicate F										3.987	0.626	0.050
Replicate Prob(F)										0.0250	0.5391	0.9511
Treatment F										38.835	17.787	24.606
Treatment Prob(F)										0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Residual Activity of Herbicides for Use in DTS Soybean

Trial ID: 11GN07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code Rating Date Rating Data Type Rating Unit											ECHCG 20/Jul/2011 Control %	SEBEX 20/Jul/2011 Control %	AMASS 20/Jul/2011 Control %
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	Clarity CANG	4 100	SL AD	0.5 2.5	lb ae/a % v/v	16 2.5	oz/a % v/v	PRE PRE	A A	70c	55c-g	37d	
2	Clarity CANG	4 100	SL AD	1 2.5	lb ae/a % v/v	32 2.5	oz/a % v/v	PRE PRE	A A	82b	67b-f	52c	
3	Valor SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	95ab	65b-f	97a	
4	Valor SX Clarity	51 4	WG SL	0.064 1	lb ai/a lb ae/a	2 32	oz/a oz/a	PRE PRE	A A	98ab	84abc	100a	
5	Valor XLT	40.3	WG	0.0756	lb ai/a	3	oz/a	PRE	A	88ab	78abc	95a	
6	Valor XLT Clarity	40.3 4	WG SL	0.0756 1	lb ai/a lb ae/a	3 32	oz/a oz/a	PRE PRE	A A	98ab	89ab	100a	
7	Prefix	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	100a	45e-h	93ab	
8	Prefix Clarity	5.29 4	EC SL	1.32 1	lb ai/a lb ae/a	2 32	pt/a oz/a	PRE PRE	A A	100a	73a-d	100a	
9	Dual Magnum	7.62	EC	0.95	lb ai/a	1	pt/a	PRE	A	98ab	42fgh	85b	
10	Dual Magnum Clarity	7.62 4	EC SL	0.95 1	lb ai/a lb ae/a	1 32	pt/a oz/a	PRE PRE	A A	99ab	80abc	96a	
11	Warrant	3	CS	1.13	lb ai/a	3	pt/a	PRE	A	93ab	30gh	93ab	
12	Warrant Clarity	3 4	CS SL	1.13 1	lb ai/a lb ae/a	3 32	pt/a oz/a	PRE PRE	A A	98ab	75a-d	100a	
13	Warrant Valor SX	3 51	CS WG	1.13 0.064	lb ai/a lb ai/a	3 2	pt/a oz/a	PRE PRE	A A	98ab	88ab	100a	
14	Authority MTZ	45	DF	0.31	lb ai/a	11	oz/a	PRE	A	93ab	48d-h	93ab	
15	Warrant Valor SX Clarity	3 51 4	CS WG SL	1.13 0.064 1	lb ai/a lb ai/a lb ae/a	3 2 32	pt/a oz/a oz/a	PRE PRE PRE	A A A	99ab	98a	100a	
16	Authority MTZ Clarity	45 4	DF SL	0.31 1	lb ai/a lb ae/a	11 32	oz/a oz/a	PRE PRE	A A	95ab	81abc	98a	
17	Fierce	76	WG	0.142	lb ai/a	3	oz/a	PRE	A	95ab	88ab	100a	

School of Plant, Environmental, and Soil Sciences

Residual Activity of Herbicides for Use in DTS Soybean

Trial ID: 11GN07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										ECHCG	SEBEX	AMASS
Rating Date										20/Jul/2011	20/Jul/2011	20/Jul/2011
Rating Data Type										Control	Control	Control
Rating Unit										%	%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
18	Fierce Clarity	76 4	WG SL	0.142 1	lb ai/a lb ae/a	3 32	oz/a oz/a	PRE PRE	A A	98ab	98a	100a
19	Metribuzin	4	SC	0.334	lb ai/a	10.7	oz/a	PRE	A	88ab	68a-f	100a
20	Metribuzin Clarity	4 4	SC SL	0.334 1	lb ai/a lb ae/a	10.7 32	oz/a oz/a	PRE PRE	A A	97ab	82abc	100a
21	Zidua	85	WG	0.12	lb ai/a	2.26	oz/a	PRE	A	96ab	28h	97a
22	Zidua Clarity	85 4	WG SL	0.12 1	lb ai/a lb ae/a	2.26 32	oz/a oz/a	PRE PRE	A A	100a	70a-e	100a
23	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	82b	55c-g	91ab
24	Canopy DF Clarity	75 4	DF SL	0.28 1	lb ai/a lb ae/a	6 32	oz/a oz/a	PRE PRE	A A	95ab	87ab	100a
25	Nontreated									0d	0i	0e
LSD (P=.05)										9.7	17.0	6.6
Standard Deviation										5.9	10.3	4.0
CV										6.52	15.42	4.5
Grand Mean										90.24	66.95	89.08
Bartlett's X2										33.972	30.713	6.774
P(Bartlett's X2)										0.026*	0.13	0.817
Replicate F										0.300	9.505	1.377
Replicate Prob(F)										0.7424	0.0003	0.2621
Treatment F										35.184	16.260	107.936
Treatment Prob(F)										0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Residual Activity of Herbicides for Use in DTS Soybean

Trial ID: 11GN07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code Rating Date Rating Data Type Rating Unit										SIDSP 20/Jul/2011 Control %	IPOLA 20/Jul/2011 Control %	ECHCG 29/Jul/2011 Control %
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Clarity CANG	4 100	SL AD	0.5 2.5	lb ae/a % v/v	16 2.5	oz/a % v/v	PRE PRE	A A	47e	35b	43d
2	Clarity CANG	4 100	SL AD	1 2.5	lb ae/a % v/v	32 2.5	oz/a % v/v	PRE PRE	A A	57de		73bc
3	Valor SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	98a	53ab	83abc
4	Valor SX Clarity	51 4	WG SL	0.064 1	lb ai/a lb ae/a	2 32	oz/a oz/a	PRE PRE	A A	100a		94ab
5	Valor XLT	40.3	WG	0.0756	lb ai/a	3	oz/a	PRE	A	95ab	60ab	67c
6	Valor XLT Clarity	40.3 4	WG SL	0.0756 1	lb ai/a lb ae/a	3 32	oz/a oz/a	PRE PRE	A A	99a	97a	93ab
7	Prefix	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	78abc	65ab	93ab
8	Prefix Clarity	5.29 4	EC SL	1.32 1	lb ai/a lb ae/a	2 32	pt/a oz/a	PRE PRE	A A	97ab	83ab	95ab
9	Dual Magnum	7.62	EC	0.95	lb ai/a	1	pt/a	PRE	A	75bc	48ab	91ab
10	Dual Magnum Clarity	7.62 4	EC SL	0.95 1	lb ai/a lb ae/a	1 32	pt/a oz/a	PRE PRE	A A	80abc	80ab	97a
11	Warrant	3	CS	1.13	lb ai/a	3	pt/a	PRE	A	63cd	40b	92ab
12	Warrant Clarity	3 4	CS SL	1.13 1	lb ai/a lb ae/a	3 32	pt/a oz/a	PRE PRE	A A	92ab	55ab	95ab
13	Warrant Valor SX	3 51	CS WG	1.13 0.064	lb ai/a lb ai/a	3 2	pt/a oz/a	PRE PRE	A A	100a	73ab	93ab
14	Authority MTZ	45	DF	0.31	lb ai/a	11	oz/a	PRE	A	75bc	60ab	84abc
15	Warrant Valor SX Clarity	3 51 4	CS WG SL	1.13 0.064 1	lb ai/a lb ai/a lb ae/a	3 2 32	pt/a oz/a oz/a	PRE PRE PRE	A A A	100a	100a	93ab
16	Authority MTZ Clarity	45 4	DF SL	0.31 1	lb ai/a lb ae/a	11 32	oz/a oz/a	PRE PRE	A A	98a	85ab	85abc
17	Fierce	76	WG	0.142	lb ai/a	3	oz/a	PRE	A	99a	84ab	88ab

School of Plant, Environmental, and Soil Sciences

Residual Activity of Herbicides for Use in DTS Soybean

Trial ID: 11GN07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										SIDSP	IPOLA	ECHCG
Rating Date										20/Jul/2011	20/Jul/2011	29/Jul/2011
Rating Data Type										Control	Control	Control
Rating Unit										%	%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type	Rate	Unit	Rate	Rate	Stage	Code			
18	Fierce	76	WG	0.142	lb ai/a	3	oz/a	PRE	A	100a	100a	96ab
	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A			
19	Metribuzin	4	SC	0.334	lb ai/a	10.7	oz/a	PRE	A	100a	65ab	83abc
20	Metribuzin	4	SC	0.334	lb ai/a	10.7	oz/a	PRE	A	100a	63ab	93ab
	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A			
21	Zidua	85	WG	0.12	lb ai/a	2.26	oz/a	PRE	A	90ab		94ab
22	Zidua	85	WG	0.12	lb ai/a	2.26	oz/a	PRE	A	98a	78ab	95ab
	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A			
23	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	91ab	50ab	75abc
24	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	93ab	80ab	87ab
	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A			
25	Nontreated									0f	0c	0e
LSD (P=.05)										13.4	27.7	12.3
Standard Deviation										8.1	15.9	7.5
CV										9.56	24.12	8.94
Grand Mean										85.03	65.98	83.35
Bartlett's X2										38.234	11.04	35.964
P(Bartlett's X2)										0.002*	0.273	0.016*
Replicate F										1.173	0.622	0.073
Replicate Prob(F)										0.3181	0.5501	0.9298
Treatment F										24.481	6.612	23.896
Treatment Prob(F)										0.0001	0.0003	0.0001

School of Plant, Environmental, and Soil Sciences

Residual Activity of Herbicides for Use in DTS Soybean

Trial ID: 11GN07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code Rating Date Rating Data Type Rating Unit										SEBEX 29/Jul/2011 Control %	AMASS 29/Jul/2011 Control %	SIDSP 29/Jul/2011 Control %
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Clarity CANG	4 100	SL AD	0.5 2.5	lb ae/a % v/v	16 2.5	oz/a % v/v	PRE PRE	A A	37cde	50b	38d
2	Clarity CANG	4 100	SL AD	1 2.5	lb ae/a % v/v	32 2.5	oz/a % v/v	PRE PRE	A A	48bcd	55b	52cd
3	Valor SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	57bcd	95a	95a
4	Valor SX Clarity	51 4	WG SL	0.064 1	lb ai/a lb ae/a	2 32	oz/a oz/a	PRE PRE	A A	78ab	98a	98a
5	Valor XLT	40.3	WG	0.0756	lb ai/a	3	oz/a	PRE	A	58bcd	80a	82ab
6	Valor XLT Clarity	40.3 4	WG SL	0.0756 1	lb ai/a lb ae/a	3 32	oz/a oz/a	PRE PRE	A A	78ab	100a	97a
7	Prefix	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	32de	92a	78ab
8	Prefix Clarity	5.29 4	EC SL	1.32 1	lb ai/a lb ae/a	2 32	pt/a oz/a	PRE PRE	A A	58bcd	95a	88a
9	Dual Magnum	7.62	EC	0.95	lb ai/a	1	pt/a	PRE	A	40cde	75a	72abc
10	Dual Magnum Clarity	7.62 4	EC SL	0.95 1	lb ai/a lb ae/a	1 32	pt/a oz/a	PRE PRE	A A	68abc	90a	73abc
11	Warrant	3	CS	1.13	lb ai/a	3	pt/a	PRE	A	17ef	83a	60bc
12	Warrant Clarity	3 4	CS SL	1.13 1	lb ai/a lb ae/a	3 32	pt/a oz/a	PRE PRE	A A	53bcd	97a	80ab
13	Warrant Valor SX	3 51	CS WG	1.13 0.064	lb ai/a lb ai/a	3 2	pt/a oz/a	PRE PRE	A A	77ab	97a	93a
14	Authority MTZ	45	DF	0.31	lb ai/a	11	oz/a	PRE	A	33cde	92a	87ab
15	Warrant Valor SX Clarity	3 51 4	CS WG SL	1.13 0.064 1	lb ai/a lb ai/a lb ae/a	3 2 32	pt/a oz/a oz/a	PRE PRE PRE	A A A	93a	100a	100a
16	Authority MTZ Clarity	45 4	DF SL	0.31 1	lb ai/a lb ae/a	11 32	oz/a oz/a	PRE PRE	A A	58bcd	97a	93a
17	Fierce	76	WG	0.142	lb ai/a	3	oz/a	PRE	A	68abc	98a	97a

School of Plant, Environmental, and Soil Sciences

Residual Activity of Herbicides for Use in DTS Soybean

Trial ID: 11GN07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										SEBEX	AMASS	SIDSP
Rating Date										29/Jul/2011	29/Jul/2011	29/Jul/2011
Rating Data Type										Control	Control	Control
Rating Unit										%	%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type	Rate	Unit	Rate	Rate	Stage	Code			
18	Fierce Clarity	76 4	WG SL	0.142 1	lb ai/a lb ae/a	3 32	oz/a oz/a	PRE PRE	A A	98a	100a	100a
19	Metribuzin	4	SC	0.334	lb ai/a	10.7	oz/a	PRE	A	60bcd	97a	92a
20	Metribuzin Clarity	4 4	SC SL	0.334 1	lb ai/a lb ae/a	10.7 32	oz/a oz/a	PRE PRE	A A	80ab	97a	97a
21	Zidua	85	WG	0.12	lb ai/a	2.26	oz/a	PRE	A	12ef	83a	83ab
22	Zidua Clarity	85 4	WG SL	0.12 1	lb ai/a lb ae/a	2.26 32	oz/a oz/a	PRE PRE	A A	60bcd	98a	97a
23	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	38cde	87a	80ab
24	Canopy DF Clarity	75 4	DF SL	0.28 1	lb ai/a lb ae/a	6 32	oz/a oz/a	PRE PRE	A A	68abc	97a	80ab
25	Nontreated									0f	0c	0e
LSD (P=.05)										20.2	18.0	16.5
Standard Deviation										12.2	10.9	10.0
CV										22.28	12.64	12.44
Grand Mean										54.87	86.07	80.47
Bartlett's X2										30.52	47.652	29.837
P(Bartlett's X2)										0.135	0.001*	0.073
Replicate F										1.716	5.483	1.371
Replicate Prob(F)										0.1906	0.0072	0.2636
Treatment F										12.067	12.448	15.649
Treatment Prob(F)										0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Residual Activity of Herbicides for Use in DTS Soybean

Trial ID: 11GN07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code Rating Date Rating Data Type Rating Unit										IPOLA 29/Jul/2011 Control %	ECHCG 5/Aug/2011 Control %	SEBEX 5/Aug/2011 Control %
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Clarity CANG	4 100	SL AD	0.5 2.5	lb ae/a % v/v	16	oz/a % v/v	PRE PRE	A A	30bcd	43c	37def
2	Clarity CANG	4 100	SL AD	1 2.5	lb ae/a % v/v	32	oz/a % v/v	PRE PRE	A A		70ab	48cde
3	Valor SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	40a-d	80ab	58cde
4	Valor SX Clarity	51 4	WG SL	0.064 1	lb ai/a lb ae/a	2 32	oz/a oz/a	PRE PRE	A A	95ab	89a	78abc
5	Valor XLT	40.3	WG	0.0756	lb ai/a	3	oz/a	PRE	A	35a-d	63b	62b-e
6	Valor XLT Clarity	40.3 4	WG SL	0.0756 1	lb ai/a lb ae/a	3 32	oz/a oz/a	PRE PRE	A A	85ab	92a	80abc
7	Prefix	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	57a-d	92a	32ef
8	Prefix Clarity	5.29 4	EC SL	1.32 1	lb ai/a lb ae/a	2 32	pt/a oz/a	PRE PRE	A A	83abc	95a	58cde
9	Dual Magnum	7.62	EC	0.95	lb ai/a	1	pt/a	PRE	A	40a-d	91a	40def
10	Dual Magnum Clarity	7.62 4	EC SL	0.95 1	lb ai/a lb ae/a	1 32	pt/a oz/a	PRE PRE	A A	90ab	97a	68a-d
11	Warrant	3	CS	1.13	lb ai/a	3	pt/a	PRE	A	20cd	92a	17fg
12	Warrant Clarity	3 4	CS SL	1.13 1	lb ai/a lb ae/a	3 32	pt/a oz/a	PRE PRE	A A	50a-d	95a	53cde
13	Warrant Valor SX	3 51	CS WG	1.13 0.064	lb ai/a lb ai/a	3 2	pt/a oz/a	PRE PRE	A A	60a-d	93a	77abc
14	Authority MTZ	45	DF	0.31	lb ai/a	11	oz/a	PRE	A	50a-d	84ab	33ef
15	Warrant Valor SX Clarity	3 51 4	CS WG SL	1.13 0.064 1	lb ai/a lb ai/a lb ae/a	3 2 32	pt/a oz/a oz/a	PRE PRE PRE	A A A	98a	93a	93ab
16	Authority MTZ Clarity	45 4	DF SL	0.31 1	lb ai/a lb ae/a	11 32	oz/a oz/a	PRE PRE	A A	77abc	85ab	58cde
17	Fierce	76	WG	0.142	lb ai/a	3	oz/a	PRE	A	76abc	87ab	68a-d

School of Plant, Environmental, and Soil Sciences

Residual Activity of Herbicides for Use in DTS Soybean

Trial ID: 11GN07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										IPOLA	ECHCG	SEBEX
Rating Date										29/Jul/2011	5/Aug/2011	5/Aug/2011
Rating Data Type										Control	Control	Control
Rating Unit										%	%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
18	Fierce Clarity	76 4	WG SL	0.142 1	lb ai/a 32	3 32	oz/a oz/a	PRE PRE	A A	95ab	94a	98a
19	Metribuzin	4	SC	0.334	lb ai/a	10.7	oz/a	PRE	A	40a-d	82ab	60cde
20	Metribuzin Clarity	4 4	SC SL	0.334 1	lb ai/a 32	10.7 32	oz/a oz/a	PRE PRE	A A	67abc	88a	80abc
21	Zidua	85	WG	0.12	lb ai/a	2.26	oz/a	PRE	A	40a-d	94a	15fg
22	Zidua Clarity	85 4	WG SL	0.12 1	lb ai/a 32	2.26 32	oz/a oz/a	PRE PRE	A A	67abc	95a	58cde
23	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	40a-d	72ab	42def
24	Canopy DF Clarity	75 4	DF SL	0.28 1	lb ai/a 32	6 32	oz/a oz/a	PRE PRE	A A	70abc	83ab	68a-d
25	Nontreated									0d	0d	0g
LSD (P=.05)										34.3	14.8	19.7
Standard Deviation										20.4	9.0	11.9
CV										34.95	10.92	21.59
Grand Mean										58.44	81.99	55.33
Bartlett's X2										9.624	42.709	29.779
P(Bartlett's X2)										0.649	0.002*	0.124
Replicate F										2.266	0.011	2.678
Replicate Prob(F)										0.1238	0.9889	0.0789
Treatment F										4.845	16.518	12.391
Treatment Prob(F)										0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Residual Activity of Herbicides for Use in DTS Soybean

Trial ID: 11GN07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code Rating Date Rating Data Type Rating Unit										AMASS 5/Aug/2011 Control %	SIDSP 5/Aug/2011 Control %	IPOLA 5/Aug/2011 Control %
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Clarity CANG	4 100	SL AD	0.5 2.5	lb ae/a % v/v	16 2.5	oz/a % v/v	PRE PRE	A A	50b	38e	30bcd
2	Clarity CANG	4 100	SL AD	1 2.5	lb ae/a % v/v	32 2.5	oz/a % v/v	PRE PRE	A A	55b	45de	
3	Valor SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	95a	95a	40a-d
4	Valor SX Clarity	51 4	WG SL	0.064 1	lb ai/a lb ae/a	2 32	oz/a oz/a	PRE PRE	A A	98a	98a	95ab
5	Valor XLT	40.3	WG	0.0756	lb ai/a	3	oz/a	PRE	A	82a	85abc	35a-d
6	Valor XLT Clarity	40.3 4	WG SL	0.0756 1	lb ai/a lb ae/a	3 32	oz/a oz/a	PRE PRE	A A	100a	97a	85ab
7	Prefix	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	92a	80abc	57a-d
8	Prefix Clarity	5.29 4	EC SL	1.32 1	lb ai/a lb ae/a	2 32	pt/a oz/a	PRE PRE	A A	95a	85abc	83abc
9	Dual Magnum	7.62	EC	0.95	lb ai/a	1	pt/a	PRE	A	82a	67bc	40a-d
10	Dual Magnum Clarity	7.62 4	EC SL	0.95 1	lb ai/a lb ae/a	1 32	pt/a oz/a	PRE PRE	A A	90a	73abc	90ab
11	Warrant	3	CS	1.13	lb ai/a	3	pt/a	PRE	A	83a	60cd	20cd
12	Warrant Clarity	3 4	CS SL	1.13 1	lb ai/a lb ae/a	3 32	pt/a oz/a	PRE PRE	A A	97a	80abc	50a-d
13	Warrant Valor SX	3 51	CS WG	1.13 0.064	lb ai/a lb ai/a	3 2	pt/a oz/a	PRE PRE	A A	97a	97a	60a-d
14	Authority MTZ	45	DF	0.31	lb ai/a	11	oz/a	PRE	A	92a	83abc	50a-d
15	Warrant Valor SX Clarity	3 51 4	CS WG SL	1.13 0.064 1	lb ai/a lb ai/a lb ae/a	3 2 32	pt/a oz/a oz/a	PRE PRE PRE	A A A	100a	100a	98a
16	Authority MTZ Clarity	45 4	DF SL	0.31 1	lb ai/a lb ae/a	11 32	oz/a oz/a	PRE PRE	A A	98a	95a	77abc
17	Fierce	76	WG	0.142	lb ai/a	3	oz/a	PRE	A	98a	97a	76abc

School of Plant, Environmental, and Soil Sciences

Residual Activity of Herbicides for Use in DTS Soybean

Trial ID: 11GN07JG

Study Director: Matthew Bauerle

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										AMASS	SIDSP	IPOLA
Rating Date										5/Aug/2011	5/Aug/2011	5/Aug/2011
Rating Data Type										Control	Control	Control
Rating Unit										%	%	%
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type	Rate	Unit	Rate	Rate	Stage	Code			
18	Fierce	76	WG	0.142	lb ai/a	3	oz/a	PRE	A	100a	100a	95ab
	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A			
19	Metribuzin	4	SC	0.334	lb ai/a	10.7	oz/a	PRE	A	97a	88ab	40a-d
20	Metribuzin	4	SC	0.334	lb ai/a	10.7	oz/a	PRE	A	97a	97a	67abc
	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A			
21	Zidua	85	WG	0.12	lb ai/a	2.26	oz/a	PRE	A	92a	84abc	40a-d
22	Zidua	85	WG	0.12	lb ai/a	2.26	oz/a	PRE	A	98a	97a	67abc
	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A			
23	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	83a	77abc	40a-d
24	Canopy DF	75	DF	0.28	lb ai/a	6	oz/a	PRE	A	97a	78abc	70abc
	Clarity	4	SL	1	lb ae/a	32	oz/a	PRE	A			
25	Nontreated									0c	0f	0d
LSD (P=.05)										16.5	16.0	34.3
Standard Deviation										10.0	9.7	20.4
CV										11.57	12.13	34.95
Grand Mean										86.67	79.84	58.44
Bartlett's X2										46.569	24.614	9.624
P(Bartlett's X2)										0.001*	0.217	0.649
Replicate F										5.175	0.684	2.266
Replicate Prob(F)										0.0092	0.5096	0.1238
Treatment F										14.588	17.490	4.845
Treatment Prob(F)										0.0001	0.0001	0.0001

Unison/Latigo/Vision Test
Louisiana State University
School of Plant, Environmental, and Soil Sciences

Experiment number : 11GN09JG
Location : Plaquemine, LA
Experimental design : Randomized Complete Block
Number of reps : 4
Plot size : 6' x 25'
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 : POST A
Date applied (mm-dd-yy) : 7-13-11
Time (hh:mm-hh:mm) : 10:30-11:00am
Incorporation equipment : N/A
Incorporation depth : N/A
Air/Soil temperature (F) : 87/87
Wind (mph/direction) : 7-8/NW
Relative humidity (%) : 66
Soil/Leaf surface moist : dry/dry
Crop stage/height : 1-2 lf/2-3"
Sprayer type/mpg : CO₂bkpk/3.0
Nozzle type/size : FF/11002VS
Boom ht/#noz/spacing (in) : 18"/4/18"
GPA/psi (at nozzle) : 15/28
Applied by : Hardwick

Weed species : population per ft²/height/# leaves
IPOCC : 4-7/8-16" runners
ECHCG : 2-6/4-12"/4-6

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

Comments:

School of Plant, Environmental, and Soil Sciences

Unison/Latigo/Vision Test

Trial ID: 11GN09JG

Study Director: Matthew Bauerle

Location:

Investigator: Dr. James L. Griffin

Pest Code										IPOCC	IPOCC
Description										10 DAT	21 DAT
Rating Date										22/Jul/2011	3/Aug/2011
Rating Data Type										Control	Control
Rating Unit										%	%
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type	Rate	Unit	Rate	Unit	Stage	Code		
1	Unison	1.74	L	0.217	lb ae/a	1	pt/a	POST	A	36cd	58c
2	Unison	1.74	L	0.326	lb ae/a	1.5	pt/a	POST	A	43bc	68b
3	2.4-D Amine Weedar 64	3.8	L	0.95	lb ae/a	2	pt/a	POST	A	53ab	89a
4	2.4-D Amine Weedar 64	3.8	L	1.42	lb ae/a	3	pt/a	POST	A	60a	96a
5	Latigo	4.2	L	0.525	lb ae/a	1	pt/a	POST	A	48abc	75b
6	Latigo	4.2	L	0.79	lb ae/a	1.5	pt/a	POST	A	51ab	73b
7	Brash	3.87	L	0.484	lb ai/a	1	pt/a	POST	A	43bc	70b
8	Brash	3.87	L	0.726	lb ai/a	1.5	pt/a	POST	A	48abc	77b
9	Vision	3.8	L	0.237	lb ae/a	8	oz/a	POST	A	19e	35d
10	Vision	3.8	L	0.475	lb ae/a	16	oz/a	POST	A	25de	42d
11	Clarity	4.0	L	0.25	lb ae/a	8	oz/a	POST	A	23e	35d
12	Clarity	4.0	L	0.5	lb ae/a	16	oz/a	POST	A	28de	41d
13	Nontreated									0f	0e
LSD (P=.05)										9.7	9.5
Standard Deviation										6.8	6.7
CV										18.62	11.47
Grand Mean										36.56	58.15
Bartlett's X2										8.831	12.339
P(Bartlett's X2)										0.637	0.339
Replicate F										1.483	1.752
Replicate Prob(F)										0.2355	0.1739
Treatment F										24.726	63.006
Treatment Prob(F)										0.0001	0.0001

Bermudagrass Biotype Response to Glyphosate (Greenhouse)

Louisiana State University

School of Plant, Environmental, and Soil Sciences

Experiment number : 11GH01DF
Location : LSU Greenhouse Complex
Experimental design : Factorial
Number of reps : 4
Plot size : 1 gallon pot
Row width/# per plot : N/A
Soil type : 2 river silt:1 Jiffy Mix Plus
OM (%) : N/A
pH : N/A
Planting date : 3-28-11
Harvest date : N/A
Crop/Variety : Bermudagrass/20 biotypes
Uniform std. treatment : N/A

Application type : POST A
Date applied (mm-dd-yy) : 5-19-11
Time (hh:mm-hh:mm) : 10:00-10:30am
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 : moist/dry
Crop stage/height : N/A (see comments below)
Sprayer type/mpg : CO₂bkpk/3.0
Nozzle type/size : FF/11002VS
Boom ht/#noz/spacing (in) : 18"/4/18"
GPA/psi (at nozzle) : 15/28
Applied by : Bauerle

Weed species : population per ft²/height/# leaves
N/A

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

Comments:

Plants cut back and fertilized on 5-6-11. On 5-18-11, stolon length (in.) ranged as follows: (Biotype A) 3-40, (B) 2-21, (C) 3-17, (D) 6-24, (E) 5-17, (F) 5-21, (G) 4-13.5, (H) 4-13, (I) 3.5-17, (J) 2-19, (K) 2-13, (L) 2.5-25, (M) 1-15.5, (N) 4-14, (O) 2-5.5, (P) 1-12.5, (Q) 5-19.5, (R) 4-24, (S) 5-39, (T) 5-17.

School of Plant, Environmental, and Soil Sciences

Bermudagrass Biotype Response to Glyphosate (Greenhouse)

Trial ID: 11GH01DF

Study Director: Dexter Fontenot

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

Crop Code										CYNDA	CYNDA	CYNDA
BBCH Scale										BGRM	BGRM	BGRM
Rating Date										26/May/2011	1/Jun/2011	15/Jun/2011
Rating Data Type										Control	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	Biotype A No Roundup									0g	0m	0l
2	Biotype A Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	28d-g	31jkl	59g-k
3	Biotype A Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	44b-e	68b-g	84a-e
4	Biotype B No Roundup									0g	0m	0l
5	Biotype B Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	35b-f	53c-k	71b-h
6	Biotype B Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	60bc	78abc	83a-e
7	Biotype C No Roundup									0g	0m	0l
8	Biotype C Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	25efg	23lm	46k
9	Biotype C Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	40b-f	53c-k	72a-h
10	Biotype D No Roundup									0g	0m	0l
11	Biotype D Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	31c-f	53c-k	74a-h
12	Biotype D Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	64b	81ab	92ab
13	Biotype E No Roundup									0g	0m	0l
14	Biotype E Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	13fg	23lm	49ijk

School of Plant, Environmental, and Soil Sciences

Bermudagrass Biotype Response to Glyphosate (Greenhouse)

Trial ID: 11GH01DF

Study Director: Dexter Fontenot

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

										CYNDA	CYNDA	CYNDA
										BGRM	BGRM	BGRM
										26/May/2011	1/Jun/2011	15/Jun/2011
										Control	Control	Control
										%	%	%
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl				
No.	Name	Conc	Type	Rate	Unit	Rate	Unit	Stage	Code			
15	Biotype E									51b-e	61b-i	74a-h
	Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A			
16	Biotype F									0g	0m	0l
	No Roundup											
17	Biotype F									39b-f	41g-l	64e-k
	Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A			
18	Biotype F									46b-e	58b-j	74a-h
	Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A			
19	Biotype G									0g	0m	0l
	No Roundup											
20	Biotype G									29d-g	50c-l	69c-j
	Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A			
21	Biotype G									38b-f	49d-l	68d-k
	Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A			
22	Biotype H									0g	0m	0l
	No Roundup											
23	Biotype H									28d-g	50c-l	64e-k
	Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A			
24	Biotype H									40b-f	51c-k	73a-h
	Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A			
25	Biotype I									0g	0m	0l
	No Roundup											
26	Biotype I									30def	45f-l	74a-h
	Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A			
27	Biotype I									55bcd	73a-f	90abc
	Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A			
28	Biotype J									0g	0m	0l
	No Roundup											

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Bermudagrass Biotype Response to Glyphosate (Greenhouse)

Trial ID: 11GH01DF

Study Director: Dexter Fontenot

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

										CYNDA	CYNDA	CYNDA
										BGRM	BGRM	BGRM
										26/May/2011	1/Jun/2011	15/Jun/2011
										Control	Control	Control
										%	%	%
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl				
No.	Name	Conc	Type	Rate	Unit	Rate	Unit	Stage	Code			
29	Biotype J									28d-g	36h-l	58g-k
	Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A			
30	Biotype J									50b-e	63b-h	70b-i
	Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A			
31	Biotype K									0g	0m	0l
	No Roundup											
32	Biotype K									28d-g	29kl	49ijk
	Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A			
33	Biotype K									35b-f	51c-k	60f-k
	Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A			
34	Biotype L									0g	0m	0l
	No Roundup											
35	Biotype L									29d-g	34i-l	48jk
	Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A			
36	Biotype L									33c-f	38h-l	66e-k
	Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A			
37	Biotype M									0g	0m	0l
	No Roundup											
38	Biotype M									33c-f	48e-l	71b-h
	Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A			
39	Biotype M									55bcd	75a-e	83a-e
	Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A			
40	Biotype N									0g	0m	0l
	No Roundup											
41	Biotype N									28d-g	41g-l	71b-h
	Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A			
42	Biotype N									28d-g	41g-l	66e-k
	Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A			

School of Plant, Environmental, and Soil Sciences

Bermudagrass Biotype Response to Glyphosate (Greenhouse)

Trial ID: 11GH01DF

Study Director: Dexter Fontenot

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

										CYNDA	CYNDA	CYNDA
										BGRM	BGRM	BGRM
										26/May/2011	1/Jun/2011	15/Jun/2011
										Control	Control	Control
										%	%	%
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl				
No.	Name	Conc	Type	Rate	Unit	Rate	Unit	Stage	Code			
43	Biotype O No Roundup									0g	0m	0l
44	Biotype O Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	85a	76a-d	81a-f
45	Biotype O Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	95a	95a	93a
46	Biotype P No Roundup									0g	0m	0l
47	Biotype P Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	43b-e	68b-g	78a-g
48	Biotype P Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	81a	74a-e	89a-d
49	Biotype Q No Roundup									0g	0m	0l
50	Biotype Q Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	33c-f	31jkl	64e-k
51	Biotype Q Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	41b-f	51c-k	70b-i
52	Biotype R No Roundup									0g	0m	0l
53	Biotype R Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	26d-g	48e-l	63e-k
54	Biotype R Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	43b-e	71a-f	76a-g
55	Biotype S No Roundup									0g	0m	0l
56	Biotype S Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	24efg	39h-l	53h-k

School of Plant, Environmental, and Soil Sciences

Bermudagrass Biotype Response to Glyphosate (Greenhouse)

Trial ID: 11GH01DF

Study Director: Dexter Fontenot

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

Crop Code										CYNDA	CYNDA	CYNDA
BBCH Scale										BGRM	BGRM	BGRM
Rating Date										26/May/2011	1/Jun/2011	15/Jun/2011
Rating Data Type										Control	Control	Control
Rating Unit										%	%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
57	Biotype S Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	43b-e	69b-g	66e-k
58	Biotype T No Roundup									0g	0m	0l
59	Biotype T Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	44b-e	55b-k	60f-k
60	Biotype T Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	36b-f	56b-k	60f-k
LSD (P=.05)										16.3	15.6	12.0
Standard Deviation										11.7	11.1	8.6
CV										42.94	31.47	18.55
Grand Mean										27.17	35.42	46.15
Bartlett's X2										48.638	29.112	63.127
P(Bartlett's X2)										0.116	0.849	0.009*
Replicate F										4.962	14.585	2.866
Replicate Prob(F)										0.0025	0.0001	0.0381
Treatment F										16.760	26.684	64.305
Treatment Prob(F)										0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Bermudagrass Biotype Response to Glyphosate (Greenhouse)

Trial ID: 11GH01DF

Study Director: Dexter Fontenot

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

Crop Code										CYNDA
BBCH Scale										BGRM
Rating Date										24/Jun/2011
Rating Data Type										dry weight
Rating Unit										grams
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	Biotype A No Roundup									5.61a
2	Biotype A Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	4.22abc
3	Biotype A Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	1.38f-n
4	Biotype B No Roundup									0.73j-n
5	Biotype B Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	1.43f-n
6	Biotype B Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	1.14g-n
7	Biotype C No Roundup									4.53ab
8	Biotype C Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	3.42b-g
9	Biotype C Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	2.99b-j
10	Biotype D No Roundup									3.22b-i
11	Biotype D Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	2.74b-k
12	Biotype D Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	1.17g-n
13	Biotype E No Roundup									3.36b-h
14	Biotype E Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	2.55b-m

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Bermudagrass Biotype Response to Glyphosate (Greenhouse)

Trial ID: 11GH01DF

Study Director: Dexter Fontenot

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

Crop Code										CYNDA
BBCH Scale										BGRM
Rating Date										24/Jun/2011
Rating Data Type										dry weight
Rating Unit										grams
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
15	Biotype E Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	1.40f-n
16	Biotype F No Roundup									2.58b-l
17	Biotype F Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	3.26b-i
18	Biotype F Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	1.32f-n
19	Biotype G No Roundup									1.18g-n
20	Biotype G Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	0.84i-n
21	Biotype G Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	0.53k-n
22	Biotype H No Roundup									0.95h-n
23	Biotype H Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	0.62j-n
24	Biotype H Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	0.46k-n
25	Biotype I No Roundup									2.26b-n
26	Biotype I Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	1.98c-n
27	Biotype I Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	1.34f-n
28	Biotype J No Roundup									3.07b-j

School of Plant, Environmental, and Soil Sciences

Bermudagrass Biotype Response to Glyphosate (Greenhouse)

Trial ID: 11GH01DF

Study Director: Dexter Fontenot

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

Crop Code										CYNDA
BBCH Scale										BGRM
Rating Date										24/Jun/2011
Rating Data Type										dry weight
Rating Unit										grams
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
29	Biotype J Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	2.73b-k
30	Biotype J Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	1.29f-n
31	Biotype K No Roundup									2.07c-n
32	Biotype K Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	1.92c-n
33	Biotype K Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	1.42f-n
34	Biotype L No Roundup									4.12a-d
35	Biotype L Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	2.36b-n
36	Biotype L Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	2.80b-k
37	Biotype M No Roundup									1.58e-n
38	Biotype M Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	1.75d-n
39	Biotype M Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	0.90i-n
40	Biotype N No Roundup									1.87c-n
41	Biotype N Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	1.66d-n
42	Biotype N Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	1.69d-n

School of Plant, Environmental, and Soil Sciences

Bermudagrass Biotype Response to Glyphosate (Greenhouse)

Trial ID: 11GH01DF

Study Director: Dexter Fontenot

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

Crop Code										CYNDA
BBCH Scale										BGRM
Rating Date										24/Jun/2011
Rating Data Type										dry weight
Rating Unit										grams
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
43	Biotype O No Roundup									0.05n
44	Biotype O Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	0.13lmn
45	Biotype O Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	0.12mn
46	Biotype P No Roundup									0.61j-n
47	Biotype P Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	0.61j-n
48	Biotype P Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	0.70j-n
49	Biotype Q No Roundup									3.90a-e
50	Biotype Q Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	3.67a-f
51	Biotype Q Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	2.34b-n
52	Biotype R No Roundup									2.31b-n
53	Biotype R Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	2.68b-k
54	Biotype R Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	2.31b-n
55	Biotype S No Roundup									4.10a-d
56	Biotype S Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	3.28b-i

School of Plant, Environmental, and Soil Sciences

Bermudagrass Biotype Response to Glyphosate (Greenhouse)

Trial ID: 11GH01DF

Study Director: Dexter Fontenot

Location: LSU Greenhouse Complex

Investigator: Dr. James L. Griffin

Crop Code										CYNDA
BBCH Scale										BGRM
Rating Date										24/Jun/2011
Rating Data Type										dry weight
Rating Unit										grams
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
57	Biotype S Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	1.86c-n
58	Biotype T No Roundup									1.37f-n
59	Biotype T Roundup Original Max	5.5	SL	0.75	lb ai/a	17.5	fl oz/a	POST	A	2.11b-n
60	Biotype T Roundup Original Max	5.5	SL	1.5	lb ai/a	35	fl oz/a	POST	A	1.88c-n
LSD (P=.05)										1.340
Standard Deviation										0.957
CV										46.93
Grand Mean										2.04
Bartlett's X2										170.86
P(Bartlett's X2)										0.001*
Replicate F										2.129
Replicate Prob(F)										0.0983
Treatment F										6.480
Treatment Prob(F)										0.0001

Bermudagrass Biotype Response to Glyphosate (Field)
Louisiana State University
School of Plant, Environmental, and Soil Sciences

Experiment number : 11GN01DF
Location..... : Ben Hur Research Farm
Experimental design : Randomized Complete Block
Number of reps : 3
Plot size : 5' x 5'
Row width/# per plot : N/A
Soil type..... : clay loam
OM (%)..... : 1.9
pH : 6.3
Planting date : 3-28-11
Harvest date..... : N/A
Crop/Variety : N/A
Uniform std. treatment..... : N/A

Application type : POST A
Date applied (mm-dd-yy) : 8-12-11
Time (hh:mm-hh:mm) : 10:00-10:15am
Incorporation equipment..... : N/A
Incorporation depth..... : N/A
Air/Soil temperature (F) : 87/88
Wind (mph/direction) : 6-7/N
Relative humidity (%) : 66
Soil/Leaf surface moist..... : dry/moist
Crop stage/height : 3-12" (16-97% ground cover)
Sprayer type/mph..... : CO₂bkpk/3.0
Nozzle type/size..... : FF/11002VS
Boom ht/#noz/spacing (in) : 18"/4/18"
GPA/psi (at nozzle) : 15/28
Applied by : Bauerle

Rainfall (in.)
0-24 hr/1-3 days..... : 0.00/0.01
4-7 days/2nd week..... : 0.64/0.17
3rd week/4th week..... : 0.84/7.93

Comments:

Twenty biotypes of bermudagrass were planted March 28 using two established plants per plot.

School of Plant, Environmental, and Soil Sciences

Bermudagrass Biotype Response to Glyphosate (Field)

Trial ID: 11GN01DF

Study Director: Dexter Fontenot

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										CYNDA	CYNDA	CYNDA
Rating Date										11/Aug/2011	11/Aug/2011	18/Aug/2011
Rating Data Type										Avg PlantHt	GroundCover	Control
Rating Unit										cm	%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Biotype A Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	297ab	97ab	52efg
2	Biotype A No Roundup									306a	94abc	0h
3	Biotype B Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	142c-k	42a-j	83abc
4	Biotype B No Roundup									253a-f	92a-d	0h
5	Biotype C Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	151c-k	70a-h	60e
6	Biotype C No Roundup									128c-k	69a-h	0h
7	Biotype D Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	108f-k	38c-j	66cde
8	Biotype D No Roundup									73ijk	48a-j	0h
9	Biotype E Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	193a-i	34d-j	57ef
10	Biotype E No Roundup									249a-h	67a-h	0h
11	Biotype F Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	119c-k	68a-h	96a
12	Biotype F No Roundup									103h-k	46a-j	0h
13	Biotype G Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	99ijk	49a-j	95a
14	Biotype G No Roundup									70ijk	33d-j	0h
15	Biotype H Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	167b-j	59a-j	88ab

School of Plant, Environmental, and Soil Sciences

Bermudagrass Biotype Response to Glyphosate (Field)

Trial ID: 11GN01DF

Study Director: Dexter Fontenot

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										CYNDA	CYNDA	CYNDA
Rating Date										11/Aug/2011	11/Aug/2011	18/Aug/2011
Rating Data Type										Avg PlantHt	GroundCover	Control
Rating Unit										cm	%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
16	Biotype H No Roundup									134c-k	52a-j	0h
17	Biotype I Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	105g-k	55a-j	91a
18	Biotype I No Roundup									117d-k	47a-j	0h
19	Biotype J Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	170b-j	43a-j	63de
20	Biotype J No Roundup									122c-k	39b-j	0h
21	Biotype K Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	137c-k	55a-j	69b-e
22	Biotype K No Roundup									138c-k	36c-j	0h
23	Biotype L Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	160b-k	83a-f	80a-d
24	Biotype L No Roundup									99ijk	40b-j	0h
25	Biotype M Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	87ijk	20g-j	69b-e
26	Biotype M No Roundup									116e-k	25f-j	0h
27	Biotype N Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	91ijk	27f-j	53efg
28	Biotype N No Roundup									66ijk	27f-j	0h
29	Biotype O Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	31jk	7ij	40fg
30	Biotype O No Roundup									17k	2j	0h

School of Plant, Environmental, and Soil Sciences

Bermudagrass Biotype Response to Glyphosate (Field)

Trial ID: 11GN01DF

Study Director: Dexter Fontenot

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										CYNDA	CYNDA	CYNDA
Rating Date										11/Aug/2011	11/Aug/2011	18/Aug/2011
Rating Data Type										Avg PlantHt	GroundCover	Control
Rating Unit										cm	%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
31	Biotype P Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	157c-k	72a-h	91a
32	Biotype P No Roundup									95ijk	31e-j	0h
33	Biotype Q Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	252a-g	74a-h	60e
34	Biotype Q No Roundup									162b-k	65a-i	0h
35	Biotype R Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	257a-e	97ab	37g
36	Biotype R No Roundup									260a-e	100a	0h
37	Biotype S Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	264a-d	87a-e	48efg
38	Biotype S No Roundup									266abc	78a-g	0h
39	Biotype T Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	69ijk	16hij	85abc
40	Biotype T No Roundup									127c-k	17hij	0h
LSD (P=.05)										80.3	31.9	13.2
Standard Deviation										49.2	19.5	8.1
CV										33.03	37.17	23.29
Grand Mean										148.92	52.55	34.62
Bartlett's X2										60.574	59.564	43.065
P(Bartlett's X2)										0.015*	0.014*	0.001*
Replicate F										3.513	3.931	5.350
Replicate Prob(F)										0.0346	0.0236	0.0067
Treatment F										6.824	5.398	64.515
Treatment Prob(F)										0.0001	0.0001	0.0001

School of Plant, Environmental, and Soil Sciences

Bermudagrass Biotype Response to Glyphosate (Field)

Trial ID: 11GN01DF

Study Director: Dexter Fontenot

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										CYND	CYND
Rating Date										25/Aug/2011	8/Sep/2011
Rating Data 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	Biotype A Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	86fg	99a
2	Biotype A No Roundup									0i	0c
3	Biotype B Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	96abc	100a
4	Biotype B No Roundup									0i	0c
5	Biotype C Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	91de	100a
6	Biotype C No Roundup									0i	0c
7	Biotype D Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	99a	100a
8	Biotype D No Roundup									0i	0c
9	Biotype E Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	89ef	100a
10	Biotype E No Roundup									0i	0c
11	Biotype F Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	100a	100a
12	Biotype F No Roundup									0i	0c
13	Biotype G Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	99a	100a
14	Biotype G No Roundup									0i	0c
15	Biotype H Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	98ab	100a

School of Plant, Environmental, and Soil Sciences

Bermudagrass Biotype Response to Glyphosate (Field)

Trial ID: 11GN01DF

Study Director: Dexter Fontenot

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										CYNDA	CYNDA
Rating Date										25/Aug/2011	8/Sep/2011
Rating Data Type										Control	Control
Rating Unit										%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	Biotype H No Roundup									0i	0c
17	Biotype I Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	97abc	100a
18	Biotype I No Roundup									0i	0c
19	Biotype J Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	93b-e	100a
20	Biotype J No Roundup									0i	0c
21	Biotype K Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	96a-d	100a
22	Biotype K No Roundup									0i	0c
23	Biotype L Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	98a	100a
24	Biotype L No Roundup									0i	0c
25	Biotype M Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	96abc	100a
26	Biotype M No Roundup									0i	0c
27	Biotype N Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	93cde	100a
28	Biotype N No Roundup									0i	0c
29	Biotype O Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	85fg	100a
30	Biotype O No Roundup									0i	0c

School of Plant, Environmental, and Soil Sciences

Bermudagrass Biotype Response to Glyphosate (Field)

Trial ID: 11GN01DF

Study Director: Dexter Fontenot

Location: Ben Hur Research Farm

Investigator: Dr. James L. Griffin

Pest Code										CYNDA	CYNDA
Rating Date										25/Aug/2011	8/Sep/2011
Rating Data 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		
31	Biotype P Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	99a	100a
32	Biotype P No Roundup									0i	0c
33	Biotype Q Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	94a-d	100a
34	Biotype Q No Roundup									0i	0c
35	Biotype R Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	79h	96b
36	Biotype R No Roundup									0i	0c
37	Biotype S Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	84g	99a
38	Biotype S No Roundup									0i	0c
39	Biotype T Roundup	5.5	L	2	lb ai/a	46.5	oz/a	POST	A	99a	100a
40	Biotype T No Roundup									0i	0c
LSD (P=.05)										3.4	1.5
Standard Deviation										2.1	0.9
CV										4.41	1.83
Grand Mean										46.77	49.87
Bartlett's X2										30.172	9.408
P(Bartlett's X2)										0.036*	0.009*
Replicate F										3.708	0.735
Replicate Prob(F)										0.0291	0.4832
Treatment F										1591.266	9239.517
Treatment Prob(F)										0.0001	0.0001