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# **WEED SCIENCE**

## **2007 Annual Research Report**

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School of Plant, Environmental, and Soil Sciences

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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. Weeds can be controlled with mechanical cultivation, crop rotation, and herbicides. Louisiana producers currently use all these methods, but herbicides serve as the foundation for successful 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 for weed control and crop tolerance as well as their effect on rotational crops.

This progress report summarizes weed research conducted in sugarcane, soybeans, and corn during the 2007 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 2007 growing season are shown in Tables 1 and 2. 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 with the Agriculture Research Manager (ARM) by Gylling Data Management, Inc., Brookings, South Dakota. Control and crop injury ratings for all experiments are based on a scale of 0 to 100%, where 0 equals no control or crop injury and 100% equals complete control or crop injury. Injury ratings are based on chlorosis, necrosis, and stand and height reductions. Where appropriate, crop yields were obtained. Soybean yields are adjusted to 13% moisture. Miscellaneous abbreviations used in this report are shown in Table 5.

For additional information concerning research activities covered in the report contact James L. Griffin, School of Agronomy, 104 Sturgis Hall, Baton Rouge, LA 70803, (225) 578-1768, or by e-mail at [jgriffin@agcenter.lsu.edu](mailto:jgriffin@agcenter.lsu.edu). This report is also available on the LSU AgCenter web site [www.agronomy.lsu.edu/weedscience/index.asp](http://www.agronomy.lsu.edu/weedscience/index.asp).

## **Acknowledgments**

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Financial assistance to conduct portions of this research was provided by the following companies.

Bayer CropScience  
DuPont Crop Protection  
FMC Corporation  
Gowan Company  
Monsanto Company  
Syngenta Crop Protection  
Valent USA

**Table 1. Rainfall for the 2007 growing season (March - September) at the Ben Hur Research Farm, Baton Rouge, LA.**

Day	Month						
	March	April	May	June	July	August	September
	in						
1	0.02	0.01	-	-	0.07	0.94	-
2	-	0.01	-	-	-	0.01	-
3	-	0.09	1.51	0.02	2.12	-	-
4	-	0.19	1.67	0.09	0.20	-	0.44
5	-	-	-	-	0.28	-	-
6	-	-	-	-	0.14	-	-
7	-	0.14	0.04	-	0.08	-	0.76
8	-	0.10	-	-	0.27	-	0.07
9	-	-	-	0.02	-	-	-
10	-	1.01	-	0.15	0.02	-	-
11	-	-	-	-	-	-	-
12	0.53	-	-	-	0.40	-	0.76
13	-	-	0.49	-	0.23	-	1.19
14	0.87	0.39	0.01	-	0.78	0.25	0.01
15	0.25	-	1.23	-	0.55	0.01	-
16	-	-	0.02	-	0.01	1.29	-
17	-	-	-	-	0.32	0.26	-
18	-	0.11	-	1.56	-	-	-
19	-	-	-	4.20	0.16	-	-
20	-	-	-	0.01	0.04	-	-
21	-	-	-	-	-	-	-
22	-	-	0.01	-	-	-	0.43
23	-	-	0.02	-	-	-	0.04
24	-	-	0.30	-	-	-	0.80
25	-	1.37	0.01	0.10	0.10	-	0.11
26	-	0.41	0.10	-	0.33	0.15	-
27	-	-	-	-	0.38	-	-
28	-	-	-	-	-	0.14	-
29	-	-	0.53	-	0.08	0.03	-
30	-	-	0.06	-	0.17	0.01	-
31	0.25	-	0.16	-	0.67	0.01	-
<b>Total</b>	<b>1.92</b>	<b>3.83</b>	<b>6.16</b>	<b>6.15</b>	<b>7.40</b>	<b>3.10</b>	<b>4.61</b>

**Table 2. Rainfall for the 2007 growing season (March - September) at the Sugar Research Station, St. Gabriel, LA.**

Day	Month						
	March	April	May	June	July	August	September
	in						
1	N/A	N/A	-	0.01	0.44	0.05	0.46
2	N/A	N/A	-	-	0.01	0.01	0.01
3	N/A	N/A	1.28	0.01	0.14	-	-
4	N/A	N/A	0.67	0.68	-	-	0.12
5	N/A	N/A	-	-	0.34	0.21	0.01
6	N/A	N/A	-	-	0.30	-	-
7	N/A	N/A	0.01	0.08	0.03	-	0.01
8	N/A	N/A	-	0.10	-	-	0.78
9	N/A	N/A	-	0.84	-	-	0.01
10	N/A	-	-	-	0.03	-	0.37
11	N/A	N/A	-	-	-	-	0.16
12	N/A	N/A	-	0.11	0.21	-	0.01
13	N/A	N/A	-	0.04	0.16	-	1.04
14	N/A	-	0.11	-	0.32	-	-
15	N/A	N/A	0.10	-	0.48	-	-
16	N/A	N/A	0.44	0.25	0.01	1.81	-
17	N/A	N/A	0.01	0.01	0.10	-	-
18	N/A	-	-	1.16	-	0.01	-
19	N/A	N/A	-	2.12	-	-	-
20	N/A	N/A	-	-	0.01	-	-
21	N/A	N/A	-	-	-	-	-
22	N/A	N/A	-	-	-	-	0.59
23	N/A	3.68	0.02	-	-	-	0.11
24	N/A	-	0.18	0.18	-	-	1.88
25	N/A	N/A	-	0.22	-	-	0.25
26	N/A	1.04	0.09	-	0.69	0.38	0.01
27	-	0.01	-	-	0.05	0.01	-
28	N/A	-	0.06	-	-	0.66	-
29	N/A	-	0.24	0.04	0.11	0.05	-
30	N/A	-	0.11	0.13	0.37	0.01	-
31	N/A	-	1.41	-	0.16	0.48	-
<b>Total</b>	N/A	4.73	4.73	5.98	3.96	3.68	5.82

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

Trade name	Common name	Manufacturer
2, 4-D Amine 4	-	Nufarm T&S
A14972	-	Syngenta
A15189	-	Syngenta
Aatrex	atrazine	Syngenta
Agri-dex	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
Callisto	mesotrione	Syngenta
Clarity	dicamba	BASF
Classic	chlorimuron	DuPont
Command	clomazone	FMC
Direx	diuron	Griffin
Dual II Magnum	metolachlor	Syngenta DuPont K4
EDTA	manganese	Stoller Industries
Envoke	trifloxysulfuron – sodium (proposed)	Syngenta
Eptam	EPTC	Gowan
Evik	ametryn	Syngenta
Flexstar	fomesafen	Syngenta
Gramoxone Inteon	paraquat (2 L)	Syngenta
Harness Extra	acetochlor + atrazine	Monsanto
Induce	nonionic surfactant	Helena

Continued.

**Table 3. Continued.**

Trade name	Common name	Manufacturer
K4/K4 Max	hexazinone + diuron	DuPont
Karmex	diuron	DuPont
Karmex XP	diuron	DuPont
Lumax	metolachlor + mesotrione + atrazine	Syngenta
Metri DF	metribuzin	UPI
MON xxx	glyphosate formulations	Monsanto
Palisade	trinexapac-ethyl	Syngenta
Prowl	pendimethalin	BASF
Prowl H <sub>2</sub> O	pendimethalin	BASF
Roundup Original Max	glyphosate	Monsanto
Sencor	metribuzin	Bayer CropScience
Sequence	glyphosate + metolachlor	Syngenta
Sinbar	terbacil	DuPont
Sodium Chlorate	-	Helena
Spartan	sulfentrazone	FMC
Touchdown Total	glyphosate	Syngenta
Treflan	trifluralin	Dow AgroSciences
Trimmit	paclobutrazol	Syngenta
Valor SX	flumioxazin	Valent USA
Velpar	hexazinone	DuPont
Weedmaster	2,4-D + dicamba	BASF
Yukon	halosulfuron + dicamba	Gowan

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

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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 cocklebur	XANST	<i>Xanthium strumarium</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
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
horseweed	ERICA	<i>Conyza canadensis</i> (L.) Cronq.
itchgrass	ROOEX	<i>Rottboellia cochinchinensis</i> (Lour.) Clayton

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Continued.

**Table 4. Continued.**

Common name	WSSA abbreviation	Scientific name
ivy leaf 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.
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.
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 taminifolia</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.

Continued.

**Table 4. Continued.**

Common name	WSSA abbreviation	Scientific name
spreading dayflower	COMDI	<i>Commelina diffusa</i> Burm. f.
velvetleaf	ABUTH	<i>Abutilon theophrasti</i> Medik.
Virginia pepperweed	LEPVI	<i>Lepidium virginicum</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
Bdcast	Broadcast application
bu/A	Bushels per acre
B/L	Broadleaf species
CEC	Cation Exchange Capacity
CO <sub>2</sub> bkpk	CO <sub>2</sub> -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

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Continued.

**Table 5. Continued.**

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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

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Continued.

**Table 5. Continued.**

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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

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**Louisiana State University**  
Department of Agronomy and Environmental Management

**Sugarcane Variety Study**

Experiment number ..... : 07SC01JG  
Location ..... : Sugar Research Station - St. Gabriel, LA  
Experimental design..... : Randomized complete block  
    Number of reps..... : 4  
    Plot size ..... : 18' x 50'  
    Row width/# per plot..... : 72"/3  
Soil type..... : silt loam  
    OM (%) ..... : 1.0  
    pH ..... : 5.9  
Planting date..... : 09-25-06  
Harvest date ..... : N/A  
Crop/Variety ..... : Sugarcane  
Uniform std. treatment..... : 09-25-06 – PRE - DuPont K4 at 4.0 lb/A

Application type ..... : PRE  
Date applied (mm-dd-yy)..... : 09-25-06  
Time (hh:mm-hh:mm) ..... : 02:00-02:30p  
Incorporation equipment..... : N/A  
Incorporation depth..... : N/A  
Air/Soil temperature (F)..... : 83/75  
Wind (mph/direction) ..... : 3-5/NNW  
Cloud cover (%) ..... : 0  
Relative humidity (%)..... : 37  
Soil/Leaf surface moist ..... : moist/N/A  
Crop stage/height ..... : N/A  
Sprayer type/mph..... : trctr.pto/3.75  
Nozzle type/size ..... : FF/8003VS  
Boom ht/#noz/spacing (in) .... : 18"/12/18"  
GPA/psi (at nozzle) ..... : 15/30  
Applied by ..... : Boudreaux

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
N/A

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

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Comments:

# School of Plant, Environmental, and Soil Sciences

## Sugarcane Variety Study

Trial ID: 07SC01JG  
Location: St. Gabriel

Protocol ID: 07SC01JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code		CANE		CANE		CANE		
Rating Date		11/Apr/2007		15/May/2007		15/May/2007		
Rating Data Type		Shoots		Shoots		Heights		
Rating Unit		#/40ft		#/40ft		IN		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Rate	Growth Stage	Appl Code
1	LCP 85-384							
				217	ab	381	a	33
2	L 97-128							
				227	ab	342	a	37
3	HoCP 96-540							
				158	c	346	a	29
4	Ho 95-988							
				181	bc	352	a	30
5	L 99-226							
				244	a	392	a	30
6	L 99-233							
				198	abc	337	a	38
LSD (P=.05)				42.9		46.2		3.5
Standard Deviation				28.4		30.7		2.3
CV				13.93		8.57		7.04
Grand Mean				204.21		358.04		32.8
Bartlett's X2				8.246		3.981		2.585
P(Bartlett's X2)				0.143		0.552		0.764
Replicate F				3.054		5.631		2.902
Replicate Prob(F)				0.0609		0.0086		0.0694
Treatment F				4.942		2.182		11.093
Treatment Prob(F)				0.0071		0.1109		0.0001

# School of Plant, Environmental, and Soil Sciences

## Sugarcane Variety Study

Trial ID: 07SC01JG  
 Location: St. Gabriel

Protocol ID: 07SC01JG  
 Study Director: Joseph M. Boudreaux  
 Investigator: Dr. James L. Griffin

Crop Code		CANE		CANE		CANE		
Rating Date		15/May/2007		27/Jun/2007		27/Jun/2007		
Rating Data Type		Widths		Heights		PAR		
Rating Unit		IN		IN		%Reduced		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Stage	Appl Code
1	LCP 85-384							
								32 bc
								44 b
								87 b
2	L 97-128							
								36 ab
								57 a
								87 b
3	HoCP 96-540							
								30 c
								47 b
								80 c
4	Ho 95-988							
								36 ab
								46 b
								86 b
5	L 99-226							
								40 a
								47 b
								97 a
6	L 99-233							
								37 ab
								59 a
								91 b
LSD (P=.05)								4.2
Standard Deviation								2.8
CV								7.9
Grand Mean								35.23
Bartlett's X2								10.733
P(Bartlett's X2)								0.057
Replicate F								3.792
Replicate Prob(F)								0.0331
Treatment F								7.114
Treatment Prob(F)								0.0014
								1.028
								0.4084
								13.501
								9.571
								0.0001
								0.0003

# School of Plant, Environmental, and Soil Sciences

## Sugarcane Variety Study

Trial ID: 07SC01JG  
Location: St. Gabriel

Protocol ID: 07SC01JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code		CANE		CANE				
Rating Date		18/Jul/2007		24/Jul/2007				
Rating Data Type		PAR		Heights				
Rating Unit		%Reduced		IN				
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Unit	Growth Stage	Appl Code
1	LCP 85-384							63 b
2	L 97-128							82 a
3	HoCP 96-540							64 b
4	Ho 95-988							73 ab
5	L 99-226							86 a
6	L 99-233							91 a
								67 b
								82 a
								80a
LSD (P=.05)								11.6
Standard Deviation								6.5
CV								7.7
Grand Mean								4.3
Bartlett's X2								9.84
P(Bartlett's X2)								6.0
Replicate F								78.2
Replicate Prob(F)								71.66
Treatment F								3.964
Treatment Prob(F)								2.259
								0.555
								0.812
								3.153
								0.306
								0.0560
								0.8207
								9.021
								8.231
								0.0004
								0.0007

**Louisiana State University**  
Department of Agronomy and Environmental Management

**In-Furrow Seed Piece Enhancer Study**

Experiment number ..... : 07SC02JG  
Location ..... : Sugar Research Station - St. Gabriel, LA  
Experimental design..... : Randomized complete block  
Number of reps..... : 4  
Plot size ..... : 18' x 30'  
Row width/# per plot..... : 72"/3 – Only treated middle row  
Soil type..... : silt loam  
OM (%) ..... : 1.0  
pH ..... : 5.9  
Planting date..... : 09-25-06  
Harvest date ..... : N/A  
Crop/Variety ..... : HoCP 96-540  
Uniform std. treatment..... : 09-25-06 – PRE – DuPont K4 @ 4.0 lb/A

Application type ..... : In-Furrow  
Date applied (mm-dd-yy)..... : 09-25-06  
Time (hh:mm-hh:mm) ..... : 01:45-02:00p  
Incorporation equipment..... : N/A  
Incorporation depth..... : 2-3"  
Air/Soil temperature (F)..... : 83/75  
Wind (mph/direction) ..... : 3-5/NNW  
Cloud cover (%) ..... : 0  
Relative humidity (%)..... : 37  
Soil/Leaf surface moist ..... : moist/N/A  
Crop stage/height ..... : N/A  
Sprayer type/mph..... : CO2bkpk/3.0  
Nozzle type/size ..... : FF/9505EVS  
Boom ht/#noz/spacing (in) .... : 18'/N/A  
GPA/psi (at nozzle) ..... : 70/56  
Applied by ..... : Etheredge

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
N/A

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

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Comments:

# School of Plant, Environmental, and Soil Sciences

## In-Furrow Seed Piece Enhancer Study

Trial ID: 07SC02JG  
Location: St. Gabriel

Protocol ID: 07SC02JG  
Study Director: Luke M. Etheredge, Jr.  
Investigator: Dr. James L. Griffin

										CANE	CANE	CANE
										25/Sep/2006	1/Nov/2006	20/Nov/2006
										nodes/eyes	shoots	shoots
										#/plot	#/30'	#/30'
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl				
No.	Name	Conc	Type	Rate	Unit	Rate	Rate	Unit	Stage	Code		
1	Palisade	2.08	EC	1.15	LB A/A	2.22	QT/A	ATPLAN	A	122 a	28 b	39 a
2	Palisade	2.08	EC	5.7	LB A/A	11	QT/A	ATPLAN	A	127 a	8 c	15 b
3	Trimmit	2.08	L	0.29	LB A/A	1.11	PT/A	ATPLAN	A	139 a	49 a	56 a
4	Trimmit	2.08	L	1.15	LB A/A	2.22	QT/A	ATPLAN	A	119 a	46 ab	52 a
5	Tilt	2.08	L	0.0455	LB A/A	2.8	OZ/A	ATPLAN	A	123 a	44 ab	46 a
6	Nontreated									133 a	51 a	59 a
LSD (P=.05)										22.8	15.1	16.1
Standard Deviation										15.2	10.1	10.7
CV										11.93	26.75	24.01
Grand Mean										127.04	37.58	44.46
Bartlett's X2										11.283	4.266	1.607
P(Bartlett's X2)										0.046*	0.512	0.90
Replicate F										0.931	4.444	3.303
Replicate Prob(F)										0.4500	0.0201	0.0493
Treatment F										1.024	11.073	9.123
Treatment Prob(F)										0.4386	0.0001	0.0004

# School of Plant, Environmental, and Soil Sciences

## In-Furrow Seed Piece Enhancer Study

Trial ID: 07SC02JG  
Location: St. Gabriel

Protocol ID: 07SC02JG  
Study Director: Luke M. Etheredge, Jr.  
Investigator: Dr. James L. Griffin

										CANE	CANE	CANE	
										11/Apr/2007	11/Apr/2007	15/May/2007	
										shoots	height	shoots	
										#/30'	cm	#/30'	
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl					
No.	Name	Conc	Type	Rate	Unit	Rate	Rate	Unit	Stage	Code	4	5	6
1	Palisade	2.08	EC	1.15	LB A/A	2.22	QT/A		ATPLAN	A	72 ab	66 a	181 a
2	Palisade	2.08	EC	5.7	LB A/A	11	QT/A		ATPLAN	A	65 ab	43 b	178 a
3	Trimmit	2.08	L	0.29	LB A/A	1.11	PT/A		ATPLAN	A	83 a	70 a	194 a
4	Trimmit	2.08	L	1.15	LB A/A	2.22	QT/A		ATPLAN	A	75 ab	63 a	197 a
5	Tilt	2.08	L	0.0455	LB A/A	2.8	OZ/A		ATPLAN	A	62 b	63 a	165 a
6	Nontreated										75 ab	67 a	186 a
LSD (P=.05)											12.3	8.5	26.4
Standard Deviation											8.2	5.7	17.5
CV											11.36	9.15	9.56
Grand Mean											72.0	62.04	183.42
Bartlett's X2											1.736	6.005	2.197
P(Bartlett's X2)											0.884	0.306	0.821
Replicate F											19.315	0.320	24.106
Replicate Prob(F)											0.0001	0.8105	0.0001
Treatment F											3.232	11.698	1.763
Treatment Prob(F)											0.0354	0.0001	0.1812

**Louisiana State University**  
Department of Agronomy and Environmental Management

**Evaluation of Valor for Weed Control and Sugarcane Tolerance at Planting**

Experiment number ..... : 07SC03JG  
Location ..... : Mike Melancon Farms - Henderson, LA  
Experimental design..... : Randomized complete block  
Number of reps..... : 4  
Plot size ..... : 18' x 50'  
Row width/# per plot..... : 72"/3  
Soil type..... : silty clay  
OM (%) ..... : 1.5  
pH ..... : 6.2  
Planting date..... : 08-29-06  
Harvest date ..... : N/A  
Crop/Variety ..... : HoCP 96-540  
Uniform std. treatment..... : N/A

Application type ..... : Pre A  
Date applied (mm-dd-yy)..... : 08-30-06  
Time (hh:mm-hh:mm) ..... : 01:00-02:00p  
Incorporation equipment..... : N/A  
Incorporation depth..... : N/A  
Air/Soil temperature (F)..... : 88/84  
Wind (mph/direction) ..... : 3-7/N  
Cloud cover (%) ..... : 30  
Relative humidity (%)..... : 53  
Soil/Leaf surface moist ..... : moist/N/A  
Crop stage/height ..... : N/A  
Sprayer type/mph..... : trctrCA/5.0  
Nozzle type/size ..... : FF/11002VS  
Boom ht/#noz/spacing (in) .... : 18"/12/18"  
GPA/psi (at nozzle) ..... : 10/35  
Applied by ..... : Etheredge

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
N/A

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

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Comments:

# School of Plant, Environmental, and Soil Sciences

## Evaluation of Valor for Weed Control and Sugarcane Tolerance at Planting

Trial ID: 07SC03JG  
 Location: Henderson, LA

Protocol ID: 07SC03JG  
 Study Director: Luke M. Etheredge, Jr.  
 Investigator: Dr. James L. Griffin

										LOLMU		
										CANE	CANE	CANE
										5/Oct/2006	10/Nov/2006	10/Nov/2006
										shoots	control	injury
										#/50'	%	%
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl				
No.	Name	Conc	Type	Rate	Unit	Rate	Unit	Stage	Code			
1	Valor SX	51	WG	0.128	LB A/A	4.0	OZ/A	PRE	A	121 a	74 ab	0 a
2	Valor SX	51	WG	0.191	LB A/A	6.0	OZ/A	PRE	A	134 a	80 ab	0 a
3	Valor SX	51	WG	0.255	LB A/A	8.0	OZ/A	PRE	A	114 a	79 ab	0 a
4	Valor SX Prowl	51 3.3	WG EC	0.128 2.9	LB A/A LB A/A	4.0 3.5	OZ/A QT/A	PRE PRE	A A	115 a	83 ab	0 a
5	Valor SX Prowl	51 3.3	WG EC	0.191 2.9	LB A/A LB A/A	6.0 3.5	OZ/A QT/A	PRE PRE	A A	119 a	88 a	0 a
6	Valor SX Prowl	51 3.3	WG EC	0.255 2.9	LB A/A LB A/A	8.0 3.5	OZ/A QT/A	PRE PRE	A A	114 a	83 ab	0 a
7	Velpar Karmex XP	75 80	DF WG	0.519 1.84	LB A/A LB A/A	11.1 2.3	OZ/A LB/A	PRE PRE	A A	129 a	80 ab	0 a
8	Sencor	75	DF	1.5	LB A/A	2.0	LB/A	PRE	A	125 a	70 b	0 a
9	Prowl Atrazine	3.3 4	EC L	2.9 2	LB A/A LB A/A	3.5 2.0	QT/A QT/A	PRE PRE	A A	115 a	74 ab	0 a
LSD (P=.05)										22.4	9.3	0.0
Standard Deviation										15.3	6.4	0.0
CV										12.73	8.11	0.0
Grand Mean										120.47	78.75	0.0
Bartlett's X2										3.206	2.015	0.0
P(Bartlett's X2)										0.921	0.981	.
Replicate F										10.103	1.243	0.000
Replicate Prob(F)										0.0002	0.3162	1.0000
Treatment F										0.893	2.872	0.000
Treatment Prob(F)										0.5374	0.0215	1.0000

**Louisiana State University**  
Department of Agronomy and Environmental Management

**Evaluation of DPX-KQG34 (K4 Max) for Weed Control and  
Sugarcane Tolerance at Planting**

Experiment number ..... : 07SC04JG  
Location ..... : Mike Melancon Farms - Henderson, LA  
Experimental design ..... : Randomized complete block  
  Number of reps ..... : 4  
  Plot size ..... : 18' x 50'  
  Row width/# per plot ..... : 72"/3  
Soil type ..... : silty clay  
  OM (%) ..... : 1.5  
  pH ..... : 6.2  
Planting date ..... : 08-29-06  
Harvest date ..... : N/A  
Crop/Variety ..... : HoCP 96-540  
Uniform std. treatment ..... : N/A

Application type ..... : Pre A  
Date applied (mm-dd-yy) ..... : 08-30-06  
Time (hh:mm-hh:mm) ..... : 01:00-02:00p  
Incorporation equipment ..... : N/A  
Incorporation depth ..... : N/A  
Air/Soil temperature (F) ..... : 88/84  
Wind (mph/direction) ..... : 3-7/N  
Cloud cover (%) ..... : 30  
Relative humidity (%) ..... : 53  
Soil/Leaf surface moist ..... : moist/N/A  
Crop stage/height ..... : N/A  
Sprayer type/mph ..... : trctrCA/5.0  
Nozzle type/size ..... : FF/11002VS  
Boom ht/#noz/spacing (in) ..... : 18"/12/18"  
GPA/psi (at nozzle) ..... : 10/35  
Applied by ..... : Etheredge

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
N/A

Rainfall (in.) data taken from Jeanerette, Iberia Parish, LA  
0-24 hr/1-3 days ..... : 0.00/0.00  
4-7 days/2nd week ..... : 0.00/1.92  
3rd week/4th week ..... : 1.52/0.16

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Comments:

# School of Plant, Environmental, and Soil Sciences

## Evaluation of DPX-KQG34 (K4 Max) for Weed Control and Sugarcane Tolerance at Planting

Trial ID: 07SC04JG  
Location: Henderson, LA

Protocol ID: 07SC04JG  
Study Director: Luke M. Etheredge, Jr.  
Investigator: Dr. James L. Griffin

										LOLMU		
										CANE		
										5/Oct/2006	10/Nov/2006	CANE
										shoots	control	injury
										#/50'	%	%
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl				
No.	Name	Conc	Type	Rate	Unit	Rate	Unit	Stage	Code			
1	Velpar	75	DF	0.344	LB A/A	7.34	OZ/A	PRE	A	117 b	75 a	0 a
	Karmex XP	80	WG	1.23	LB A/A	1.54	LB/A	PRE	A			
2	Velpar	75	DF	0.519	LB A/A	11.1	OZ/A	PRE	A	122 b	75 a	0 a
	Karmex XP	80	WG	1.84	LB A/A	2.3	LB/A	PRE	A			
3	Velpar	75	DF	0.694	LB A/A	14.8	OZ/A	PRE	A	129 b	78 a	0 a
	Karmex XP	80	WG	2.46	LB A/A	3.08	LB/A	PRE	A			
4	Velpar	75	DF	0.794	LB A/A	17	OZ/A	PRE	A	116 b	80 a	0 a
	Karmex XP	80	WG	2.83	LB A/A	3.54	LB/A	PRE	A			
5	Velpar	75	DF	1.21	LB A/A	25.8	OZ/A	PRE	A	126 b	81 a	0 a
	Karmex XP	80	WG	4.31	LB A/A	5.4	LB/A	PRE	A			
6	Velpar	75	DF	0.519	LB A/A	11.1	OZ/A	PRE	A	194 a	83 a	0 a
	Karmex XP	80	WG	1.84	LB A/A	2.3	LB/A	PRE	A			
	Prowl	3.3	EC	1.65	LB A/A	2	QT/A	PRE	A			
7	Prowl	3.3	EC	3.3	LB A/A	4	QT/A	PRE	A	128 b	76 a	0 a
	Atrazine	4	L	4.0	LB A/A	4	QT/A	PRE	A			
8	Velpar	75	DF	0.519	LB A/A	11.1	OZ/A	PRE	A	118 b	70 a	0 a
	Karmex XP	80	WG	1.84	LB A/A	2.3	LB/A	PRE	A			
	Velpar	75	DF	0.519	LB A/A	11.1	OZ/A	Layby	B			
	Karmex XP	80	WG	1.84	LB A/A	2.3	LB/A	Layby	B			
	Induce		L	0.25	% V/V	0.25	% V/V	Layby	B			
LSD (P=.05)										38.6	8.8	0.0
Standard Deviation										26.2	6.0	0.0
CV										19.99	7.76	0.0
Grand Mean										131.22	77.19	0.0
Bartlett's X2										19.694	3.955	0.0
P(Bartlett's X2)										0.006*	0.785	.
Replicate F										4.546	6.826	0.000
Replicate Prob(F)										0.0132	0.0022	1.0000
Treatment F										3.885	1.830	0.000
Treatment Prob(F)										0.0073	0.1341	1.0000

**Louisiana State University**  
Department of Agronomy and Environmental Management

**Asulox/Asulox XP and Envoke POST Johnsongrass Test**

Experiment number ..... : 07SC07JG  
Location ..... : Sugar Research Station - St. Gabriel, LA  
Experimental design..... : Randomized Complete Block  
Number of reps..... : 4  
Plot size ..... : 18'X40'  
Row width/# per plot..... : 72"/3  
Soil type..... : silt loam  
OM (%) ..... : 1.0  
pH ..... : 5.9  
Planting date..... : 3<sup>Rd</sup> Stubble  
Harvest date ..... : N/A  
Crop/Variety ..... : LCP-85-384  
Uniform std. treatment..... : N/A

Application type ..... : POST A  
Date applied (mm-dd-yy)..... : 04/06/07  
Time (hh:mm-hh:mm) ..... : 7:00-7:30am  
Incorporation equipment..... : N/A  
Incorporation depth..... : N/A  
Air/Soil temperature (F)..... : 58/67  
Wind (mph/direction) ..... : 4-6/NNW  
Cloud cover (%) ..... : 40%  
Relative humidity (%)..... : 38%  
Soil/Leaf surface moist ..... : moist/moist  
Crop stage/height ..... : 4-6lf/8-12"  
Sprayer type/mph..... : trctrCA/5.0  
Nozzle type/size ..... : FF/11002VS  
Boom ht/#noz/spacing (in) .... : 18 /3-36"band  
GPA/psi (at nozzle) ..... : 15/35  
Applied by ..... : Boudreaux

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
SORHA (3-5/ ft<sup>2</sup>) ..... : 18-24"/6-10lf

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

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Comments:

# School of Plant, Environmental, and Soil Sciences

## Asulox/Asulox XP and Envoke POST Johnsongrass Test

Trial ID: 07SC07JG  
 Location: St. Gabriel

Protocol ID: 07SC07JG  
 Study Director: Joseph M. Boudreaux  
 Investigator: Dr. James L. Griffin

										SORHA		SORHA	
										CANE			
										4/May/2007	4/May/2007	23/May/2007	
										Control	Injury	Control	
										%	%	%	
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	Asulox Induce	3.34	L	3.34	LB A/A	8	PT/A	POST	A	44 b	0 b	61 c	
			L	0.25	% V/V	0.25	% V/V	POST	A				
2	Asulox XP Induce	3.13	L	3.13	LB A/A	8	PT/A	POST	A	41 b	0 b	60 c	
			L	0.25	% V/V	0.25	% V/V	POST	A				
3	Asulox Induce	3.34	L	2.5	LB A/A	6	PT/A	POST	A	65 a	10 a	78 ab	
	Envoke Induce	75	DF	0.014	LB A/A	0.3	OZ/A	POST	A				
			L	0.25	% V/V	0.25	% V/V	POST	A				
4	Asulox XP Induce	3.13	L	2.35	LB A/A	6	PT/A	POST	A	68 a	11 a	81 a	
	Envoke Induce	75	DF	0.014	LB A/A	0.3	OZ/A	POST	A				
			L	0.25	% V/V	0.25	% V/V	POST	A				
5	Asulox Induce	3.34	L	1.67	LB A/A	4	PT/A	POST	A	66 a	8 a	76 ab	
	Envoke Induce	75	DF	0.014	LB A/A	0.3	OZ/A	POST	A				
			L	0.25	% V/V	0.25	% V/V	POST	A				
6	Asulox XP Induce	3.13	L	1.57	LB A/A	4	PT/A	POST	A	64 a	11 a	70 b	
	Envoke Induce	75	DF	0.014	LB A/A	0.3	OZ/A	POST	A				
			L	0.25	% V/V	0.25	% V/V	POST	A				
7	Nontreated									0 c	0 b	0 d	
LSD (P=.05)										6.8	3.2	7.4	
Standard Deviation										4.6	2.2	5.0	
CV										9.19	37.79	8.21	
Grand Mean										49.64	5.71	60.89	
Bartlett's X2										5.475	1.0	5.265	
P(Bartlett's X2)										0.361	0.801	0.384	
Replicate F										1.200	2.043	0.417	
Replicate Prob(F)										0.3381	0.1439	0.7432	
Treatment F										115.171	25.851	125.810	
Treatment Prob(F)										0.0001	0.0001	0.0001	

**Louisiana State University**  
Department of Agronomy and Environmental Management

**Yukon Spring Test**

Experiment number ..... : 07SC09JG  
Location ..... : Sugar Research Station - St. Gabriel, LA  
Experimental design..... : Randomized Complete Block  
Number of reps..... : 4  
Plot size ..... : 18'X40'  
Row width/# per plot..... : 72"/3  
Soil type..... : silt loam  
OM (%) ..... : 1.0  
pH ..... : 5.9  
Planting date..... : 10-02-06  
Harvest date ..... : N/A  
Crop/Variety ..... : L 97-128  
Uniform std. treatment..... : N/A

Application type ..... : POST A  
Date applied (mm-dd-yy)..... : 04/06/07  
Time (hh:mm-hh:mm) ..... : 7:30-7:45am  
Incorporation equipment..... : N/A  
Incorporation depth..... : N/A  
Air/Soil temperature (F)..... : 58/67  
Wind (mph/direction) ..... : 4-6/NNW  
Cloud cover (%) ..... : 40%  
Relative humidity (%)..... : 38%  
Soil/Leaf surface moist ..... : moist/moist  
Crop stage/height ..... : 4-6lf/8-12"  
Sprayer type/mph..... : trctrCA/5.0  
Nozzle type/size ..... : FF/11002VS  
Boom ht/#noz/spacing (in) .... : 18/3-36"band  
GPA/psi (at nozzle) ..... : 15/35  
Applied by ..... : Boudreaux

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)

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

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Comments:

# School of Plant, Environmental, and Soil Sciences

## Yukon Spring Test

Trial ID: 07SC09JG  
Location: St. Gabriel

Protocol ID: 07SC09JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code	CANE	CANE
Rating Date	16/Apr/2007	27/Apr/2007
Rating Data Type	Injury	Injury
Rating Unit	%	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Yukon 2,4-D Amine 4 Induce	67.5 3.8	DG L	0.253 0.475 0.25	LB A/A LB AE/A % V/V	6 1 0.25	OZ/A PT/A % V/V	POST POST POST	A A A	0 c	0 b
2	Yukon K-4 Induce	67.5 60	DG DG	0.253 2.25 0.25	LB A/A LB A/A % V/V	6 3.75 0.25	OZ/A LB/A % V/V	POST POST POST	A A A	28 a	8 a
3	Yukon Evik Induce	67.5 76	DG WG	0.253 0.76 0.25	LB A/A LB A/A % V/V	6 1.0 0.25	OZ/A LB/A % V/V	POST POST POST	A A A	5 b	2 b
4	Yukon Atrazine Induce	67.5 4	DG L	0.253 3 0.25	LB A/A LB A/A % V/V	6 3 0.25	OZ/A QT/A % V/V	POST POST POST	A A A	0 c	0 b
5	Yukon Envoke Induce	67.5 75	DG DF	0.253 0.014 0.25	LB A/A LB A/A % V/V	6 0.3 0.25	OZ/A OZ/A % V/V	POST POST POST	A A A	0 c	2 b
6	Nontreated									0 c	0 b
LSD (P=.05)										1.8	1.8
Standard Deviation										1.2	1.2
CV										21.76	58.13
Grand Mean										5.42	2.08
Bartlett's X2										0.0	5.297
P(Bartlett's X2)										.	0.071
Replicate F										1.000	0.341
Replicate Prob(F)										0.4199	0.7961
Treatment F										348.600	27.864
Treatment Prob(F)										0.0001	0.0001

**Louisiana State University**  
Department of Agronomy and Environmental Management

**Johnsongrass Yukon/Asulox Test**

Experiment number ..... : 07SC10JG  
Location ..... : Sugar Research Station - St. Gabriel, LA  
Experimental design..... : Randomized Complete Block  
  Number of reps..... : 4  
  Plot size ..... : 18'X35'  
  Row width/# per plot..... : 72"/3  
Soil type ..... : silt loam  
  OM (%) ..... : 1.0  
  pH ..... : 5.9  
Planting date ..... : 3<sup>rd</sup> Stubble  
Harvest date ..... : N/A  
Crop/Variety ..... : LCP-85-384  
Uniform std. treatment..... : N/A

Application type .....	POST A	POST B
Date applied (mm-dd-yy).....	04/06/07	05/14/07
Time (hh:mm-hh:mm) .....	7:30-7:45am	11:30-12:00pm
Incorporation equipment.....	N/A	N/A
Incorporation depth.....	N/A	N/A
Air/Soil temperature (F).....	58/67	90/72
Wind (mph/direction) .....	4-6/NNW	2-3/NE
Cloud cover (%) .....	40	10
Relative humidity (%).....	38	44
Soil/Leaf surface moist .....	moist/moist	dry/dry
Crop stage/height .....	4-6lf/8-12"	10-12lf/24-36"
Sprayer type/mph .....	trctrCA/5.0	trctrCA/3.75
Nozzle type/size .....	FF/11002VS	FF/11002VS
Boom ht/#noz/spacing (in) .....	18/3-36"band	18/12/18
GPA/psi (at nozzle) .....	15/35	15/25
Applied by .....	Boudreaux	Boudreaux

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
SORHA (5/ ft<sup>2</sup>) ..... : 18-24"/6-10lf

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

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Comments:

# School of Plant, Environmental, and Soil Sciences

## Johnsongrass Yukon/Asulox Test

Trial ID: 07SC10JG  
Location: St. Gabriel

Protocol ID: 07SC10JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

										SORHA		SORHA	
										CANE			
										4/May/2007	4/May/2007	23/May/2007	
										Control	Injury	Control	
										%	%	%	
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Form Unit	Other Rate	Other Unit	Growth Stage	Appl Code				
1	Yukon	67.5	DG	0.253	LB A/A 6	OZ/A		POST	A	46 b	0 b	56 b	
	Asulox	3.34	L	3.34	LB A/A 4	QT/A		POST	A				
	Induce			0.25	% V/V	0.25	% V/V	POST	A				
2	Yukon	67.5	DG	0.169	LB A/A 4	OZ/A		POST	A	45 b	0 b	58 b	
	Asulox	3.34	L	3.34	LB A/A 4	QT/A		POST	A				
	Induce			0.25	% V/V	0.25	% V/V	POST	A				
3	Yukon	67.5	DG	0.253	LB A/A 6	OZ/A		POST	A	40 b	0 b	56 b	
	Asulox	3.34	L	3.34	LB A/A 4	QT/A		POST	A				
	Induce			0.25	% V/V	0.25	% V/V	POST	A				
	Yukon	67.5	DG	0.253	LB A/A 6	OZ/A		POST	B				
	Asulox	3.34	L	3.34	LB A/A 4	QT/A		POST	B				
	Induce			0.25	% V/V	0.25	% V/V	POST	B				
4	Yukon	67.5	DG	0.169	LB A/A 4	OZ/A		POST	A	44 b	0 b	59 b	
	Asulox	3.34	L	3.34	LB A/A 4	QT/A		POST	A				
	Induce			0.25	% V/V	0.25	% V/V	POST	A				
	Yukon	67.5	DG	0.169	LB A/A 4	OZ/A		POST	B				
	Asulox	3.34	L	3.34	LB A/A 4	QT/A		POST	B				
	Induce			0.25	% V/V	0.25	% V/V	POST	B				
5	Asulox	3.34	L	1.67	LB A/A 2	QT/A		POST	A	69 a	11 a	76 a	
	Envoke	75	DF	0.014	LB A/A 0.3	OZ/A		POST	A				
	Induce			0.25	% V/V	0.25	% V/V	POST	A				
6	Nontreated									0 c	0 b	0 c	
LSD (P=.05)										5.1	1.5	7.0	
Standard Deviation										3.4	1.0	4.7	
CV										8.28	54.43	9.16	
Grand Mean										40.63	1.88	50.83	
Bartlett's X2										1.877	0.0	4.475	
P(Bartlett's X2)										0.758	.	0.346	
Replicate F										1.074	1.000	1.154	
Replicate Prob(F)										0.3900	0.4199	0.3598	
Treatment F										176.853	81.000	125.385	
Treatment Prob(F)										0.0001	0.0001	0.0001	

# School of Plant, Environmental, and Soil Sciences

## Johnsongrass Yukon/Asulox Test

Trial ID: 07SC10JG  
Location: St. Gabriel

Protocol ID: 07SC10JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

											SORHA	
											CANE	
											23/May/2007	15/Jun/2007
											Injury	Control
											%	%
											4	5
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Form Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code	4	5
1	Yukon	67.5	DG	0.253	LB A/A	6	OZ/A		POST	A	0 b	0 a
	Asulox	3.34	L	3.34	LB A/A	4	QT/A		POST	A		
	Induce			0.25	% V/V	0.25	% V/V		POST	A		
2	Yukon	67.5	DG	0.169	LB A/A	4	OZ/A		POST	A	0 b	0 a
	Asulox	3.34	L	3.34	LB A/A	4	QT/A		POST	A		
	Induce			0.25	% V/V	0.25	% V/V		POST	A		
3	Yukon	67.5	DG	0.253	LB A/A	6	OZ/A		POST	A	0 b	0 a
	Asulox	3.34	L	3.34	LB A/A	4	QT/A		POST	A		
	Induce			0.25	% V/V	0.25	% V/V		POST	A		
	Yukon	67.5	DG	0.253	LB A/A	6	OZ/A		POST	B		
	Asulox	3.34	L	3.34	LB A/A	4	QT/A		POST	B		
	Induce			0.25	% V/V	0.25	% V/V		POST	B		
4	Yukon	67.5	DG	0.169	LB A/A	4	OZ/A		POST	A	0 b	0 a
	Asulox	3.34	L	3.34	LB A/A	4	QT/A		POST	A		
	Induce			0.25	% V/V	0.25	% V/V		POST	A		
	Yukon	67.5	DG	0.169	LB A/A	4	OZ/A		POST	B		
	Asulox	3.34	L	3.34	LB A/A	4	QT/A		POST	B		
	Induce			0.25	% V/V	0.25	% V/V		POST	B		
5	Asulox	3.34	L	1.67	LB A/A	2	QT/A		POST	A	6 a	0 a
	Envoke	75	DF	0.014	LB A/A	0.3	OZ/A		POST	A		
	Induce			0.25	% V/V	0.25	% V/V		POST	A		
6	Nontreated										0 b	0 a
LSD (P=.05)											1.6	0.0
Standard Deviation											1.1	0.0
CV											101.42	0.0
Grand Mean											1.04	0.0
Bartlett's X2											0.0	0.0
P(Bartlett's X2)											.	.
Replicate F											0.933	0.000
Replicate Prob(F)											0.4506	1.0000
Treatment F											23.333	0.000
Treatment Prob(F)											0.0001	1.0000

**Louisiana State University**  
Department of Agronomy and Environmental Management

**Fallow Field Weed Control with Yukon**

Experiment number ..... : 07SC11JG  
Location ..... : Keith Mathern Farm – Donaldsonville, LA  
Experimental design..... : Randomized Complete Block  
Number of reps..... : 4  
Plot size ..... : 8X30FT  
Row width/# per plot..... : N/A  
Soil type..... : silt loam  
OM (%) ..... : 1.1  
pH ..... : 5.9  
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)..... : 07-10-07  
Time (hh:mm-hh:mm) ..... : 11:30-11:45am  
Incorporation equipment..... : N/A  
Incorporation depth..... : N/A  
Air/Soil temperature (F)..... : 90/78  
Wind (mph/direction) ..... : 3-6/E  
Cloud cover (%) ..... : 70%  
Relative humidity (%)..... : 58%  
Soil/Leaf surface moist ..... : Dry/Dry  
Crop stage/height ..... : N/A  
Sprayer type/mph..... : CO<sub>2</sub>bkpk/3.0  
Nozzle type/size ..... : FF/11002VS  
Boom ht/#noz/spacing (in) .... : 18"/4/18"  
GPA/psi (at nozzle) ..... : 15/25  
Applied by ..... : Boudreaux

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
CYPRO (2-3)..... : 4-6"/4-6lf  
CYPES (2-3) ..... : 6-8"/6-8lf

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

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Comments:

# School of Plant, Environmental, and Soil Sciences

## Fallow Field Weed Control with Yukon

Trial ID: 07SC11JG  
Location: Donaldsonville

Protocol ID: 07SC11JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code										CYPSS	CYPSS
Rating Date										24/Jul/2007	8/Aug/2007
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	Yukon	67.5	DG	0.253	LB A/A	6	OZ/A	POST	A	60 a	85 a
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A		
	Agridex			1.0	% V/V	1	% V/V	POST	A		
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B		
2	Yukon	67.5	DG	0.253	LB A/A	6	OZ/A	POST	A	58 a	89 a
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A		
	Agridex			1.0	% V/V	1	% V/V	POST	A		
	Yukon	67.5	DG	0.253	LB A/A	6	OZ/A	POST	B		
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B		
	Agridex			1.0	% V/V	1	% V/V	POST	B		
3	Yukon	67.5	DG	0.253	LB A/A	6	OZ/A	POST	A	46 b	85 a
	Clarity	4	L	0.313	LB AE/A	10	OZ/A	POST	A		
	Agridex			1.0	% V/V	1	% V/V	POST	A		
	Roundup Original Max	5.5	L	1.0	LB A/A	23.3	OZ/A	POST	B		
4	Yukon	67.5	DG	0.253	LB A/A	6	OZ/A	POST	A	46 b	83 a
	Envoke	75	DF	0.007	LB A/A	0.15	OZ/A	POST	A		
	Agridex			1.0	% V/V	1	% V/V	POST	A		
	Roundup Original Max	5.5	L	1.0	LB A/A	23.3	OZ/A	POST	B		
5	Roundup Original Max	5.5	L	1.0	LB A/A	23.3	OZ/A	POST	A	48 b	76 b
	Roundup Original Max	5.5	L	1.0	LB A/A	23.3	OZ/A	POST	B		
LSD (P=.05)										6.5	5.8
Standard Deviation										4.2	3.7
CV										8.17	4.47
Grand Mean										51.5	83.5
Bartlett's X2										3.12	3.115
P(Bartlett's X2)										0.374	0.539
Replicate F										0.471	1.075
Replicate Prob(F)										0.7084	0.3966
Treatment F										10.129	6.134
Treatment Prob(F)										0.0008	0.0063

**Louisiana State University**  
 Department of Agronomy and Environmental Management

**Eptam Fallow Study**

Experiment number ..... : 07SC12JG  
 Location ..... : Sugar Research Station - St. Gabriel, LA  
 Experimental design..... : Randomized Complete Block  
 Number of reps..... : 4  
 Plot size ..... : 18X50ft.  
 Row width/# per plot..... : 72"/3  
 Soil type..... : silt loam  
 OM (%) ..... : 1.0  
 pH ..... : 5.9  
 Planting date..... : 09-20-07  
 Harvest date ..... : N/A  
 Crop/Variety ..... : L 99-226  
 Uniform std. treatment..... : N/A

Application type .....	PRE	POST B	POST C
Date applied (mm-dd-yy).....	06-08-07	07-10-07	07-24-07
Time (hh:mm-hh:mm) .....	10:00-12:00am	9:00-9:30am	9:30-10:00am
Incorporation equipment.....	See Comments	N/A	N/A
Incorporation depth.....	3"	N/A	N/A
Air/Soil temperature (F).....	88/80	92/78	89/81
Wind (mph/direction) .....	3-6/SW	2-6/SE	1-3/S
Cloud cover (%) .....	50%	70%	50%
Relative humidity (%).....	70%	53%	50%
Soil/Leaf surface moist .....	Moist/N/A	Dry/ Dry	Dry/Dry
Crop stage/height .....	N/A	N/A	N/A
Sprayer type/mph.....	trctrCA/3.75	trctrCA/3.75	trctr.pto/5.0
Nozzle type/size .....	FF/11002VS	FF/11002VS	FF/11003VS
Boom ht/#noz/spacing (in) ....	18"/12/18"	18"/12/18"	18"/12/18"
GPA/psi (at nozzle) .....	15/32	15/32	15/25
Applied by .....	Griffin	Boudreaux	Boudreaux

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
 CYNDA (1-2) ..... : 6-8" runners 6-10" runners  
 SORHA (< 1) ..... : 18-24"/15-20lf 24-36"/15-20lf

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

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Comments:  
 Pre trts. incorporated with a bedder or cultivator.

# School of Plant, Environmental, and Soil Sciences

## Eptam Fallow Study

Trial ID: 07SC12JG  
Location: St. Gabriel

Protocol ID: 07SC12JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code										CYNDA	CYNDA
Rating Date										9/Jul/2007	24/Jul/2007
Rating Data Type										GroundCover	GroundCover
Rating Unit										%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Eptam/bedder	7	E	1.75	LB A/A	2	PT/A	PRE	A	10 bc	16 ab
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
2	Eptam/bedder	7	E	2.63	LB A/A	3	PT/A	PRE	A	8 bc	12 ab
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
3	Eptam/bedder	7	E	3.5	LB A/A	4	PT/A	PRE	A	10 bc	19 a
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
4	Eptam/bedder	7	E	4.38	LB A/A	5	PT/A	PRE	A	7 bc	12 ab
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
5	Eptam/cultivator	7	E	1.75	LB A/A	2	PT/A	PRE	A	2 c	5 ab
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
6	Eptam/cultivator	7	E	2.63	LB A/A	3	PT/A	PRE	A	2 c	3 b
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
7	Eptam/cultivator	7	E	3.5	LB A/A	4	PT/A	PRE	A	4 c	6 ab
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
8	Eptam/cultivator	7	E	4.38	LB A/A	5	PT/A	PRE	A	2 c	5 ab
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
9	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	B	15 abc	
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
10	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	B	24 ab	
	Yukon	67.5	DG	0.253	LB A/A	6.0	OZ/A	POST	B		
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
11	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	B	26 a	
	Envoke	75	DF	0.007	LB A/A	0.15	OZ/A	POST	B		
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
LSD (P=.05)										11.4	9.4
Standard Deviation										7.9	6.4
CV										78.72	66.03
Grand Mean										10.0	9.72
Bartlett's X2										33.464	15.879
P(Bartlett's X2)										0.001*	0.026*
Replicate F										4.614	7.752
Replicate Prob(F)										0.0090	0.0011
Treatment F										4.638	3.454
Treatment Prob(F)										0.0005	0.0128

# School of Plant, Environmental, and Soil Sciences

## Eptam Fallow Study

Trial ID: 07SC12JG  
Location: St. Gabriel

Protocol ID: 07SC12JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code	Rating Date	Rating Data Type	Rating Unit	CYNDA 24/Jul/2007 Control %	SORHA 24/Jul/2007 Control %	CYNDA 8/Aug/2007 Control %						
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Eptam/bedder Roundup Original Max	7 5.5	E L	1.75 2.0	LB A/A	2 46.5	PT/A OZ/A	PRE POST	A C			97 a
2	Eptam/bedder Roundup Original Max	7 5.5	E L	2.63 2.0	LB A/A	3 46.5	PT/A OZ/A	PRE POST	A C			97 a
3	Eptam/bedder Roundup Original Max	7 5.5	E L	3.5 2.0	LB A/A	4 46.5	PT/A OZ/A	PRE POST	A C			99 a
4	Eptam/bedder Roundup Original Max	7 5.5	E L	4.38 2.0	LB A/A	5 46.5	PT/A OZ/A	PRE POST	A C			97 a
5	Eptam/cultivator Roundup Original Max	7 5.5	E L	1.75 2.0	LB A/A	2 46.5	PT/A OZ/A	PRE POST	A C			98 a
6	Eptam/cultivator Roundup Original Max	7 5.5	E L	2.63 2.0	LB A/A	3 46.5	PT/A OZ/A	PRE POST	A C			99 a
7	Eptam/cultivator Roundup Original Max	7 5.5	E L	3.5 2.0	LB A/A	4 46.5	PT/A OZ/A	PRE POST	A C			98 a
8	Eptam/cultivator Roundup Original Max	7 5.5	E L	4.38 2.0	LB A/A	5 46.5	PT/A OZ/A	PRE POST	A C			99 a
9	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	B	95 a	95 a	97 a
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C			
10	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	B	95 a	95 a	96 a
	Yukon	67.5	DG	0.253	LB A/A	6.0	OZ/A	POST	B			
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C			
11	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	B	95 a	95 a	96 a
	Envoke	75	DF	0.007	LB A/A	0.15	OZ/A	POST	B			
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C			
LSD (P=.05)										0.0	0.0	2.3
Standard Deviation										0.0	0.0	1.6
CV										0.0	0.0	1.63
Grand Mean										95.0	95.0	97.45
Bartlett's X2										0.0	0.0	3.094
P(Bartlett's X2)										.	.	0.979
Replicate F										0.000	0.000	1.179
Replicate Prob(F)										1.0000	1.0000	0.3344
Treatment F										0.000	0.000	1.921
Treatment Prob(F)										1.0000	1.0000	0.0816

**Louisiana State University**  
 Department of Agronomy and Environmental Management

**Eptam Fallow Study II**

Experiment number ..... : 07SC13JG  
 Location ..... : Keith Mathern Farm – Donaldsonville, LA  
 Experimental design..... : Randomized Complete Block  
     Number of reps..... : 4  
     Plot size ..... : 18X100ft.  
     Row width/# per plot..... : 72"/3  
 Soil type ..... : silt loam  
     OM (%) ..... : 1.1  
     pH ..... : 5.9  
 Planting date ..... : N/A  
 Harvest date ..... : N/A  
 Crop/Variety ..... : N/A  
 Uniform std. treatment..... : N/A

Application type ..... : PRE A	POST B	POST C
Date applied (mm-dd-yy)..... : 06-12-07	07-10-07	07-24-07
Time (hh:mm-hh:mm) ..... : 10:00-12:00am	11:00-11:30am	11:30-12:00am
Incorporation equipment..... : Chisel/Bedder	N/A	N/A
Incorporation depth..... : 3-6"	N/A	N/A
Air/Soil temperature (F)..... : 92/81	89/76	92/81
Wind (mph/direction) ..... : 3-6/NW	4-7/E	2-5/E
Cloud cover (%) ..... : 70%	60%	30%
Relative humidity (%)..... : 47%	50%	57%
Soil/Leaf surface moist ..... : Dry/N/A	Dry/Dry	Dry/Dry
Crop stage/height ..... : N/A	N/A	N/A
Sprayer type/mph ..... : trctrCA/3.75	trctrCA/3.75	trctr.pto/5.0
Nozzle type/size ..... : FF/11002VS	FF/11002VS	FF/11003VS
Boom ht/#noz/spacing (in) .... : 18"/12/18"	18"/12/18"	18"/12/18"
GPA/psi (at nozzle) ..... : 15/32	15/32	15/25
Applied by ..... : Boudreaux	Boudreaux	Boudreaux

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
 CYPRO (3-4)..... : 4-6"/4-6lf 4-6"/4-6lf  
 CYPEX (3-4)..... : 4-6"/4-6lf 4-6"/4-6lf

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

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Comments:

# School of Plant, Environmental, and Soil Sciences

## Eptam Fallow Study II

Trial ID: 07SC13JG  
Location: Donaldsonville

Protocol ID: 07SC13JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code				CYPSS		CYPSS					
Rating Date				9/Jul/2007		24/Jul/2007					
Rating Data Type				GroundCover		GroundCover					
Rating Unit				%		%					
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code		
1	Eptam	7	E	1.75	LB A/A	2	PT/A	PRE	A	18 b	48 a
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
2	Eptam	7	E	2.63	LB A/A	3	PT/A	PRE	A	13 b	45 a
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
3	Eptam	7	E	3.5	LB A/A	4	PT/A	PRE	A	8 b	25 a
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
4	Eptam	7	E	4.38	LB A/A	5	PT/A	PRE	A	4 b	24 a
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
5	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	B	51 a	
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
6	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	B	50 a	
	Yukon	67.5	DG	0.253	LB A/A	6.0	OZ/A	POST	B		
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
7	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	B	38 a	
	Envoke	75	DF	0.007	LB A/A	0.15	OZ/A	POST	B		
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
LSD (P=.05)										13.7	19.4
Standard Deviation										9.2	12.1
CV										35.66	34.38
Grand Mean										25.93	35.31
Bartlett's X2										20.739	7.994
P(Bartlett's X2)										0.002*	0.046*
Replicate F										3.256	1.057
Replicate Prob(F)										0.0458	0.4144
Treatment F										18.595	4.364
Treatment Prob(F)										0.0001	0.0371

# School of Plant, Environmental, and Soil Sciences

## Eptam Fallow Study II

Trial ID: 07SC13JG  
Location: Donaldsonville

Protocol ID: 07SC13JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code										CYPSS	CYPSS
Rating Date										24/Jul/2007	8/Aug/2007
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	Eptam	7	E	1.75	LB A/A	2	PT/A	PRE	A		73 b
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
2	Eptam	7	E	2.63	LB A/A	3	PT/A	PRE	A		78 b
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
3	Eptam	7	E	3.5	LB A/A	4	PT/A	PRE	A		84 a
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
4	Eptam	7	E	4.38	LB A/A	5	PT/A	PRE	A		85 a
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
5	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	B	79 a	89 a
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
6	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	B	61 c	91 a
	Yukon	67.5	DG	0.253	LB A/A	6.0	OZ/A	POST	B		
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
7	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	B	73 b	92 a
	Envoke	75	DF	0.007	LB A/A	0.15	OZ/A	POST	B		
	Roundup Original Max	5.5	L	2.0	LB A/A	46.5	OZ/A	POST	C		
LSD (P=.05)										5.9	5.6
Standard Deviation										3.4	3.7
CV										4.85	4.44
Grand Mean										70.83	84.21
Bartlett's X2										1.995	2.438
P(Bartlett's X2)										0.369	0.875
Replicate F										1.176	11.079
Replicate Prob(F)										0.3942	0.0002
Treatment F										26.647	14.146
Treatment Prob(F)										0.0010	0.0001

**Louisiana State University**  
School of Plant, Environmental, and Soil Sciences

**Roundup Programs Test**

Experiment number ..... : 07SB01JG  
 Location ..... : Ben Hur Research Farm- Baton Rouge LA  
 Experimental design..... : Randomized Complete Block  
   Number of reps..... : 4  
   Plot size ..... : 8 X 30 ft  
   Row width/# per plot..... : 15"/3  
 Soil type..... : clay loam  
   OM (%) ..... : 1.9  
   pH ..... : 6.3  
 Planting date..... : 04-30-07  
 Harvest date ..... : N/A  
 Crop/Variety ..... : Asgrow 5903  
 Uniform std. treatment..... : 05-01-07 - Post – Roundup Original Max at 23.3oz/A

Application type .....	PRE	EPOST B	POST C
Date applied (mm-dd-yy) .....	05-02-07	05-31-07	06-18-07
Time (hh:mm-hh:mm) .....	8:00-8:30am	11:30-12:00pm	8:30-8:45am
Incorporation equipment.....	N/A	N/A	N/A
Incorporation depth.....	N/A	N/A	N/A
Air/Soil temperature (F).....	74/75	88/65	86/75
Wind (mph/direction) .....	2-3/SE	1-3/SE	4-6/SE
Cloud cover (%) .....	50%	70%	25%
Relative humidity (%).....	80%	54%	85%
Soil/Leaf surface moist .....	Dry/N/A	Moist/Dry	Dry/Moist
Crop stage/height .....	N/A	V3-V4/10-12"	V8-V10/26-32"
Sprayer type/mph.....	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/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) .....	15/25	15/25	15/25
Applied by .....	Boudreaux	Boudreaux	Boudreaux

Weed species (population/ft <sup>2</sup> ) . :	(height/# leaves)	
ECHCG (2-3) .....	3-4"/8-10lf	3-6"/6-10lf
PHYAN (2).....	3-4"/8-12lf	3-6"/6-12lf
IPOHE (1) .....	6-10" runners	8-12"runners
MEOCO (1-2).....	1-2"/ 2-3lf	1-2"/2-3lf

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

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Comments:

# School of Plant, Environmental, and Soil Sciences

## Roundup Programs Test

Trial ID: 07SB01JG  
Location: Ben Hur

Protocol ID: 07SB01JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code										ECHCG	IPOLA
Rating Date										31/May/2007	31/May/2007
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	WP	0.064	LB A/A	2	OZ/A	PRE	A	83 a	50 a
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C		
2	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	EPOST	B	0 b	0 b
3	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	EPOST	B	0 b	0 b
4	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	EPOST	B	0 b	0 b
5	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	EPOST	B	0 b	0 b
	Dual II Magnum	7.64	L	0.955	LB A/A	1	PT/A	EPOST	B		
6	Sequence	5.25	L	1.64	LB A/A	2.5	PT/A	EPOST	B	0 b	0 b
7	Sequence	5.25	L	1.97	LB A/A	3.0	PT/A	EPOST	B	0 b	0 b
8	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	EPOST	B	0 b	0 b
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C		
9	Nontreated									0 b	0 b
LSD (P=.05)										2.4	2.0
Standard Deviation										1.7	1.4
CV										18.18	24.49
Grand Mean										9.17	5.56
Bartlett's X2										0.0	0.0
P(Bartlett's X2)										.	.
Replicate F										1.000	1.000
Replicate Prob(F)										0.4098	0.4098
Treatment F										1089.000	600.000
Treatment Prob(F)										0.0001	0.0001

# School of Plant, Environmental, and Soil Sciences

## Roundup Programs Test

Trial ID: 07SB01JG  
Location: Ben Hur

Protocol ID: 07SB01JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code		PHYAN		ECHCG							
Rating Date		31/May/2007		14/Jun/2007							
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	WP	0.064	LB A/A	2	OZ/A	PRE	A	100 a	86 a
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C		
2	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	EPOST	B	0 b	90 a
3	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	EPOST	B	0 b	83 a
4	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	EPOST	B	0 b	90 a
5	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	EPOST	B	0 b	86 a
	Dual II Magnum	7.64	L	0.955	LB A/A	1	PT/A	EPOST	B		
6	Sequence	5.25	L	1.64	LB A/A	2.5	PT/A	EPOST	B	0 b	89 a
7	Sequence	5.25	L	1.97	LB A/A	3.0	PT/A	EPOST	B	0 b	90 a
8	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	EPOST	B	0 b	93 a
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C		
9	Nontreated									0 b	0 b
LSD (P=.05)										0.0	10.7
Standard Deviation										0.0	7.3
CV										0.0	9.31
Grand Mean										11.11	78.47
Bartlett's X2										0.0	3.823
P(Bartlett's X2)										.	0.80
Replicate F										0.000	1.088
Replicate Prob(F)										1.0000	0.3732
Treatment F										0.000	65.490
Treatment Prob(F)										1.0000	0.0001

# School of Plant, Environmental, and Soil Sciences

## Roundup Programs Test

Trial ID: 07SB01JG  
Location: Ben Hur

Protocol ID: 07SB01JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code		IPOLA	PHYAN
Rating Date		14/Jun/2007	14/Jun/2007
Rating Data Type		Control	Control
Rating Unit		%	%

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Valor	51	WP	0.064	LB A/A	2	OZ/A	PRE	A	50 a	98 a
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C		
2	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	EPOST	B	59 a	96 a
3	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	EPOST	B	58 a	96 a
4	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	EPOST	B	59 a	96 a
5	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	EPOST	B	63 a	95 a
	Dual II Magnum	7.64	L	0.955	LB A/A	1	PT/A	EPOST	B		
6	Sequence	5.25	L	1.64	LB A/A	2.5	PT/A	EPOST	B	60 a	99 a
7	Sequence	5.25	L	1.97	LB A/A	3.0	PT/A	EPOST	B	60 a	96 a
8	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	EPOST	B	70 a	98 a
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C		
9	Nontreated									0 b	0 b
LSD (P=.05)										13.0	3.3
Standard Deviation										8.9	2.3
CV										16.8	2.65
Grand Mean										53.06	86.06
Bartlett's X2										8.565	3.79
P(Bartlett's X2)										0.285	0.804
Replicate F										4.323	13.443
Replicate Prob(F)										0.0143	0.0001
Treatment F										21.280	799.775
Treatment Prob(F)										0.0001	0.0001

**Louisiana State University**  
School of Plant, Environmental, and Soil Sciences

**Manganese/Glyphosate POST Test**

Experiment number ..... : 07SB03JG  
 Location ..... : Ben Hur Research Farm- Baton Rouge LA  
 Experimental design..... : Randomized Complete Block  
 Number of reps..... : 4  
 Plot size ..... : 8X30ft.  
 Row width/# per plot..... : 15"/3  
 Soil type..... : clay loam  
 OM (%) ..... : 1.9  
 pH ..... : 6.3  
 Planting date..... : 05-09-07  
 Harvest date ..... : 10-26-07  
 Crop/Variety ..... : Asgrow 5903  
 Uniform std. treatment..... :

Application type .....	POST A	10 DAT A	POST B	10 DAT B
Date applied (mm-dd-yy) .....	06-05-07	06-14-07	06-25-07	07-05-07
Time (hh:mm-hh:mm) .....	11:00-11:45am	8:30-8:45am	10:30-10:45am	9:00-9:15am
Incorporation equipment.....	N/A	N/A	N/A	N/A
Incorporation depth.....	N/A	N/A	N/A	N/A
Air/Soil temperature (F) .....	86/65	82/76	80/73	81/75
Wind (mph/direction) .....	1-4/SE	2-5/E	3-6/S	2-6/E
Cloud cover (%) .....	20%	40%	40%	80%
Relative humidity (%).....	75%	80%	70%	91%
Soil/Leaf surface moist .....	Dry/Dry	Dry/Dry	Dry/Dry	Moist/Moist
Crop stage/height .....	V4-V6/10-12"	V6/18-24"	V10-V12/28-32"	R1/32-34"
Sprayer type/mph.....	trctrCA/3.75	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0
Nozzle type/size .....	FF/11002VS	FF/11002VS	FF/11002VS	FF/11002VS
Boom ht/#noz/spacing (in) .....	18"/6/18"	18"/4/18"	18"/4/18"	18"/4/18"
GPA/psi (at nozzle) .....	15/32	15/25	15/25	15/25
Applied by .....	Boudreaux	Boudreaux	Boudreaux	Boudreaux

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
 N/A

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

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Comments:

## Manganese/Glyphosate Post Test

Project Code: 07SB03JG

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Application type .....	POST C	10 DAT C
Date applied (mm-dd-yy) .....	07-12-07	07-23-07
Time (hh:mm-hh:mm) .....	9:30-9:45am	12:00-12:15pm
Incorporation equipment .....	N/A	N/A
Incorporation depth .....	N/A	N/A
Air/Soil temperature (F) .....	88/80	88/80
Wind (mph/direction) .....	2-5/W	1-3/S
Cloud cover (%) .....	35%	30%
Relative humidity (%) .....	79%	53%
Soil/Leaf surface moist .....	Moist/Dry	Dry/Dry
Crop stage/height .....	R2/36-38"	R2-R3/38"
Sprayer type/mph .....	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> 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 .....	Boudreaux	Boudreaux

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
N/A

Rainfall (in.)  
0-24 hr/1-3 days .....

4-7 days/2nd week .....

3rd week/4th week .....

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Comments:

# School of Plant, Environmental, and Soil Sciences

## Manganese/Glyphosate POST Test

Trial ID: 07SB03JG  
Location: Ben Hur

Protocol ID: 07SB03JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code		SOYBEAN		SOYBEAN							
Rating Date		14/Jun/2007		29/Oct/2007							
Rating Data Type		Injury		yield							
Rating Unit		%		lbs							
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A	0 b	11.42 a
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B		
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C		
2	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A	5 a	10.65 a
	EDTA	0.6372	L	0.32	LB A/A	2	QT/A	POST	A		
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B		
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C		
3	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A	0 b	11.26 a
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B		
	EDTA	0.6372	L	0.32	LB A/A	2	QT/A	POST	B		
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C		
4	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A	0 b	10.47 a
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B		
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C		
	EDTA					2	QT/A	POST	C		
5	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A	0 b	10.56 a
	EDTA	0.6372	L	0.32	LB A/A	2	QT/A	10 DAT	A		
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B		
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C		
6	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A	0 b	10.50 a
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B		
	EDTA	0.6372	L	0.32	LB A/A	2	QT/A	10 DAT	B		
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C		
7	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A	0 b	10.71 a
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B		
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C		
	EDTA	0.6372	L	0.32	LB A/A	2	QT/A	10 DAT	C		

# School of Plant, Environmental, and Soil Sciences

## Manganese/Glyphosate POST Test

Trial ID: 07SB03JG  
Location: Ben Hur

Protocol ID: 07SB03JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code		SOYBEAN		SOYBEAN							
Rating Date		14/Jun/2007		29/Oct/2007							
Rating Data Type		Injury		yield							
Rating Unit		%		lbs							
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Unit	Growth Stage	Appl Code			
8	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A	5 a	11.06 a
	EDTA	0.6372	L	0.32	LB A/A	2	QT/A	POST	A		
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B		
	EDTA	0.6372	L	0.32	LB A/A	2	QT/A	POST	B		
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C		
	EDTA	0.6372	L	0.32	LB A/A	2	QT/A	POST	C		
LSD (P=.05)									0.0	1.940	
Standard Deviation									0.0	1.315	
CV									0.0	12.15	
Grand Mean									1.25	10.83	
Bartlett's X2									0.0	7.732	
P(Bartlett's X2)									.	0.357	
Replicate F									0.000	7.650	
Replicate Prob(F)									1.0000	0.0013	
Treatment F									0.000	0.311	
Treatment Prob(F)									1.0000	0.9406	

# School of Plant, Environmental, and Soil Sciences

## Manganese/Glyphosate POST Test

Trial ID: 07SB03JG  
Location: Ben Hur

Protocol ID: 07SB03JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code SOYBEAN  
Rating Date 29/Oct/2007  
Rating Data Type YIELD  
Rating Unit BU

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A	54.31 a
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B	
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C	
2	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A	50.65 a
	EDTA	0.6372	L	0.32	LB A/A	2	QT/A	POST	A	
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B	
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C	
3	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A	53.55 a
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B	
	EDTA	0.6372	L	0.32	LB A/A	2	QT/A	POST	B	
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C	
4	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A	49.80 a
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B	
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C	
	EDTA					2	QT/A	POST	C	
5	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A	50.23 a
	EDTA	0.6372	L	0.32	LB A/A	2	QT/A	10 DAT	A	
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B	
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C	
6	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A	49.96 a
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B	
	EDTA	0.6372	L	0.32	LB A/A	2	QT/A	10 DAT	B	
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C	
7	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A	50.93 a
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B	
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C	
	EDTA	0.6372	L	0.32	LB A/A	2	QT/A	10 DAT	C	

# School of Plant, Environmental, and Soil Sciences

## Manganese/Glyphosate POST Test

Trial ID: 07SB03JG  
Location: Ben Hur

Protocol ID: 07SB03JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code SOYBEAN  
Rating Date 29/Oct/2007  
Rating Data Type YIELD  
Rating Unit BU

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
8	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	A	52.63 a
	EDTA	0.6372	L	0.32	LB A/A	2	QT/A	POST	A	
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	B	
	EDTA	0.6372	L	0.32	LB A/A	2	QT/A	POST	B	
	Roundup Original Max	5.5	L	1	LB A/A	23.3	OZ/A	POST	C	
	EDTA	0.6372	L	0.32	LB A/A	2	QT/A	POST	C	
<hr/>										
	LSD (P=.05)									9.228
	Standard Deviation									6.256
	CV									12.15
	Grand Mean									51.51
	Bartlett's X2									7.732
	P(Bartlett's X2)									0.357
	Replicate F									7.650
	Replicate Prob(F)									0.0013
	Treatment F									0.311
	Treatment Prob(F)									0.9406

**Louisiana State University**  
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**PRE Weed Control with A14972 in Soybean**

Experiment number .....	07SB04JG		
Location .....	Ben Hur Research Farm - Baton Rouge, LA		
Experimental design.....	Randomized Complete Block		
Number of reps.....	4		
Plot size .....	8 X30 ft		
Row width/# per plot.....	15"/3		
Soil type.....	clay loam		
OM (%) .....	1.9		
pH.....	6.3		
Planting date.....	04-30-07		
Harvest date .....			
Crop/Variety .....	Asgrow 5903		
Uniform std. treatment.....	Roundup Original Max 05-01-07		
Application type .....	PRE	EPOST B	POST C
Date applied (mm-dd-yy).....	05-02-07	05-31-07	06-18-07
Time (hh:mm-hh:mm) .....	8:00-8:30am	11:30-12:00pm	8:45-9:00
Incorporation equipment.....	N/A	N/A	N/A
Incorporation depth.....	N/A	N/A	N/A
Air/Soil temperature (F).....	74/75	88/65	86/75
Wind (mph/direction) .....	2-3/SE	1-3/SE	4-6/SE
Cloud cover (%) .....	50%	70%	25%
Relative humidity (%).....	80%	54%	85%
Soil/Leaf surface moist .....	Dry/N/A	Moist/Dry	Dry/Moist
Crop stage/height .....	N/A	V3-V4/10-12"	V8-V10/26-32"
Sprayer type/mph.....	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/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) .....	15/25	15/25	15/25
Applied by .....	Boudreaux	Boudreaux	Boudreaux
Weed species (population/ft <sup>2</sup> ) .:	(height/# leaves)		
ECHCG (2-3) .....	3-4"/8-10lf	3-6"/6-10lf	
PHYAN (2).....	3-4"/8-12lf	6-8"/6-12lf	
IPOHE (1) .....	6-10" runners	6-8"runners	
MEOCO (1-2).....	1-2"/ 2-3lf	1-2"/ 2-3lf	
Rainfall (in.)			
0-24 hr/1-3 days .....	0.00/3.18	0.16/0.02	0.00/5.76
4-7 days/2nd week.....	0.04/1.73	0.09/0.17	0.00/0.08
3rd week/4th week .....	0.03/0.95	5.77/0.10	3.15/1.53

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Comments:

# School of Plant, Environmental, and Soil Sciences

## PRE Weed Control with A14972 in Soybean

Trial ID: 07SB04JG  
 Location: Ben Hur

Protocol ID: 07SB04JG  
 Study Director: Joseph M. Boudreaux  
 Investigator: Dr. James L. Griffin

Pest Code										ECHCG	IPOLA
Rating Date										31/May/2007	31/May/2007
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	A14972	5.27	EC	1.32	LB A/A	2	PT/A	PRE	A	100 a	76 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B		
2	A14972	5.27	EC	1.32	LB A/A	2	PT/A	PRE	A	100 a	65 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B		
	Flexstar	1.88	EC	0.088	LB A/A	6	OZ/A	EPOST	B		
3	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	PRE	A	100 a	58 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B		
4	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	PRE	A	100 a	58 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B		
	Flexstar	1.88	EC	0.088	LB A/A	6	OZ/A	EPOST	B		
5	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	EPOST	B	0 b	0 b
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	POST	C		
6	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	EPOST	B	0 b	0 b
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	POST	C		
	Flexstar	1.88	EC	0.088	LB A/A	6	OZ/A	POST	C		
7	Nontreated									0 b	0 b
LSD (P=.05)										0.0	16.0
Standard Deviation										0.0	10.8
CV										0.0	29.47
Grand Mean										57.14	36.61
Bartlett's X2										0.0	4.889
P(Bartlett's X2)										.	0.18
Replicate F										0.000	1.358
Replicate Prob(F)										1.0000	0.2873
Treatment F										0.000	41.655
Treatment Prob(F)										1.0000	0.0001

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## PRE Weed Control with A14972 in Soybean

Trial ID: 07SB04JG  
Location: Ben Hur

Protocol ID: 07SB04JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code		PHYAN		ECHCG							
Rating Date		31/May/2007		14/Jun/2007							
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	A14972	5.27	EC	1.32	LB A/A	2	PT/A	PRE	A	100 a	100 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B		
2	A14972	5.27	EC	1.32	LB A/A	2	PT/A	PRE	A	100 a	100 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B		
	Flexstar	1.88	EC	0.088	LB A/A	6	OZ/A	EPOST	B		
3	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	PRE	A	86 ab	100 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B		
4	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	PRE	A	81 b	100 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B		
	Flexstar	1.88	EC	0.088	LB A/A	6	OZ/A	EPOST	B		
5	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	EPOST	B	0 c	83 b
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	POST	C		
6	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	EPOST	B	0 c	83 b
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	POST	C		
	Flexstar	1.88	EC	0.088	LB A/A	6	OZ/A	POST	C		
7	Nontreated									0 c	0 c
LSD (P=.05)										12.2	4.9
Standard Deviation										8.2	3.3
CV										15.63	4.06
Grand Mean										52.5	80.71
Bartlett's X2										0.86	0.0
P(Bartlett's X2)										0.354	1.00
Replicate F										1.361	1.778
Replicate Prob(F)										0.2865	0.1874
Treatment F										145.948	498.333
Treatment Prob(F)										0.0001	0.0001

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## PRE Weed Control with A14972 in Soybean

Trial ID: 07SB04JG  
Location: Ben Hur

Protocol ID: 07SB04JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code								IPOLA		PHYAN	
Rating Date								14/Jun/2007		14/Jun/2007	
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	A14972	5.27	EC	1.32	LB A/A	2	PT/A	PRE	A	84 a	100 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B		
2	A14972	5.27	EC	1.32	LB A/A	2	PT/A	PRE	A	88 a	100 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B		
	Flexstar	1.88	EC	0.088	LB A/A	6	OZ/A	EPOST	B		
3	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	PRE	A	81 a	100 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B		
4	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	PRE	A	76 ab	99 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B		
	Flexstar	1.88	EC	0.088	LB A/A	6	OZ/A	EPOST	B		
5	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	EPOST	B	66 b	98 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	POST	C		
6	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	EPOST	B	68 b	96 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	POST	C		
	Flexstar	1.88	EC	0.088	LB A/A	6	OZ/A	POST	C		
7	Nontreated									0 c	0 b
LSD (P=.05)										9.4	3.0
Standard Deviation										6.3	2.0
CV										9.53	2.4
Grand Mean										66.07	84.57
Bartlett's X2										8.465	5.586
P(Bartlett's X2)										0.132	0.134
Replicate F										1.770	3.320
Replicate Prob(F)										0.1889	0.0433
Treatment F										91.950	1348.493
Treatment Prob(F)										0.0001	0.0001

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## PRE Weed Control with A14972 in Soybean

Trial ID: 07SB04JG  
Location: Ben Hur

Protocol ID: 07SB04JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code										ECHCHG	IPOLA
Rating Date										22/Jun/2007	22/Jun/2007
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	A14972	5.27	EC	1.32	LB A/A	2	PT/A	PRE	A	100 a	93 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B		
2	A14972	5.27	EC	1.32	LB A/A	2	PT/A	PRE	A	100 a	90 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B		
	Flexstar	1.88	EC	0.088	LB A/A	6	OZ/A	EPOST	B		
3	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	PRE	A	100 a	90 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B		
4	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	PRE	A	100 a	88 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B		
	Flexstar	1.88	EC	0.088	LB A/A	6	OZ/A	EPOST	B		
5	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	EPOST	B	91 b	83 ab
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	POST	C		
6	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	EPOST	B	93 b	78 b
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	POST	C		
	Flexstar	1.88	EC	0.088	LB A/A	6	OZ/A	POST	C		
7	Nontreated									0 c	0 c
LSD (P=.05)										2.0	7.5
Standard Deviation										1.4	5.1
CV										1.65	6.84
Grand Mean										83.39	74.29
Bartlett's X2										0.06	0.498
P(Bartlett's X2)										0.806	0.992
Replicate F										1.737	9.508
Replicate Prob(F)										0.1953	0.0006
Treatment F										2901.000	170.492
Treatment Prob(F)										0.0001	0.0001

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## PRE Weed Control with A14972 in Soybean

Trial ID: 07SB04JG  
Location: Ben Hur

Protocol ID: 07SB04JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Control %
1	A14972	5.27	EC	1.32	LB A/A	2	PT/A	PRE	A	100 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B	
2	A14972	5.27	EC	1.32	LB A/A	2	PT/A	PRE	A	100 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B	
	Flexstar	1.88	EC	0.088	LB A/A	6	OZ/A	EPOST	B	
3	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	PRE	A	99 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B	
4	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	PRE	A	100 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	EPOST	B	
	Flexstar	1.88	EC	0.088	LB A/A	6	OZ/A	EPOST	B	
5	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	EPOST	B	94 b
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	POST	C	
6	Sequence	5.25	EW	1.64	LB AE/A	2.5	PT/A	EPOST	B	94 b
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	POST	C	
	Flexstar	1.88	EC	0.088	LB A/A	6	OZ/A	POST	C	
7	Nontreated									0 c
LSD (P=.05)										2.4
Standard Deviation										1.6
CV										1.92
Grand Mean										83.75
Bartlett's X2										0.0
P(Bartlett's X2)										0.001*
Replicate F										1.269
Replicate Prob(F)										0.3148
Treatment F										2127.462
Treatment Prob(F)										0.0001

**Louisiana State University**  
School of Plant, Environmental, and Soil Sciences

**Harvest Aid Timing Test MG IV**

Experiment number ..... : 07SB02JB  
 Location ..... : Ben Hur Research Farm- Baton Rouge LA  
 Experimental design..... : Randomized Complete Block  
   Number of reps..... : 4  
   Plot size ..... : 5X30ft.  
   Row width/# per plot..... : 15"/3  
 Soil type..... : clay loam  
   OM (%) ..... : 1.9  
   pH ..... : 6.3  
 Planting date..... : 04-16-07  
 Harvest date ..... : N/A  
 Crop/Variety ..... : Soybean/Asgrow 4403  
 Uniform std. treatment..... : N/A

Application type .....	POST A	POST B	POST C	POST D	POST E
Date applied (mm-dd-yy) .....	07-26-07	08-06-07	08-15-07	08-23-07	09-01-07
Time (hh:mm-hh:mm) .....	9:30-10:00am	12:00-12:15pm	9:15-9:30am	9:30-10:00am	8:30-9:0am
Incorporation equipment.....	N/A	N/A	N/A	N/A	N/A
Incorporation depth.....	N/A	N/A	N/A	N/A	N/A
Air/Soil temperature (F) .....	90/81	95/83	94/85	88/81	82/80
Wind (mph/direction) .....	2-5/W	2-5/W	4-7/E	2-5/SW	2-3/NE
Cloud cover (%) .....	30%	40%	40%	30%	50%
Relative humidity (%).....	56%	55%	65%	46%	68%
Soil/Leaf surface moist .....	Dry/Moist	Dry/Dry	Dry/Dry	Dry/Moist	Dry/Moist
Crop stage/height .....	R6/36"	R6.5/36"	R7/36"	R7.5/36"	R8/36"
Sprayer type/mpg.....	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0
Nozzle type/size .....	FF/11002VS	FF/11002VS	FF/1002VS	FF/11002VS	FF/11002VS
Boom ht/#noz/spacing (in) .....	18"/4/18"	18"/4/18"	18"/4/18"	18"/4/18"	18"/4/18"
GPA/psi (at nozzle) .....	15/25	15/25	15/25	15/25	15/25
Applied by .....	Boudreaux	Boudreaux	Boudreaux	Boudreaux	Boudreaux

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
 N/A

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

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Comments:

# School of Plant, Environmental, and Soil Sciences

## Harvest Aid Timing Test MG IV

Trial ID: 07SB02JB  
Location: Ben Hur

Protocol ID: 07SB02JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code										SOYBEAN	SOYBEAN	SOYBEAN
Rating Date										13/Aug/2007	13/Aug/2007	13/Aug/2007
Rating Data Type										Plot wt.	Moisture	Test wt.
Rating Unit										lbs.	%	lbs/Bu
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	60% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25	LB A/A % V/V		A	9.93 a	11.5 a	52.9 a
2	60% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25	LB A/A LB A/A % V/V		A A A	9.76 a	11.3 a	53.4 a
3	60% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		A	10.25 a	11.3 a	53.8 a
4	50% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25	LB A/A % V/V		B B	11.80 a	11.3 a	54.9 a
5	50% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25	LB A/A LB A/A % V/V		B B B	12.05 a	12.3 a	54.5 a
6	50% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		B	12.37 a	11.5 a	54.4 a
7	40% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25	LB A/A % V/V		C C			
8	40% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25	LB A/A LB A/A % V/V		C C C			
9	40% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		C			
10	30% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25	LB A/A % V/V		D D			
11	30% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25	LB A/A LB A/A % V/V		D D D			
12	30% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		D			

# School of Plant, Environmental, and Soil Sciences

## Harvest Aid Timing Test MG IV

Trial ID: 07SB02JB  
Location: Ben Hur

Protocol ID: 07SB02JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code	SOYBEAN	SOYBEAN	SOYBEAN
Rating Date	13/Aug/2007	13/Aug/2007	13/Aug/2007
Rating Data Type	Plot wt.	Moisture	Test wt.
Rating Unit	lbs.	%	lbs/Bu

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code
13	20% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB A/A % V/V		E E
	20% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB A/A LB A/A % V/V		E E E
15	20% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		E
16	Nontreated								

LSD (P=.05)	2.480	0.94	1.49
Standard Deviation	1.635	0.62	0.98
CV	14.83	5.37	1.82
Grand Mean	11.03	11.53	53.96
Bartlett's X2	5.887	27.015	3.668
P(Bartlett's X2)	0.317	0.001*	0.598
Replicate F	1.202	1.312	2.119
Replicate Prob(F)	0.3451	0.3098	0.1437
Treatment F	2.053	1.621	2.251
Treatment Prob(F)	0.1329	0.2187	0.1064

# School of Plant, Environmental, and Soil Sciences

## Harvest Aid Timing Test MG IV

Trial ID: 07SB02JB  
Location: Ben Hur

Protocol ID: 07SB02JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code				SOYBEAN		SOYBEAN		SOYBEAN				
Rating Date				21/Aug/2007		21/Aug/2007		21/Aug/2007				
Rating Data Type				Plot wt.		Moisture		Test wt.				
Rating Unit				lbs.		%		lbs/Bu				
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	60% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB % V/V	A/A	A			
2	60% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB LB % V/V	A/A A/A	A A A			
3	60% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB	A/A	A			
4	50% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB % V/V	A/A	B B			
5	50% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB LB % V/V	A/A A/A	B B B			
6	50% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB	A/A	B			
7	40% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB % V/V	A/A	C C	12.50 a	12.3 b	53.2 a
8	40% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB LB % V/V	A/A A/A	C C C	13.04 a	14.0 ab	53.3 a
9	40% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB	A/A	C	12.85 a	13.1 ab	53.6 a
10	30% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB % V/V	A/A	D D	13.05 a	14.0 ab	52.9 a
11	30% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB LB % V/V	A/A A/A	D D D	12.47 a	13.4 ab	52.9 a
12	30% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB	A/A	D	12.09 a	13.1 ab	52.9 a

# School of Plant, Environmental, and Soil Sciences

## Harvest Aid Timing Test MG IV

Trial ID: 07SB02JB  
Location: Ben Hur

Protocol ID: 07SB02JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code										SOYBEAN	SOYBEAN	SOYBEAN
Rating Date										21/Aug/2007	21/Aug/2007	21/Aug/2007
Rating Data Type										Plot wt.	Moisture	Test wt.
Rating Unit										lbs.	%	lbs/Bu
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
13	20% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB A/A % V/V		E E	13.01 a	12.8 ab	53.1 a
14	20% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB A/A LB A/A % V/V		E E E	13.29 a	14.3 ab	52.7 a
15	20% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		E	13.48 a	14.4 ab	52.7 a
16	Nontreated									13.33 a	15.1 a	52.5 a
LSD (P=.05)										1.775	1.47	0.97
Standard Deviation										1.218	1.01	0.67
CV										9.44	7.42	1.26
Grand Mean										12.91	13.64	52.96
Bartlett's X2										8.092	15.315	9.182
P(Bartlett's X2)										0.525	0.083	0.421
Replicate F										0.531	2.156	2.293
Replicate Prob(F)										0.6649	0.1184	0.1025
Treatment F										0.520	2.813	0.926
Treatment Prob(F)										0.8465	0.0198	0.5194

# School of Plant, Environmental, and Soil Sciences

## Harvest Aid Timing Test MG IV

Trial ID: 07SB02JB  
Location: Ben Hur

Protocol ID: 07SB02JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code										SOYBEAN	SOYBEAN	SOYBEAN
Rating Date												
Rating Data Type										Plot wt.	Moisture	Yield
Rating Unit										combined	combined	Bu/A
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	60% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB % V/V	A/A	A A	9.93 bc	11.5 c	48.8 a
2	60% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB LB	A/A A/A	A A A	9.76 c	11.3 c	48.2 a
3	60% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB	A/A	A	10.25 abc	11.3 c	50.6 a
4	50% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB % V/V	A/A	B B	11.80 abc	11.3 c	58.2 a
5	50% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB LB	A/A A/A	B B B	12.16 abc	12.2 bc	59.3 a
6	50% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB	A/A	B	12.37 abc	11.5 c	60.9 a
7	40% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB % V/V	A/A	C C	12.50 abc	12.3 bc	61.0 a
8	40% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB LB	A/A A/A	C C C	13.14 abc	14.1 ab	62.8 a
9	40% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB	A/A	C	12.85 abc	13.1 abc	62.1 a
10	30% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB % V/V	A/A	D D	13.05 abc	14.0 ab	62.3 a
11	30% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB LB	A/A A/A	D D D	12.47 abc	13.4 abc	60.1 a
12	30% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB	A/A	D	12.09 abc	13.1 abc	58.5 a

# School of Plant, Environmental, and Soil Sciences

## Harvest Aid Timing Test MG IV

Trial ID: 07SB02JB  
Location: Ben Hur

Protocol ID: 07SB02JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code										SOYBEAN	SOYBEAN	SOYBEAN
Rating Date												
Rating Data Type										Plot wt.	Moisture	Yield
Rating Unit										combined	combined	Bu/A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
13	20% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB A/A % V/V		E E	13.01 abc	12.8 bc	63.1 a
14	20% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB A/A LB A/A % V/V		E E E	13.29 ab	14.3 ab	63.4 a
15	20% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		E	13.48 a	14.4 ab	64.2 a
16	Nontreated									13.33 ab	15.1 a	62.9 a
LSD (P=.05)										1.949	1.32	9.25
Standard Deviation										1.364	0.92	6.47
CV										11.16	7.19	10.94
Grand Mean										12.22	12.85	59.16
Bartlett's X2										15.348	44.387	17.466
P(Bartlett's X2)										0.427	0.001*	0.292
Replicate F										1.425	1.186	1.410
Replicate Prob(F)										0.2490	0.3265	0.2531
Treatment F										3.168	7.551	2.647
Treatment Prob(F)										0.0016	0.0001	0.0066

# School of Plant, Environmental, and Soil Sciences

## Harvest Aid Timing Test MG IV

Trial ID: 07SB02JB  
Location: Ben Hur

Protocol ID: 07SB02JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code	SOYBEAN
Rating Date	29/Aug/2007
Rating Data Type	100 seed wt
Rating Unit	grams

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	60% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB A/A % V/V		A A	12.81 cde
2	60% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB A/A LB A/A % V/V		A A A	12.15 de
3	60% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		A	11.81 e
4	50% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB A/A % V/V		B B	14.00 a-d
5	50% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB A/A LB A/A % V/V		B B B	13.09 b-e
6	50% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		B	13.69 a-d
7	40% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB A/A % V/V		C C	13.92 a-d
8	40% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB A/A LB A/A % V/V		C C C	14.42 abc
9	40% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		C	14.77 abc
10	30% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB A/A % V/V		D D	13.77 a-d
11	30% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB A/A LB A/A % V/V		D D D	14.49 abc
12	30% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		D	14.11 abc

# School of Plant, Environmental, and Soil Sciences

## Harvest Aid Timing Test MG IV

Trial ID: 07SB02JB  
Location: Ben Hur

Protocol ID: 07SB02JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code SOYBEAN  
Rating Date 29/Aug/2007  
Rating Data Type 100 seed wt  
Rating Unit grams

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
13	20% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB % V/V	A/A	E E	13.72 a-d
14	20% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB LB	A/A A/A	E E E	14.34 abc
15	20% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB	A/A	E	14.94 ab
16	Nontreated									15.53 a
LSD (P=.05)										1.195
Standard Deviation										0.836
CV										6.04
Grand Mean										13.85
Bartlett's X2										25.247
P(Bartlett's X2)										0.047*
Replicate F										0.346
Replicate Prob(F)										0.7920
Treatment F										5.595
Treatment Prob(F)										0.0001

**Louisiana State University**  
School of Plant, Environmental, and Soil Sciences

**Harvest Aid Timing Test MG V**

Experiment number ..... : 07SB03JB  
 Location ..... : Ben Hur Research Farm- Baton Rouge LA  
 Experimental design..... : Randomized Complete Block  
 Number of reps..... : 4  
 Plot size ..... : 5X/30ft.  
 Row width/# per plot..... : 15"/3  
 Soil type..... : clay loam  
 OM (%) ..... : 1.9  
 pH ..... : 6.3  
 Planting date..... : 05-09-07  
 Harvest date ..... : N/A  
 Crop/Variety ..... : Soybean/Asgrow 5903  
 Uniform std. treatment..... : N/A

Application type .....	POST A	POST B	POST C	POST D	POST E
Date applied (mm-dd-yy) .....	08-15-07	08-24-07	09-06-07	09-20-07	10-02-07
Time (hh:mm-hh:mm) .....	9:30-9:45am	8:45-9:00am	9:00-9:30am	2:15-2:30pm	9:00-9:15am
Incorporation equipment.....	N/A	N/A	N/A	N/A	N/A
Incorporation depth.....	N/A	N/A	N/A	N/A	N/A
Air/Soil temperature (F).....	94/85	88/82	87/81	90/84	84/79
Wind (mph/direction) .....	4-7/E	1-3/S	3-5/NE	3-5/SE	3-6/NE
Cloud cover (%) .....	40%	20%	50%	47%	30%
Relative humidity (%).....	65%	73%	80%	25%	43%
Soil/Leaf surface moist .....	Dry/Dry	Dry/Moist	Moist/Moist	Dry/Dry	Dry/Dry
Crop stage/height .....	R6/38"	R6.5	R6.5/38"	R7/36"	R8/36"
Sprayer type/mph.....	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0
Nozzle type/size .....	FF/11002VS	FF/11002VS	FF/1002VS	FF/11002VS	FF/11002VS
Boom ht/#noz/spacing (in) .....	18"/4/18"	18"/4/18"	18"/4/18"	18"/4/18"	18"/4/18"
GPA/psi (at nozzle) .....	15/25	15/25	15/25	15/25	15/25
Applied by .....	Boudreaux	Boudreaux	Boudreaux	Boudreaux	Boudreaux

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
 N/A

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

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Comments:

# School of Plant, Environmental, and Soil Sciences

## Harvest Aid Timing Test MG V

Trial ID: 07SB03JB  
Location: Ben Hur

Protocol ID: 07SB03JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code										SOYBEAN	SOYBEAN	SOYBEAN
Rating Date										15/Oct/2007	15/Oct/2007	15/Oct/2007
Rating Data Type										plot wt.	moisture	test wt.
Rating Unit										lbs	%	lbs/bu
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	60% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25	LB A/A % V/V		A A	9.92 cd	15.8 a	50.1 a
2	60% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25	LB A/A LB A/A % V/V		A A A	9.94 cd	16.0 a	52.0 a
3	60% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		A	9.64 d	14.4 abc	51.8 a
4	50% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25	LB A/A % V/V		B B	10.81 c	15.5 ab	51.0 a
5	50% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25	LB A/A LB A/A % V/V		B B B	11.02 c	15.6 a	51.5 a
6	50% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		B	10.80 c	15.7 a	52.7 a
7	40% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25	LB A/A % V/V		C C	13.38 ab	13.6 c	52.6 a
8	40% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25	LB A/A LB A/A % V/V		C C C	12.83 b	13.7 c	52.4 a
9	40% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		C	13.79 ab	13.9 c	53.5 a
10	30% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25	LB A/A % V/V		D D	14.00 ab	14.0 bc	51.4 a
11	30% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25	LB A/A LB A/A % V/V		D D D	14.35 a	13.5 c	51.5 a
12	30% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		D	13.89 ab	13.9 c	50.8 a

# School of Plant, Environmental, and Soil Sciences

## Harvest Aid Timing Test MG V

Trial ID: 07SB03JB  
 Location: Ben Hur

Protocol ID: 07SB03JB  
 Study Director: Joseph M. Boudreaux  
 Investigator: Dr. James L. Griffin

Crop Code										SOYBEAN	SOYBEAN	SOYBEAN
Rating Date										15/Oct/2007	15/Oct/2007	15/Oct/2007
Rating Data Type										plot wt.	moisture	test wt.
Rating Unit										lbs	%	lbs/bu
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
13	20% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB A/A % V/V		E E	13.56 ab	14.6 abc	50.8 a
14	20% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB A/A LB A/A % V/V		E E E	14.13 a	14.5 abc	50.6 a
15	20% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		E	13.86 ab	14.8 abc	51.1 a
16	Nontreated									13.83 ab	15.1 abc	51.0 a
LSD (P=.05)										0.798	1.00	2.00
Standard Deviation										0.558	0.70	1.40
CV										4.47	4.76	2.72
Grand Mean										12.48	14.65	51.55
Bartlett's X2										8.951	23.411	25.629
P(Bartlett's X2)										0.88	0.076	0.042*
Replicate F										1.544	4.509	4.836
Replicate Prob(F)										0.2164	0.0076	0.0054
Treatment F										40.122	6.028	1.633
Treatment Prob(F)										0.0001	0.0001	0.1036

# School of Plant, Environmental, and Soil Sciences

## Harvest Aid Timing Test MG V

Trial ID: 07SB03JB  
Location: Ben Hur

Protocol ID: 07SB03JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code				SOYBEAN		SOYBEAN					
Rating Date				15/Oct/2007		16/Oct/2007					
Rating Data Type				YIELD		100 SEED WT					
Rating Unit				BU		grams					
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	60% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25	LB A/A % V/V	A	A	46.47 c	9.32 g
2	60% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25	LB A/A % V/V	A	A	46.46 c	9.39 g
3	60% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A	A		45.90 c	11.23 ef
4	50% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25	LB A/A % V/V	B	B	50.80 c	10.46 fg
5	50% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25	LB A/A % V/V	B	B	51.72 c	10.53 fg
6	50% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A	B		50.62 c	12.09 de
7	40% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25	LB A/A % V/V	C	C	64.35 ab	13.17 cd
8	40% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25	LB A/A % V/V	C	C	61.62 b	13.38 bcd
9	40% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A	C		66.05 ab	13.10 cd
10	30% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25	LB A/A % V/V	D	D	66.94 ab	14.68 abc
11	30% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25	LB A/A % V/V	D	D	69.06 a	13.68 bcd
12	30% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A	D		66.55 ab	14.71 abc

# School of Plant, Environmental, and Soil Sciences

## Harvest Aid Timing Test MG V

Trial ID: 07SB03JB  
 Location: Ben Hur

Protocol ID: 07SB03JB  
 Study Director: Joseph M. Boudreaux  
 Investigator: Dr. James L. Griffin

Crop Code		SOYBEAN		SOYBEAN							
Rating Date		15/Oct/2007		16/Oct/2007							
Rating Data Type		YIELD		100 SEED WT							
Rating Unit		BU		grams							
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Unit	Stage	Appl Code		
13	20% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB % V/V	A/A	E E		64.41 ab 15.07 ab
14	20% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB LB % V/V	A/A A/A	E E E		67.23 ab 16.34 a
15	20% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB	A/A	E		65.70 ab 15.01 ab
16	Nontreated										65.35 ab 16.29 a
LSD (P=.05)										3.966	1.179
Standard Deviation										2.776	0.825
CV										4.68	6.33
Grand Mean										59.33	13.03
Bartlett's X2										9.036	12.776
P(Bartlett's X2)										0.876	0.62
Replicate F										2.350	1.496
Replicate Prob(F)										0.0853	0.2288
Treatment F										40.266	31.260
Treatment Prob(F)										0.0001	0.0001

**Louisiana State University**  
School of Plant, Environmental, and Soil Sciences

**Harvest Aid Timing Test MG VI**

Experiment number ..... : 07SB04JB  
 Location ..... : Ben Hur Research Farm- Baton Rouge LA  
 Experimental design..... : Randomized Complete Block  
   Number of reps..... : 4  
   Plot size ..... : 5X30ft.  
   Row width/# per plot..... : 15"/3  
 Soil type..... : clay loam  
   OM (%) ..... : 1.9  
   pH ..... : 6.3  
 Planting date..... : 05-10-07  
 Harvest date ..... : N/A  
 Crop/Variety ..... : Soybean/Asgrow 6202  
 Uniform std. treatment..... : N/A

Application type .....	POST A	POST B	POST C	POST D	POST E
Date applied (mm-dd-yy) .....	09-06-07	09-20-07	10-02-07	10-08-07	10-12-07
Time (hh:mm-hh:mm) .....	9:30-10:00am	2:00-2:15pm	9:30-9:45am	9:00-9:15am	9:30-10:00am
Incorporation equipment.....	N/A	N/A	N/A	N/A	N/A
Incorporation depth.....	N/A	N/A	N/A	N/A	N/A
Air/Soil temperature (F).....	87/81	90/84	84/79	84/78	75/72
Wind (mph/direction) .....	2-5/NE	3-5/SE	3-6/NE	4-6/E	1-3/NE
Cloud cover (%) .....	50%	25%	30%	10%	20%
Relative humidity (%).....	80%	47%	43%	65%	40%
Soil/Leaf surface moist .....	Moist/Moist	Dry/Dry	Dry/Dry	Moist/Moist	Dry/Moist
Crop stage/height .....	R6/38"	R6/38"	R6.5/38"	R7/38"	R8/38"
Sprayer type/mph.....	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0
Nozzle type/size .....	FF11002VS	FF/11002VS	FF/11002VS	FF/11002VS	FF/11002VS
Boom ht/#noz/spacing (in) .....	18"/4/18"	18"/4/18"	18"/4/18"	18"/4/18"	18"/4/18"
GPA/psi (at nozzle) .....	15/25	15/25	15/25	15/25	15/25
Applied by .....	Boudreaux	Boudreaux	Boudreaux	Boudreaux	Boudreaux

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
 N/A

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

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Comments:

# School of Plant, Environmental, and Soil Sciences

## Harvest Aid Timing Test MG VI

Trial ID: 07SB04JG  
Location: Ben Hur

Protocol ID: 07SB04JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code	Rating Date	Rating Data Type	Rating Unit	SOYBEAN 16/Oct/2007 plot wt lbs	SOYBEAN 16/Oct/2007 moisture %	SOYBEAN 16/Oct/2007 test wt lbs/bu						
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	60% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB A/A % V/V		A A	9.69 b	13.1 a-d	51.9 abc
2	60% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB A/A LB A/A % V/V		A A A	9.74 b	13.2 a-d	53.6 a
3	60% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		A	11.21 a	13.6 a-d	53.6 ab
4	50% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB A/A % V/V		B B	12.16 a	12.8 bcd	51.3 abc
5	50% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB A/A LB A/A % V/V		B B B	12.23 a	12.6 cd	51.8 abc
6	50% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		B	12.39 a	12.8 bcd	52.1 abc
7	40% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB A/A % V/V		C C	12.42 a	12.4 d	52.0 abc
8	40% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB A/A LB A/A % V/V		C C C	12.19 a	12.1 d	52.1 abc
9	40% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		C	12.71 a	12.0 d	53.3 abc
10	30% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB A/A % V/V		D D	12.50 a	12.8 bcd	51.7 abc
11	30% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB A/A LB A/A % V/V		D D D	11.99 a	12.4 d	51.7 abc
12	30% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		D	13.20 a	13.1 a-d	51.5 abc

# School of Plant, Environmental, and Soil Sciences

## Harvest Aid Timing Test MG VI

Trial ID: 07SB04JG  
Location: Ben Hur

Protocol ID: 07SB04JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code										SOYBEAN	SOYBEAN	SOYBEAN
Rating Date										16/Oct/2007	16/Oct/2007	16/Oct/2007
Rating Data Type										plot wt	moisture	test wt
Rating Unit										lbs	%	lbs/bu
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
13	20% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB A/A % V/V		E E	13.16 a	14.6 ab	50.9 c
14	20% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB A/A LB A/A % V/V		E E E	12.94 a	14.3 abc	51.2 abc
15	20% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		E	12.42 a	14.8 a	50.9 c
16	Nontreated									12.51 a	14.6 ab	51.1bc
LSD (P=.05)										1.153	1.11	1.47
Standard Deviation										0.807	0.78	1.03
CV										6.67	5.89	1.98
Grand Mean										12.09	13.18	51.9
Bartlett's X2										20.781	37.235	32.378
P(Bartlett's X2)										0.144	0.001*	0.006*
Replicate F										1.636	10.560	4.710
Replicate Prob(F)										0.1963	0.0001	0.0066
Treatment F										6.630	5.512	2.975
Treatment Prob(F)										0.0001	0.0001	0.0030

# School of Plant, Environmental, and Soil Sciences

## Harvest Aid Timing Test MG VI

Trial ID: 07SB04JG  
Location: Ben Hur

Protocol ID: 07SB04JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code				SOYBEAN		SOYBEAN					
Rating Date				16/Oct/2007		16/Oct/2007					
Rating Data Type				YIELD		100 seed wt					
Rating Unit				BU		grams					
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	60% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB A/A % V/V		A A	46.86 c	14.67 b
2	60% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB A/A LB A/A % V/V		A A A	47.04 c	14.83 b
3	60% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		A	53.90 b	15.36 ab
4	50% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB A/A % V/V		B B	58.97 ab	16.01 ab
5	50% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB A/A LB A/A % V/V		B B B	59.45 ab	16.38 ab
6	50% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		B	60.15 ab	16.73 ab
7	40% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB A/A % V/V		C C	60.55 ab	16.14 ab
8	40% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB A/A LB A/A % V/V		C C C	59.63 ab	16.05 ab
9	40% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		C	62.19 ab	17.36 ab
10	30% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB A/A % V/V		D D	60.66 ab	16.09 ab
11	30% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB A/A LB A/A % V/V		D D D	58.44 ab	17.19 ab
12	30% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB A/A		D	63.89 a	17.26 ab

# School of Plant, Environmental, and Soil Sciences

## Harvest Aid Timing Test MG VI

Trial ID: 07SB04JG  
Location: Ben Hur

Protocol ID: 07SB04JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code										SOYBEAN	SOYBEAN
Rating Date										16/Oct/2007	16/Oct/2007
Rating Data Type										YIELD	100 seed wt
Rating Unit										BU	grams
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	4	5
13	20% Moisture Gramoxone Inteon Induce	2	SL L	1 0.25	PT/A % V/V	0.25 0.25	LB % V/V	A/A	E E	62.54 ab	18.34 a
14	20% Moisture Gramoxone Inteon Aim Induce	2 2	SL EC L	1 1.4 0.25	PT/A OZ/A % V/V	0.25 0.0219 0.25	LB LB	A/A A/A	E E E	61.66 ab	17.45 ab
15	20% Moisture Sodium Chlorate	6	L	4	QT/A	6	LB	A/A	E	58.92 ab	16.48 ab
16	Nontreated									59.45 ab	17.12 ab
LSD (P=.05)										5.470	1.855
Standard Deviation										3.828	1.298
CV										6.55	7.89
Grand Mean										58.39	16.47
Bartlett's X2										24.302	24.437
P(Bartlett's X2)										0.06	0.058
Replicate F										2.767	2.370
Replicate Prob(F)										0.0542	0.0853
Treatment F										6.769	2.318
Treatment Prob(F)										0.0001	0.0178

**Louisiana State University**  
Department of Agronomy and Environmental Management

**Soybean Row Configuration Test**

Experiment number ..... : 07SB05JB  
Location ..... : Ben Hur Research Station – Baton Rouge, LA  
Experimental design..... : Randomized Complete Block  
Number of reps..... : 4  
Plot size ..... : 18X50ft.  
Row width/# per plot..... : 72"/3  
Soil type..... : clay loam  
OM (%) ..... : 1.9  
pH ..... : 6.3  
Planting date..... : 04-16-07  
Harvest date ..... : 08-15-07  
Crop/Variety ..... : Soybean/Asgrow 4403 RR  
Uniform std. treatment..... : N/A

Application type ..... : N/A  
Date applied (mm-dd-yy)..... : N/A  
Time (hh:mm-hh:mm) ..... : N/A  
Incorporation equipment..... : N/A  
Incorporation depth..... : N/A  
Air/Soil temperature (F)..... : N/A  
Wind (mph/direction) ..... : N/A  
Cloud cover (%) ..... : N/A  
Relative humidity (%)..... : N/A  
Soil/Leaf surface moist ..... : N/A  
Crop stage/height ..... : N/A  
Sprayer type/mph..... : N/A  
Nozzle type/size ..... : N/A  
Boom ht/#noz/spacing (in) .... : N/A  
GPA/psi (at nozzle) ..... : N/A  
Applied by ..... : N/A

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
N/A

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

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Comments: Soybeans were planted on raised sugarcane beds spaced 72 inches apart. Row configurations/row spacings on each sugarcane bed were two rows at 18-inch spacing, two at 24-inch spacing, two rows at 30-inch spacing, and three rows at 15-inch spacing.

# School of Plant, Environmental, and Soil Sciences

## Soybean Row Configuration Test

Trial ID: 07SB05JB  
Location: Ben Hur

Protocol ID: 07SB05JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code	SOYBEAN										
Rating Date	1/Jun/2007	1/Jun/2007	1/Jun/2007								
Rating Data Type	Heights	Widths	Middle								
Rating Unit	IN	IN	IN								
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Unit	Other Rate	Growth Stage	Appl Code			
1	2 row 18" spacing								19 a	22 a	29 a
2	2 row 24" spacing								19 a	23 a	24 b
3	2 row 30" spacing								19 a	22 a	17 c
4	3 row 15" spacing								19 a	19 b	17 c
LSD (P=.05)									1.0	1.9	2.2
Standard Deviation									0.6	1.2	1.4
CV									3.23	5.4	6.35
Grand Mean									18.83	21.48	21.99
Bartlett's X2									1.12	5.184	1.183
P(Bartlett's X2)									0.772	0.159	0.757
Replicate F									1.917	0.062	1.991
Replicate Prob(F)									0.1974	0.9785	0.1860
Treatment F									2.061	6.528	71.771
Treatment Prob(F)									0.1758	0.0123	0.0001

# School of Plant, Environmental, and Soil Sciences

## Soybean Row Configuration Test

Trial ID: 07SB05JB  
Location: Ben Hur

Protocol ID: 07SB05JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code	SOYBEAN	SOYBEAN	SOYBEAN
Rating Date	7/Jun/2007	7/Jun/2007	7/Jun/2007
Rating Data Type	Heights	Widths	Middle
Rating Unit	IN	IN	IN

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Unit	Other Rate	Other Unit	Growth Stage	Appl Code
1	2 row 18" spacing								
						28 a		23 ab	23 a
2	2 row 24" spacing					27 a		24 a	19 b
3	2 row 30" spacing					27 a		25 a	12 c
4	3 row 15" spacing					28 a		22 b	11 c
<hr/>									
	LSD (P=.05)					2.7		2.1	2.6
	Standard Deviation					1.7		1.3	1.6
	CV					6.12		5.57	10.21
	Grand Mean					27.48		23.6	16.11
	Bartlett's X2					2.887		6.065	1.741
	P(Bartlett's X2)					0.409		0.109	0.628
	Replicate F					0.360		0.452	1.344
	Replicate Prob(F)					0.7834		0.7220	0.3203
	Treatment F					0.332		5.105	51.667
	Treatment Prob(F)					0.8028		0.0246	0.0001

# School of Plant, Environmental, and Soil Sciences

## Soybean Row Configuration Test

Trial ID: 07SB05JB  
Location: Ben Hur

Protocol ID: 07SB05JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code		SOYBEAN		SOYBEAN		SOYBEAN		
Rating Date		18/Jun/2007		18/Jun/2007		18/Jun/2007		
Rating Data Type		Heights		Widths		Middle		
Rating Unit		IN		IN		IN		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Stage	Appl Code
1	2 row 18" spacing							
2	2 row 24" spacing							
3	2 row 30" spacing							
4	3 row 15" spacing							
LSD (P=.05)				4.5			3.3	3.7
Standard Deviation				2.8			2.1	2.3
CV				8.31			7.87	20.64
Grand Mean				34.06			26.33	11.08
Bartlett's X2				1.899			6.93	2.272
P(Bartlett's X2)				0.594			0.074	0.518
Replicate F				0.240			0.731	1.157
Replicate Prob(F)				0.8660			0.5592	0.3785
Treatment F				0.768			3.960	20.828
Treatment Prob(F)				0.5401			0.0471	0.0002

# School of Plant, Environmental, and Soil Sciences

## Soybean Row Configuration Test

Trial ID: 07SB05JB  
Location: Ben Hur

Protocol ID: 07SB05JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code		SOYBEAN		SOYBEAN		SOYBEAN		
Rating Date		25/Jun/2007		25/Jun/2007		25/Jun/2007		
Rating Data Type		Heights		Widths		Middle		
Rating Unit		IN		IN		IN		
ARM Action Codes								
Number of Decimals								
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Unit	Other Rate	Growth Stage	Appl Code
1	2 row 18" spacing							
								38 a
								29 ab
								15 a
2	2 row 24" spacing							
								36 a
								30 ab
								13 a
3	2 row 30" spacing							
								37 a
								31 a
								2 b
4	3 row 15" spacing							
								39 a
								27 b
								1 b
LSD (P=.05)								4.5
Standard Deviation								2.8
CV								7.46
Grand Mean								37.64
Bartlett's X2								1.234
P(Bartlett's X2)								0.745
Replicate F								0.149
Replicate Prob(F)								0.9277
Treatment F								0.653
Treatment Prob(F)								0.6009
								1.127
								0.3888
								4.029
								35.210
								0.0001

# School of Plant, Environmental, and Soil Sciences

## Soybean Row Configuration Test

Trial ID: 07SB05JB  
Location: Ben Hur

Protocol ID: 07SB05JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code		SOYBEAN		SOYBEAN		SOYBEAN		
Rating Date		2/Jul/2007		2/Jul/2007		2/Jul/2007		
Rating Data Type		Heights		Widths		Middle		
Rating Unit		IN		IN		IN		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Stage	Appl Code
1	2 row 18" spacing							
								41 a 32 a 13 a
2	2 row 24" spacing							
								40 a 32 a 10 a
3	2 row 30" spacing							
								41 a 33 a 1 b
4	3 row 15" spacing							
								43 a 28 b 0 b
LSD (P=,05)								5.1 2.4 4.4
Standard Deviation								3.2 1.5 2.7
CV								7.76 4.85 45.92
Grand Mean								40.88 31.24 5.98
Bartlett's X2								0.134 3.35 1.86
P(Bartlett's X2)								0.987 0.341 0.394
Replicate F								0.835 1.385 1.479
Replicate Prob(F)								0.5076 0.3092 0.2849
Treatment F								0.615 6.559 22.043
Treatment Prob(F)								0.6221 0.0121 0.0002

# School of Plant, Environmental, and Soil Sciences

## Soybean Row Configuration Test

Trial ID: 07SB05JB  
Location: Ben Hur

Protocol ID: 07SB05JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code		SOYBEAN		SOYBEAN		SOYBEAN			
Rating Date		9/Jul/2007		9/Jul/2007		9/Jul/2007			
Rating Data Type		Heights		Widths		Middle			
Rating Unit		IN		IN		IN			
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Stage	Appl Code	
1	2 row 18" spacing								
								39 a 30 a 11 a	
2	2 row 24" spacing								
								38 a 31 a 9 a	
3	2 row 30" spacing								
								39 a 33 a 1 b	
4	3 row 15" spacing								
								41 a 26 b 0 b	
LSD (P=.05)				5.6		2.2		4.4	
Standard Deviation				3.5		1.4		2.8	
CV				9.0		4.6		52.59	
Grand Mean				39.2		29.78		5.29	
Bartlett's X2				2.205		3.191		2.195	
P(Bartlett's X2)				0.531		0.363		0.334	
Replicate F				0.092		0.531		0.807	
Replicate Prob(F)				0.9628		0.6723		0.5209	
Treatment F				0.802		17.567		16.818	
Treatment Prob(F)				0.5233		0.0004		0.0005	

# School of Plant, Environmental, and Soil Sciences

## Soybean Row Configuration Test

Trial ID: 07SB05JB  
Location: Ben Hur

Protocol ID: 07SB05JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code		SOYBEAN		SOYBEAN		SOYBEAN		
Rating Date		16/Jul/2007		16/Jul/2007		16/Jul/2007		
Rating Data Type		Height		Width		Middle		
Rating Unit		IN		IN		IN		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Stage	Appl Code
1	2 row 18" spacing							
				42 a				
2	2 row 24" spacing							
				37 b				
3	2 row 30" spacing							
				40 ab				
4	3 row 15" spacing							
				44 a				
LSD (P=,05)				3.9				
Standard Deviation				2.5				
CV				6.07				
Grand Mean				40.64				
Bartlett's X2				3.697				
P(Bartlett's X2)				0.296				
Replicate F				0.258				
Replicate Prob(F)				0.8539				
Treatment F				6.098				
Treatment Prob(F)				0.0150				

# School of Plant, Environmental, and Soil Sciences

## Soybean Row Configuration Test

Trial ID: 07SB05JB  
Location: Ben Hur

Protocol ID: 07SB05JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code		SOYBEAN		SOYBEAN		SOYBEAN		
Rating Date		16/Aug/2007		16/Aug/2007		16/Aug/2007		
Rating Data Type		Plot wt.		Moisture		Test wt.		
Rating Unit		lbs.		%				
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Unit	Other Rate	Growth Stage	Appl Code
1	2 row 18" spacing							
						22.4 a	12.7 a	54.6 a
2	2 row 24" spacing							
						22.1 a	11.9 a	54.8 a
3	2 row 30" spacing							
						23.7 a	11.9 a	54.4 a
4	3 row 15" spacing							
						22.6 a	12.0 a	54.9 a
LSD (P=,05)						3.15	1.23	0.89
Standard Deviation						1.97	0.77	0.56
CV						8.68	6.34	1.02
Grand Mean						22.7	12.12	54.68
Bartlett's X2						12.028	21.561	2.269
P(Bartlett's X2)						0.007*	0.001*	0.519
Replicate F						1.380	1.975	1.394
Replicate Prob(F)						0.3103	0.1884	0.3066
Treatment F						0.493	0.960	0.598
Treatment Prob(F)						0.6961	0.4526	0.6320

# School of Plant, Environmental, and Soil Sciences

## Soybean Row Configuration Test

Trial ID: 07SB05JB  
Location: Ben Hur

Protocol ID: 07SB05JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code	SOYBEAN									
Rating Date	16/Aug/2007									
Rating Data Type	Yield									
Rating Unit	BU									
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Unit	Other Rate	Other Unit	Growth Stage	Appl Code	
1	2 row 18" spacing									65.4 a
2	2 row 24" spacing									64.9 a
3	2 row 30" spacing									69.6 a
4	3 row 15" spacing									66.4 a
LSD (P=.05)										9.30
Standard Deviation										5.82
CV										8.74
Grand Mean										66.57
Bartlett's X2										12.74
P(Bartlett's X2)										0.005*
Replicate F										1.249
Replicate Prob(F)										0.3485
Treatment F										0.540
Treatment Prob(F)										0.6670

**Louisiana State University**  
 Department of Agronomy and Environmental Management

**Evaluation of Harvest Aids in MG V "Green Beans"**

Experiment number ..... : 07SB07JB  
 Location ..... : Ben Hur Research Farm - Baton Rouge, LA  
 Experimental design..... : Randomized Complete Block  
 Number of reps..... : 4  
 Plot size ..... : 5X30ft.  
 Row width/# per plot..... : 15"/3  
 Soil type..... : clay loam  
 OM (%) ..... : 1.9  
 pH ..... : 6.3  
 Planting date..... : 05-09-07  
 Harvest date ..... : N/A  
 Crop/Variety ..... : Soybean/Asgrow 5903  
 Uniform std. treatment..... : N/A

Application type .....	POST	POST A	POST B	POST C
Date applied (mm-dd-yy).....	08-01-07	08-15-07	08-24-07	9-06-07
Time (hh:mm-hh:mm) .....	2:00-2:15pm	9:30-9:45am	9:00-9:15am	10:00-10:15am
Incorporation equipment.....	N/A	N/A	N/A	N/A
Incorporation depth.....	N/A	N/A	N/A	N/A
Air/Soil temperature (F).....	89/80	94/84	88/82	87/81
Wind (mph/direction) .....	3-6/W	4-7/E	1-3/S	2-5/NE
Cloud cover (%) .....	75%	40%	20%	50%
Relative humidity (%).....	55%	65%	73%	80%
Soil/Leaf surface moist .....	Moist/Dry	Dry/Dry	Dry/Moist	Moist/Moist
Crop stage/height .....	R6/36-38"	R6/38"	R6.5/38"	R6.9/38"
Sprayer type/mpg.....	trctrCA/3.75	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0
Nozzle type/size .....	FF/11002VS	FF/11002VS	FF/11002VS	FF/11002VS
Boom ht/#noz/spacing (in) .....	18"/6/18"	18"/4/18"	18"/4/18"	18"/4/18"
GPA/psi (at nozzle) .....	15/32	15/25	15/25	15/25
Applied by .....	Boudreaux	Boudreaux	Boudreaux	Boudreaux

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
 N/A

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

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Comments:

## Evaluation of Harvest Aids in MG V "Green Beans"

Project Code: 07SB07JB

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Application type .....	POST D	POST E	POST E	POST E
Date applied (mm-dd-yy) .....	09-20-07	08-30-07	09-12-07	10-02-07
Time (hh:mm-hh:mm) .....	2:30-2:45pm	9:00-9:30am	8:00-8:30am	10:00-10:15am
Incorporation equipment .....	N/A	N/A	N/A	N/A
Incorporation depth .....	N/A	N/A	N/A	N/A
Air/Soil temperature (F) .....	90/84	87/80	82/77	84/79
Wind (mph/direction) .....	3-5/SE	2-4/E	1-4/SE	3-6/NE
Cloud cover (%) .....	25%	30%	20%	30%
Relative humidity (%) .....	47%	56%	62%	43%
Soil/Leaf surface moist .....	Dry/Dry	Dry/Moist	Dry/Moist	Dry/Dry
Crop stage/height .....	R7/36"	R 6.5/36"	R7/36"	R7.5/36"
Sprayer type/mph .....	CO2bkpk/3.0	CO2bkpk/3.0	CO2bkpk/3.0	CO2bkpk/3.0
Nozzle type/size .....	FF/11002VS	FF/11002VS	FF/11002VS	FF/11002VS
Boom ht/#noz/spacing (in) .....	18"/4/18"	18"/4/18"	18"/4/18"	18"/4/18"
GPA/psi (at nozzle) .....	15/25	15/25	15/25	15/25
Applied by .....	Boudreaux	Boudreaux	Boudreaux	Boudreaux

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
N/A

Rainfall (in.)  
0-24 hr/1-3 days .....

4-7 days/2nd week .....

3rd week/4th week .....

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Comments:

# School of Plant, Environmental, and Soil Sciences

## Evaluation of Harvest Aids in MG V "Green Beans"

Trial ID: 07SB07JB  
Location: Ben Hur

Protocol ID: 07SB07JB  
Study Director: Joseph Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code									SOYBEAN	SOYBEAN	
Rating Date									16/Oct/2007	16/Oct/2007	
Rating Data Type									plot wt	moisture	
Rating Unit									lbs	%	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	60% Moisture Gramoxone Inteon Induce	2	SL	0.25 0.25	LB A/A % V/V	1 0.25	PT/A % V/V		A A	5.46 c	19.5 ab
2	7days after initiation Gramoxone Inteon Induce	2	SL	0.25 0.25	LB A/A % V/V	1 0.25	PT/A % V/V		B B	5.50 c	16.4 bc
3	14days after initiation Gramoxone Inteon Induce	2	SL	0.25 0.25	LB A/A % V/V	1 0.25	PT/A % V/V		C C	8.34 abc	12.6 c
4	21days after initiation Gramoxone Inteon Induce	2	SL	0.25 0.25	LB A/A % V/V	1 0.25	PT/A % V/V		D D	10.82 a	20.6 a
5	28days after initiation Gramoxone Inteon Induce	2	SL	0.25 0.25	LB A/A % V/V	1 0.25	PT/A % V/V		E E	7.53 bc	15.7 bc
6	Orthene as Needed 5-7 d Baythroid as Needed 5-7 d	90 2	S L	0.90 0.044	LB A/A LB A/A	1 2.82	LB/A OZ/A			11.29 a	14.2 c
7	Nontreated									8.83 ab	14.6 c
LSD (P=.05)										2.267	3.35
Standard Deviation										1.519	2.25
CV										18.41	13.85
Grand Mean										8.25	16.23
Bartlett's X2										11.779	29.943
P(Bartlett's X2)										0.067	0.001*
Replicate F										0.283	0.170
Replicate Prob(F)										0.8371	0.9152
Treatment F										9.251	6.664
Treatment Prob(F)										0.0001	0.0009

# School of Plant, Environmental, and Soil Sciences

## Evaluation of Harvest Aids in MG V "Green Beans"

Trial ID: 07SB07JB  
Location: Ben Hur

Protocol ID: 07SB07JB  
Study Director: Joseph Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code										SOYBEAN	SOYBEAN
Rating Date										16/Oct/2007	16/Oct/2007
Rating Data Type										test wt	YIELD
Rating Unit										lbs/bu	BU
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code		
1	60% Moisture Gramoxone Inteon Induce	2	SL	0.25	LB A/A	1	PT/A		A	49.63 a	25.97 c
				0.25	% V/V	0.25	% V/V		A		
2	7days after initiation Gramoxone Inteon Induce	2	SL	0.25	LB A/A	1	PT/A		B	48.58 a	26.16 c
				0.25	% V/V	0.25	% V/V		B		
3	14days after initiation Gramoxone Inteon Induce	2	SL	0.25	LB A/A	1	PT/A		C	46.48 a	39.66 abc
				0.25	% V/V	0.25	% V/V		C		
4	21days after initiation Gramoxone Inteon Induce	2	SL	0.25	LB A/A	1	PT/A		D	42.18 a	51.44 a
				0.25	% V/V	0.25	% V/V		D		
5	28days after initiation Gramoxone Inteon Induce	2	SL	0.25	LB A/A	1	PT/A		E	42.71 a	35.81 bc
				0.25	% V/V	0.25	% V/V		E		
6	Orthene as Needed 5-7 d	90	S	0.90	LB A/A	1	LB/A			49.28 a	53.70 a
	Baythroid as Needed 5-7 d	2	L	0.044	LB A/A	2.82	OZ/A				
7	Nontreated									45.18 a	42.00 ab
LSD (P=.05)										6.421	10.782
Standard Deviation										4.283	7.227
CV										9.25	18.41
Grand Mean										46.29	39.25
Bartlett's X2										4.786	11.778
P(Bartlett's X2)										0.572	0.067
Replicate F										1.339	0.283
Replicate Prob(F)										0.2967	0.8371
Treatment F										2.044	9.250
Treatment Prob(F)										0.1187	0.0001

# School of Plant, Environmental, and Soil Sciences

## Evaluation of Harvest Aids in MG V "Green Beans"

Trial ID: 07SB07JB  
Location: Ben Hur

Protocol ID: 07SB07JB  
Study Director: Joseph Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code	SOYBEAN	SOYBEAN
Rating Date	16/Oct/2007	31/Oct/2007
Rating Data Type	100 seed wt	Green leaf
Rating Unit	grams	%

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	60% Moisture Gramoxone Inteon Induce	2	SL	0.25 0.25	LB A/A % V/V	1 0.25	PT/A % V/V		A A	12.11 ab	6 b
2	7days after initiation Gramoxone Inteon Induce	2	SL	0.25 0.25	LB A/A % V/V	1 0.25	PT/A % V/V		B B	10.95 ab	4 b
3	14days after initiation Gramoxone Inteon Induce	2	SL	0.25 0.25	LB A/A % V/V	1 0.25	PT/A % V/V		C C	10.86 ab	4 b
4	21days after initiation Gramoxone Inteon Induce	2	SL	0.25 0.25	LB A/A % V/V	1 0.25	PT/A % V/V		D D	14.09 a	6 b
5	28days after initiation Gramoxone Inteon Induce	2	SL	0.25 0.25	LB A/A % V/V	1 0.25	PT/A % V/V		E E	10.29 b	4 b
6	Orthene as Needed 5-7 d Baythroid as Needed 5-7 d	90 2	S L	0.90 0.044	LB A/A LB A/A	1 2.82	LB/A OZ/A			13.90 a	26 a
7	Nontreated									10.21 b	28 a
LSD (P=.05)										2.392	5.9
Standard Deviation										1.596	4.0
CV										13.56	35.97
Grand Mean										11.77	11.0
Bartlett's X2										14.392	12.228
P(Bartlett's X2)										0.026*	0.057
Replicate F										3.119	0.675
Replicate Prob(F)										0.0555	0.5784
Treatment F										4.238	30.262
Treatment Prob(F)										0.0096	0.0001

# School of Plant, Environmental, and Soil Sciences

## Evaluation of Harvest Aids in MG V "Green Beans"

Trial ID: 07SB07JB  
Location: Ben Hur

Protocol ID: 07SB07JB  
Study Director: Joseph Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code										SOYBEAN
Rating Date										31/Oct/2007
Rating Data Type										Green stem
Rating Unit										%
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Stage	Appl Code		
1	60% Moisture								89 a	
	Gramoxone Inteon Induce	2	SL	0.25	LB A/A 1	PT/A		A		
				0.25	% V/V	0.25	% V/V	A		
2	7days after initiation								88 a	
	Gramoxone Inteon Induce	2	SL	0.25	LB A/A 1	PT/A		B		
				0.25	% V/V	0.25	% V/V	B		
3	14days after initiation								89 a	
	Gramoxone Inteon Induce	2	SL	0.25	LB A/A 1	PT/A		C		
				0.25	% V/V	0.25	% V/V	C		
4	21days after initiation								89 a	
	Gramoxone Inteon Induce	2	SL	0.25	LB A/A 1	PT/A		D		
				0.25	% V/V	0.25	% V/V	D		
5	28days after initiation								88 a	
	Gramoxone Inteon Induce	2	SL	0.25	LB A/A 1	PT/A		E		
				0.25	% V/V	0.25	% V/V	E		
6	Orthene as Needed 5-7 d	90	S	0.90	LB A/A 1	LB/A			93 a	
	Baythroid as Needed 5-7 d	2	L	0.044	LB A/A 2.82	OZ/A				
7	Nontreated								93 a	
LSD (P=.05)									6.2	
Standard Deviation									4.2	
CV									4.7	
Grand Mean									89.46	
Bartlett's X2									4.956	
P(Bartlett's X2)									0.55	
Replicate F									0.725	
Replicate Prob(F)									0.5503	
Treatment F									1.045	
Treatment Prob(F)									0.4297	

**Louisiana State University**  
Department of Agronomy and Environmental Management

**Efficacy of Insecticides on Stinkbug Control**

Experiment number ..... : 07SB08JB  
Location ..... : Ben Hur Research Farm - Baton Rouge, LA  
Experimental design..... : Randomized Complete Block  
Number of reps..... : 4  
Plot size ..... : 5X/30ft.  
Row width/# per plot..... : 15"/3  
Soil type..... : clay loam  
OM (%) ..... : 1.9  
pH ..... : 6.3  
Planting date..... : 05-09-07  
Harvest date ..... : N/A  
Crop/Variety ..... : Soybean/Asgrow 5903  
Uniform std. treatment..... : N/A

Application type ..... : POST A  
Date applied (mm-dd-yy)..... : 08-15-07  
Time (hh:mm-hh:mm) ..... : 9:45-10:15am  
Incorporation equipment..... : N/A  
Incorporation depth..... : N/A  
Air/Soil temperature (F)..... : 94/85  
Wind (mph/direction) ..... : 4-7/E  
Cloud cover (%) ..... : 40%  
Relative humidity (%)..... : 65%  
Soil/Leaf surface moist ..... : Dry/Dry  
Crop stage/height ..... : R6/38"  
Sprayer type/mph..... : CO<sub>2</sub>bkpk/3.0  
Nozzle type/size ..... : FF/11002VS  
Boom ht/#noz/spacing (in) .... : 18"/4/18"  
GPA/psi (at nozzle) ..... : 15/25  
Applied by ..... : Boudreaux

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
N/A

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

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Comments:

# School of Plant, Environmental, and Soil Sciences

## Efficacy of Insecticides on Stinkbug Control

Trial ID: 07SB08JB  
Location: Ben Hur

Protocol ID: 07SB08JB  
Study Director: Joseph Boudreaux  
Investigator: Dr. James L. Griffin

Pest Name				Green		Brown		Red				
Rating Date				18/Aug/2007		18/Aug/2007		18/Aug/2007				
Rating Data Type				#/20Sweeps		#/20Sweeps		#/20Sweeps				
Trt-Eval Interval				2 DAT		2 DAT		2 DAT				
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Green	Brown	Red
1	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	A	1 a	0 a	3 bc
	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	B			
2	Karate	1	EC	0.03	LB A/A	3.84	OZ/A	POST	A	0 a	0 a	1 c
	Karate	1	EC	0.03	LB A/A	3.84	OZ/A	POST	B			
3	Endigo	2	L	0.047	LB A/A	3	OZ/A	POST	A	0 a	0 a	1 c
	Endigo	2	L	0.047	LB A/A	3	OZ/A	POST	B			
4	Endigo	2	L	0.0625	LB A/A	4	OZ/A	POST	A	0 a	0 a	1 c
	Endigo	2	L	0.0625	LB A/A	4	OZ/A	POST	B			
5	Orthene	90	S	0.9	LB A/A	1.0	LB/A	POST	A	0 a	0 a	6 ab
	Orthene	90	S	0.9	LB A/A	1	LB/A	POST	B			
6	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	A	0 a	0 a	1 c
	Orthene	90	S	0.9	LB A/A	1	LB/A	POST	A			
	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	B			
	Orthene	90	S	0.9	LB A/A	1	LB/A	POST	B			
7	Baythroid	2	L	0.033	LB A/A	2.11	OZ/A	POST	A	0 a	0 a	2 c
	Orthene	90	S	0.45	LB A/A	0.5	LB/A	POST	A			
	Baythroid	2	L	0.033	LB A/A	2.11	OZ/A	POST	B			
	Orthene	90	S	0.45	LB A/A	0.5	LB/A	POST	B			
8	Nontreated									1 a	0 a	8 a
LSD (P=.05)										0.9	0.3	3.1
Standard Deviation										0.6	0.2	2.1
CV										331.74	565.69	69.39
Grand Mean										0.19	0.03	3.03
Bartlett's X2										4.347	0.0	13.141
P(Bartlett's X2)										0.114	.	0.069
Replicate F										0.323	1.000	1.081
Replicate Prob(F)										0.8086	0.4123	0.3788
Treatment F										0.877	1.000	6.062
Treatment Prob(F)										0.5407	0.4586	0.0006

# School of Plant, Environmental, and Soil Sciences

## Efficacy of Insecticides on Stinkbug Control

Trial ID: 07SB08JB  
Location: Ben Hur

Protocol ID: 07SB08JB  
Study Director: Joseph Boudreaux  
Investigator: Dr. James L. Griffin

Pest Name											Nymph	Total	Green
Rating Date											18/Aug/2007	18/Aug/2007	23/Aug/2007
Rating Data Type											#/20Sweeps	#/20Sweeps	#/20Sweeps
Trt-Eval Interval											2 DAT	2 DAT	7 DAT
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	A	3 c	7 c	1 b	
	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	B				
2	Karate	1	EC	0.03	LB A/A	3.84	OZ/A	POST	A	1 c	2 c	0 b	
	Karate	1	EC	0.03	LB A/A	3.84	OZ/A	POST	B				
3	Endigo	2	L	0.047	LB A/A	3	OZ/A	POST	A	1 c	3 c	0 b	
	Endigo	2	L	0.047	LB A/A	3	OZ/A	POST	B				
4	Endigo	2	L	0.0625	LB A/A	4	OZ/A	POST	A	1 c	2 c	1 b	
	Endigo	2	L	0.0625	LB A/A	4	OZ/A	POST	B				
5	Orthene	90	S	0.9	LB A/A	1.0	LB/A	POST	A	7 b	14 b	1 ab	
	Orthene	90	S	0.9	LB A/A	1	LB/A	POST	B				
6	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	A	3 c	4 c	0 b	
	Orthene	90	S	0.9	LB A/A	1	LB/A	POST	A				
	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	B				
	Orthene	90	S	0.9	LB A/A	1	LB/A	POST	B				
7	Baythroid	2	L	0.033	LB A/A	2.11	OZ/A	POST	A	2 c	4 c	0 b	
	Orthene	90	S	0.45	LB A/A	0.5	LB/A	POST	A				
	Baythroid	2	L	0.033	LB A/A	2.11	OZ/A	POST	B				
	Orthene	90	S	0.45	LB A/A	0.5	LB/A	POST	B				
8	Nontreated									15 a	23 a	2 a	
LSD (P=.05)											3.2	5.1	1.1
Standard Deviation											2.2	3.4	0.7
CV											55.53	48.26	129.4
Grand Mean											3.88	7.13	0.56
Bartlett's X2											13.708	14.705	2.429
P(Bartlett's X2)											0.057	0.04*	0.488
Replicate F											0.486	1.093	2.753
Replicate Prob(F)											0.6957	0.3741	0.0681
Treatment F											19.913	18.785	4.955
Treatment Prob(F)											0.0001	0.0001	0.0020

# School of Plant, Environmental, and Soil Sciences

## Efficacy of Insecticides on Stinkbug Control

Trial ID: 07SB08JB  
Location: Ben Hur

Protocol ID: 07SB08JB  
Study Director: Joseph Boudreaux  
Investigator: Dr. James L. Griffin

Pest Name				Brown		Red		Nymph				
Rating Date				23/Aug/2007		23/Aug/2007		23/Aug/2007				
Rating Data Type				#/20Sweeps		#/20Sweeps		#/20Sweeps				
Trt-Eval Interval				7 DAT		7 DAT		7 DAT				
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	A	0 a	6 a	3 ab
	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	B			
2	Karate	1	EC	0.03	LB A/A	3.84	OZ/A	POST	A	0 a	2 a	0 b
	Karate	1	EC	0.03	LB A/A	3.84	OZ/A	POST	B			
3	Endigo	2	L	0.047	LB A/A	3	OZ/A	POST	A	0 a	9 a	1 b
	Endigo	2	L	0.047	LB A/A	3	OZ/A	POST	B			
4	Endigo	2	L	0.0625	LB A/A	4	OZ/A	POST	A	0 a	7 a	2 ab
	Endigo	2	L	0.0625	LB A/A	4	OZ/A	POST	B			
5	Orthene	90	S	0.9	LB A/A	1.0	LB/A	POST	A	0 a	7 a	5 ab
	Orthene	90	S	0.9	LB A/A	1	LB/A	POST	B			
6	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	A	0 a	2 a	6 ab
	Orthene	90	S	0.9	LB A/A	1	LB/A	POST	A			
	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	B			
	Orthene	90	S	0.9	LB A/A	1	LB/A	POST	B			
7	Baythroid	2	L	0.033	LB A/A	2.11	OZ/A	POST	A	0 a	8 a	5 ab
	Orthene	90	S	0.45	LB A/A	0.5	LB/A	POST	A			
	Baythroid	2	L	0.033	LB A/A	2.11	OZ/A	POST	B			
	Orthene	90	S	0.45	LB A/A	0.5	LB/A	POST	B			
8	Nontreated									0 a	11 a	11 a
LSD (P=.05)										0.0	5.9	6.2
Standard Deviation										0.0	4.0	4.2
CV										0.0	61.19	104.67
Grand Mean										0.0	6.5	4.03
Bartlett's X2										0.0	11.382	20.584
P(Bartlett's X2)										.	0.123	0.004*
Replicate F										0.000	0.553	0.128
Replicate Prob(F)										1.0000	0.6517	0.9423
Treatment F										0.000	2.325	2.682
Treatment Prob(F)										1.0000	0.0636	0.0377

# School of Plant, Environmental, and Soil Sciences

## Efficacy of Insecticides on Stinkbug Control

Trial ID: 07SB08JB  
Location: Ben Hur

Protocol ID: 07SB08JB  
Study Director: Joseph Boudreaux  
Investigator: Dr. James L. Griffin

Pest Name											Total	Green	Brown
Rating Date											23/Aug/2007	27/Aug/2007	27/Aug/2007
Rating Data Type											#/20Sweeps	#/20Sweeps	#/20Sweeps
Trt-Eval Interval											7 DAT	10 DAT	10 DAT
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	A	9 ab	0 a	0 a	
	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	B				
2	Karate	1	EC	0.03	LB A/A	3.84	OZ/A	POST	A	3 b	0 a	0 a	
	Karate	1	EC	0.03	LB A/A	3.84	OZ/A	POST	B				
3	Endigo	2	L	0.047	LB A/A	3	OZ/A	POST	A	9 ab	0 a	0 a	
	Endigo	2	L	0.047	LB A/A	3	OZ/A	POST	B				
4	Endigo	2	L	0.0625	LB A/A	4	OZ/A	POST	A	9 ab	0 a	0 a	
	Endigo	2	L	0.0625	LB A/A	4	OZ/A	POST	B				
5	Orthene	90	S	0.9	LB A/A	1.0	LB/A	POST	A	14 ab	1 a	0 a	
	Orthene	90	S	0.9	LB A/A	1	LB/A	POST	B				
6	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	A	8 b	0 a	0 a	
	Orthene	90	S	0.9	LB A/A	1	LB/A	POST	A				
	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	B				
	Orthene	90	S	0.9	LB A/A	1	LB/A	POST	B				
7	Baythroid	2	L	0.033	LB A/A	2.11	OZ/A	POST	A	13 ab	0 a	0 a	
	Orthene	90	S	0.45	LB A/A	0.5	LB/A	POST	A				
	Baythroid	2	L	0.033	LB A/A	2.11	OZ/A	POST	B				
	Orthene	90	S	0.45	LB A/A	0.5	LB/A	POST	B				
8	Nontreated									24 a	2 a	0 a	
LSD (P=.05)											10.0	1.7	0.3
Standard Deviation											6.8	1.2	0.2
CV											61.57	287.55	565.69
Grand Mean											11.09	0.41	0.03
Bartlett's X2											6.553	9.128	0.0
P(Bartlett's X2)											0.477	0.01*	.
Replicate F											0.151	1.366	1.000
Replicate Prob(F)											0.9281	0.2803	0.4123
Treatment F											3.307	1.829	1.000
Treatment Prob(F)											0.0156	0.1343	0.4586

# School of Plant, Environmental, and Soil Sciences

## Efficacy of Insecticides on Stinkbug Control

Trial ID: 07SB08JB  
Location: Ben Hur

Protocol ID: 07SB08JB  
Study Director: Joseph Boudreaux  
Investigator: Dr. James L. Griffin

Pest Name											Red	Nymph	Total
Rating Date											27/Aug/2007	27/Aug/2007	27/Aug/2007
Rating Data Type											#/20Sweeps	#/20Sweeps	#/20Sweeps
Trt-Eval Interval											10 DAT	10 DAT	10 DAT
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	A	14 a	5 b	19 b	
	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	B				
2	Karate	1	EC	0.03	LB A/A	3.84	OZ/A	POST	A	9 a	1 b	10 b	
	Karate	1	EC	0.03	LB A/A	3.84	OZ/A	POST	B				
3	Endigo	2	L	0.047	LB A/A	3	OZ/A	POST	A	12 a	2 b	14 b	
	Endigo	2	L	0.047	LB A/A	3	OZ/A	POST	B				
4	Endigo	2	L	0.0625	LB A/A	4	OZ/A	POST	A	10 a	2 b	12 b	
	Endigo	2	L	0.0625	LB A/A	4	OZ/A	POST	B				
5	Orthene	90	S	0.9	LB A/A	1.0	LB/A	POST	A	6 a	7 b	14 b	
	Orthene	90	S	0.9	LB A/A	1	LB/A	POST	B				
6	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	A	8 a	2 b	10 b	
	Orthene	90	S	0.9	LB A/A	1	LB/A	POST	A				
	Baythroid	2	L	0.044	LB A/A	2.82	OZ/A	POST	B				
	Orthene	90	S	0.9	LB A/A	1	LB/A	POST	B				
7	Baythroid	2	L	0.033	LB A/A	2.11	OZ/A	POST	A	10 a	3 b	13 b	
	Orthene	90	S	0.45	LB A/A	0.5	LB/A	POST	A				
	Baythroid	2	L	0.033	LB A/A	2.11	OZ/A	POST	B				
	Orthene	90	S	0.45	LB A/A	0.5	LB/A	POST	B				
8	Nontreated									11 a	17 a	29 a	
LSD (P=.05)											5.3	4.8	9.2
Standard Deviation											3.6	3.2	6.3
CV											36.6	68.69	41.81
Grand Mean											9.81	4.72	14.97
Bartlett's X2											6.688	15.032	6.71
P(Bartlett's X2)											0.462	0.036*	0.46
Replicate F											0.740	2.319	0.647
Replicate Prob(F)											0.5402	0.1047	0.5932
Treatment F											1.832	10.397	4.224
Treatment Prob(F)											0.1337	0.0001	0.0047

**Louisiana State University**  
Department of Agronomy and Environmental Management

**Soybean Row Configuration Test (New Iberia)**

Experiment number ..... : 07SB10JB  
Location ..... : Ronnie Gounsoulin Farms - New Iberia, LA  
Experimental design..... : Randomized Complete Block  
Number of reps..... : 4  
Plot size ..... : 18 X 100 ft  
Row width/# per plot..... : 68"/3  
Soil type..... : silt loam  
OM (%) ..... : 1.0  
pH ..... : 5.9  
Planting date..... : 05-02-07  
Harvest date ..... : N/A  
Crop/Variety ..... : Delta Pine 3861 RR  
Uniform std. treatment..... : N/A

Application type ..... : N/A  
Date applied (mm-dd-yy)..... : N/A  
Time (hh:mm-hh:mm) ..... : N/A  
Incorporation equipment..... : N/A  
Incorporation depth..... : N/A  
Air/Soil temperature (F)..... : N/A  
Wind (mph/direction) ..... : N/A  
Cloud cover (%) ..... : N/A  
Relative humidity (%)..... : N/A  
Soil/Leaf surface moist ..... : N/A  
Crop stage/height ..... : N/A  
Sprayer type/mph..... : N/A  
Nozzle type/size ..... : N/A  
Boom ht/#noz/spacing (in) .... : N/A  
GPA/psi (at nozzle) ..... : N/A  
Applied by ..... : N/A

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
N/A

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

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Comments: Soybeans were planted on raised sugarcane beds spaced 68 inches apart. Row configurations/row spacings on each sugarcane bed were two rows at 18-inch spacing, two at 24-inch spacing, two rows at 30-inch spacing, and three rows at 15-inch spacing.

# School of Plant, Environmental, and Soil Sciences

## Soybean Row Configuration Test (New Iberia)

Trial ID: 07SB10JB  
Location: New Iberia

Protocol ID: 07SB05JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code		SOYBEAN		SOYBEAN		SOYBEAN			
Rating Date		2/Jul/2007		2/Jul/2007		2/Jul/2007			
Rating Data Type		Heights		Widths		Middle			
Rating Unit		IN		IN		IN			
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Stage	Appl Code	
1	2 row 18" spacing								
							26 a	23 a	26 a
2	2 row 24" spacing								
							25 a	22 a	20 b
3	2 row 30" spacing								
							25 a	23 a	13 c
4	3 row 15" spacing								
							25 a	19 b	14 c
LSD (P=.05)							2.5	1.7	3.0
Standard Deviation							1.6	1.1	1.8
CV							6.24	4.95	10.2
Grand Mean							25.26	21.95	18.13
Bartlett's X2							3.242	3.261	1.282
P(Bartlett's X2)							0.356	0.353	0.733
Replicate F							1.664	1.531	2.029
Replicate Prob(F)							0.2433	0.2723	0.1804
Treatment F							0.264	10.419	42.744
Treatment Prob(F)							0.8495	0.0028	0.0001

# School of Plant, Environmental, and Soil Sciences

## Soybean Row Configuration Test (New Iberia)

Trial ID: 07SB10JB  
Location: New Iberia

Protocol ID: 07SB05JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code		SOYBEAN		SOYBEAN		SOYBEAN		
Rating Date		9/Jul/2007		9/Jul/2007		9/Jul/2007		
Rating Data Type		Heights		Widths		Middle		
Rating Unit		IN		IN		IN		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Unit	Other Rate	Growth Stage	Appl Code
1	2 row 18" spacing							
								30 a 25 b 19 a
2	2 row 24" spacing							
								30 a 26 ab 15 b
3	2 row 30" spacing							
								30 a 27 a 8 c
4	3 row 15" spacing							
								30 a 22 c 8 c
LSD (P=,05)								
Standard Deviation								
CV								
Grand Mean								
Bartlett's X2								
P(Bartlett's X2)								
Replicate F								
Replicate Prob(F)								
Treatment F								
Treatment Prob(F)								

# School of Plant, Environmental, and Soil Sciences

## Soybean Row Configuration Test (New Iberia)

Trial ID: 07SB10JB  
Location: New Iberia

Protocol ID: 07SB05JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code		SOYBEAN		SOYBEAN		SOYBEAN		
Rating Date		17/Jul/2007		17/Jul/2007		17/Jul/2007		
Rating Data Type		Heights		Widths		Middle		
Rating Unit		IN		IN		IN		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Unit	Other Rate	Growth Stage	Appl Code
1	2 row 18" spacing							
								36 a
								29 a
								16 a
2	2 row 24" spacing							
								37 a
								28 a
								10 b
3	2 row 30" spacing							
								38 a
								29 a
								4 c
4	3 row 15" spacing							
								37 a
								25 b
								1 d
LSD (P=,05)								2.1
Standard Deviation								1.3
CV								3.54
Grand Mean								37.21
Bartlett's X2								11.414
P(Bartlett's X2)								0.01*
Replicate F								1.076
Replicate Prob(F)								0.4070
Treatment F								0.676
Treatment Prob(F)								0.5885
								4.332
								0.0378
								17.346
								84.248
								0.0004
								2.368
								0.1386
								0.0001

# School of Plant, Environmental, and Soil Sciences

## Soybean Row Configuration Test (New Iberia)

Trial ID: 07SB10JB  
Location: New Iberia

Protocol ID: 07SB05JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code		SOYBEAN		SOYBEAN		SOYBEAN		
Rating Date		23/Jul/2007		23/Jul/2007		23/Jul/2007		
Rating Data Type		Heights		Widths		Middle		
Rating Unit		IN		IN		IN		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Unit	Other Rate	Growth Stage	Appl Code
1	2 row 18" spacing							
								39 a
								31 a
								15 a
2	2 row 24" spacing							
								40 a
								31 a
								9 b
3	2 row 30" spacing							
								39 a
								30 a
								2 c
4	3 row 15" spacing							
								39 a
								28 b
								0 c
LSD (P=,05)								2.0
Standard Deviation								1.2
CV								3.15
Grand Mean								39.56
Bartlett's X2								3.534
P(Bartlett's X2)								0.316
Replicate F								0.018
Replicate Prob(F)								0.9963
Treatment F								0.172
Treatment Prob(F)								0.9123
								6.977
								0.0101
								12.835
								114.894
								3.035
								0.0856
								0.0001

# School of Plant, Environmental, and Soil Sciences

## Soybean Row Configuration Test (New Iberia)

Trial ID: 07SB10JB  
Location: New Iberia

Protocol ID: 07SB05JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code		SOYBEAN		SOYBEAN		SOYBEAN		
Rating Date		29/Jul/2007		29/Jul/2007		29/Jul/2007		
Rating Data Type		Heights		Widths		Middle		
Rating Unit		IN		IN		IN		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Unit	Other Rate	Growth Stage	Appl Code
1	2 row 18" spacing							
								39 a
								30 b
								10 a
2	2 row 24" spacing							
								39 a
								31 ab
								6 b
3	2 row 30" spacing							
								39 a
								32 a
								0 c
4	3 row 15" spacing							
								39 a
								25 c
								0 c
LSD (P=,05)								1.8
Standard Deviation								1.1
CV								0.7
Grand Mean								2.84
Bartlett's X2								2.47
P(Bartlett's X2)								17.46
Replicate F								39.06
Replicate Prob(F)								29.48
Treatment F								4.05
Treatment Prob(F)								5.032
								0.169
								0.248
								0.23
								0.067
								7.341
								2.013
								0.9760
								0.0086
								0.137
								73.746
								192.241
								0.9352
								0.0001
								0.0001

# School of Plant, Environmental, and Soil Sciences

## Soybean Row Configuration Test (New Iberia)

Trial ID: 07SB10JB  
Location: New Iberia

Protocol ID: 07SB05JB  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Crop Code		SOYBEAN		SOYBEAN		SOYBEAN		
Rating Date		6/Aug/2007		6/Aug/2007		6/Aug/2007		
Rating Data Type		Heights		Widths		Middle		
Rating Unit		IN		IN		IN		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Unit	Other Rate	Growth Stage	Appl Code
1	2 row 18" spacing							
				40 a		30 a		9 a
2	2 row 24" spacing							
				41 a		31 a		5 b
3	2 row 30" spacing							
				40 a		31 a		0 c
4	3 row 15" spacing							
				40 a		27 b		0 c
LSD (P=.05)				1.6		1.7		1.7
Standard Deviation				1.0		1.1		1.1
CV				2.52		3.63		30.83
Grand Mean				40.38		29.71		3.49
Bartlett's X2				1.207		11.624		0.259
P(Bartlett's X2)				0.751		0.009*		0.611
Replicate F				1.765		0.985		1.335
Replicate Prob(F)				0.2235		0.4424		0.3231
Treatment F				0.453		11.390		61.487
Treatment Prob(F)				0.7213		0.0020		0.0001

**Louisiana State University**  
School of Plant, Environmental, and Soil Sciences

**Evaluation of A15189 for POST Weed Control in Corn**

Experiment number .....	07CN01JG			
Location .....	Ben Hur Research Farm- Baton Rouge LA			
Experimental design.....	Randomized Complete Block			
Number of reps.....	4			
Plot size .....	6X30ft.			
Row width/# per plot.....	38"/2			
Soil type.....	clay loam			
OM (%) .....	1.9			
pH .....	6.3			
Planting date.....	3/20/07			
Harvest date .....	N/A			
Crop/Variety .....	DeKalb 69-71 RR BT			
Uniform std. treatment.....	N/A			
Application type .....	PRE	POST B	POST C	POST D
Date applied (mm-dd-yy).....	03/28/07	04/09/07	04/17/07	05/01/07
Time (hh:mm-hh:mm) .....	2:00-2:30pm	3:45-4:00pm	12:00-12:15pm	11:30-11:45am
Incorporation equipment.....	N/A	N/A	N/A	N/A
Incorporation depth.....	N/A	N/A	N/A	N/A
Air/Soil temperature (F).....	82/75	70/62	78/80	85/80
Wind (mph/direction) .....	3-5/E	3-6/SW	2-3/SE	3-5/E
Cloud cover (%) .....	30%	75%	20%	30%
Relative humidity (%).....	58%	45%	28%	57%
Soil/Leaf surface moist .....	Dry/Dry	Dry/Dry	Dry/Dry	Dry/Dry
Crop stage/height .....	V2-V3/2-3"	V4-V5/8-10"	V5-V6/10-14"	V10-V12/32-36"
Sprayer type/mph.....	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> bkpk/3.0
Nozzle type/size .....	FF/11002VS	FF/11002VS	FF/11002VS	FF/11004VS
Boom ht/#noz/spacing (in) .....	18"/4/18"	18"/4/18"	18"/4/18"	18"/3/38"
GPA/psi (at nozzle) .....	15/25	15/25	15/25	15/28
Applied by .....	Boudreaux	Boudreaux	Boudreaux	Boudreaux
Weed species (population/ft <sup>2</sup> ) .:	(height/# leaves)			
IPOHE (.25 ft <sup>2</sup> ) .....	1"/cot-2lf	2-3"/3-6lf	3-5"/6-10lf	1-2"/cot-2lf
LAMAM (1/ ft <sup>2</sup> ) .....	2-3"/2-4lf	2-3"/4-6lf	3-6"/10-12lf	
Rainfall (in.)				
0-24 hr/1-3 days .....	0.00/0.00	0.00/1.01	0.00/0.11	0.00/1.51
4-7 days/2nd week.....	0.36/1.44	0.50/1.78	0.00/1.48	1.81/0.50
3rd week/4th week .....	0.39/0.11	1.51/1.73	3.18/0.50	1.25/0.44

Comments:

Roundup Original Max added to PRE treatments at 22oz/a to control emerged weeds.  
POST D application post directed under canopy.

# School of Plant, Environmental, and Soil Sciences

## Evaluation of A15189 for POST Weed Control in Corn

Trial ID: 07CN01JG  
Location: Ben Hur

Protocol ID: 07CN01JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code										IPOHE	
Crop Code										CORN	
Rating Date										16/Apr/2007	16/Apr/2007
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		
1	A15189	4.38	SC	2.2	LB A/A	4	PT/A	EPOST B		0 a	49 c
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	EPOST B			
	Induce			0.25	% V/V	0.25	% V/V	EPOST B			
2	A15189	4.38	SC	2.2	LB A/A	4	PT/A	EPOST B		0 a	80 b
	AAtrex	4	L	0.5	LB A/A	1	PT/A	EPOST B			
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	EPOST B			
	Induce			0.25	% V/V	0.25	% V/V	EPOST B			
3	Lumax	3.94	SE	1.97	LB A/A	2	QT/A	PRE A		0 a	100 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	POST D			
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	POST D			
4	Harness Xtra	5.6	L	2.1	LB A/A	1.5	QT/A	PRE A		0 a	100 a
	Roundup Original Max	4.5	SL	0.77	LB AE/A	22	OZ/A	POST D			
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	POST D			
5	Roudup Original Max	4.5	SL	0.77	LB AE/A	22	OZ/A	POST C		0 a	0 d
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	POST C			
6	Roundup Original Max	4.5	SL	0.77	LB AE/A	22	OZ/A	POST C		0 a	0 d
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	POST C			
	Roundup Original Max	4.5	SL	0.77	LB AE/A	22	OZ/A	POST D			
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	POST D			
7	Nontreated									0 a	0 d
LSD (P=.05)										0.0	2.5
Standard Deviation										0.0	1.7
CV										0.0	3.61
Grand Mean										0.0	46.96
Bartlett's X2										0.0	0.678
P(Bartlett's X2)										.	0.41
Replicate F										0.000	1.966
Replicate Prob(F)										1.0000	0.1553
Treatment F										0.000	3090.518
Treatment Prob(F)										1.0000	0.0001

# School of Plant, Environmental, and Soil Sciences

## Evaluation of A15189 for POST Weed Control in Corn

Trial ID: 07CN01JG  
Location: Ben Hur

Protocol ID: 07CN01JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code										IPOHE	
Crop Code										CORN	
Rating Date										24/Apr/2007	
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	A15189 Ammonium Sulfate Induce	4.38	SC	2.2	LB A/A	4	PT/A	EPOST B		0 a	93 b
			SG	1.0	% W/V	1.0	% W/V	EPOST B			
				0.25	% V/V	0.25	% V/V	EPOST B			
2	A15189 AAtrex Ammonium Sulfate Induce	4.38	SC	2.2	LB A/A	4	PT/A	EPOST B		0 a	97 ab
		4	L	0.5	LB A/A	1	PT/A	EPOST B			
			SG	1.0	% W/V	1.0	% W/V	EPOST B			
		0.25	% V/V	0.25	% V/V	EPOST B					
3	Lumax Touchdown Total Ammonium Sulfate	3.94	SE	1.97	LB A/A	2	QT/A	PRE A		0 a	100 a
		4.17	SL	0.78	LB AE/A	24	OZ/A	POST D			
			SG	1.0	% W/V	1.0	% W/V	POST D			
4	Harness Xtra Roundup Original Max Ammonium Sulfate	5.6	L	2.1	LB A/A	1.5	QT/A	PRE A		0 a	100 a
		4.5	SL	0.77	LB AE/A	22	OZ/A	POST D			
			SG	1.0	% W/V	1.0	% W/V	POST D			
5	Roudup Original Max Ammonium Sulfate	4.5	SL	0.77	LB AE/A	22	OZ/A	POST C		0 a	39 c
			SG	1.0	% W/V	1.0	% W/V	POST C			
6	Roundup Original Max Ammonium Sulfate Roundup Original Max Ammonium Sulfate	4.5	SL	0.77	LB AE/A	22	OZ/A	POST C		0 a	38 c
			SG	1.0	% W/V	1.0	% W/V	POST C			
		4.5	SL	0.77	LB AE/A	22	OZ/A	POST D			
			SG	1.0	% W/V	1.0	% W/V	POST D			
7	Nontreated									0 a	0 d
LSD (P=.05)										0.0	4.1
Standard Deviation										0.0	2.8
CV										0.0	4.14
Grand Mean										0.0	66.43
Bartlett's X2										0.0	12.116
P(Bartlett's X2)										.	0.033*
Replicate F										0.000	0.842
Replicate Prob(F)										1.0000	0.4884
Treatment F										0.000	864.803
Treatment Prob(F)										1.0000	0.0001

# School of Plant, Environmental, and Soil Sciences

## Evaluation of A15189 for POST Weed Control in Corn

Trial ID: 07CN01JG  
Location: Ben Hur

Protocol ID: 07CN01JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code										IPOHE	
Crop Code										CORN	
Rating Date										1/May/2007	
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	A15189	4.38	SC	2.2	LB A/A	4	PT/A	EPOST B		0 a	94 a
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	EPOST B			
	Induce			0.25	% V/V	0.25	% V/V	EPOST B			
2	A15189	4.38	SC	2.2	LB A/A	4	PT/A	EPOST B		0 a	98 a
	AAtrex	4	L	0.5	LB A/A	1	PT/A	EPOST B			
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	EPOST B			
	Induce			0.25	% V/V	0.25	% V/V	EPOST B			
3	Lumax	3.94	SE	1.97	LB A/A	2	QT/A	PRE A		0 a	98 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	POST D			
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	POST D			
4	Harness Xtra	5.6	L	2.1	LB A/A	1.5	QT/A	PRE A		0 a	90 a
	Roundup Original Max	4.5	SL	0.77	LB AE/A	22	OZ/A	POST D			
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	POST D			
5	Roudup Original Max	4.5	SL	0.77	LB AE/A	22	OZ/A	POST C		0 a	50 b
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	POST C			
6	Roundup Original Max	4.5	SL	0.77	LB AE/A	22	OZ/A	POST C		0 a	75 ab
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	POST C			
	Roundup Original Max	4.5	SL	0.77	LB AE/A	22	OZ/A	POST D			
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	POST D			
7	Nontreated									0 a	15 c
LSD (P=.05)										0.0	31.0
Standard Deviation										0.0	20.8
CV										0.0	28.02
Grand Mean										0.0	74.36
Bartlett's X2										0.0	43.359
P(Bartlett's X2)										.	0.001*
Replicate F										0.000	0.027
Replicate Prob(F)										1.0000	0.9938
Treatment F										0.000	9.044
Treatment Prob(F)										1.0000	0.0001

# School of Plant, Environmental, and Soil Sciences

## Evaluation of A15189 for POST Weed Control in Corn

Trial ID: 07CN01JG  
Location: Ben Hur

Protocol ID: 07CN01JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

										ECHCG	IPOHE
										31/May/2007	31/May/2007
										Control	Control
										%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	A15189	4.38	SC	2.2	LB A/A	4	PT/A	EPOST B		100 a	98 a
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	EPOST B			
	Induce			0.25	% V/V	0.25	% V/V	EPOST B			
2	A15189	4.38	SC	2.2	LB A/A	4	PT/A	EPOST B		100 a	97 a
	AAtrex	4	L	0.5	LB A/A	1	PT/A	EPOST B			
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	EPOST B			
	Induce			0.25	% V/V	0.25	% V/V	EPOST B			
3	Lumax	3.94	SE	1.97	LB A/A	2	QT/A	PRE A		100 a	99 a
	Touchdown Total	4.17	SL	0.78	LB AE/A	24	OZ/A	POST D			
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	POST D			
4	Harness Xtra	5.6	L	2.1	LB A/A	1.5	QT/A	PRE A		100 a	100 a
	Roundup Original Max	4.5	SL	0.77	LB AE/A	22	OZ/A	POST D			
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	POST D			
5	Roudup Original Max	4.5	SL	0.77	LB AE/A	22	OZ/A	POST C		75 a	97 a
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	POST C			
6	Roundup Original Max	4.5	SL	0.77	LB AE/A	22	OZ/A	POST C		100 a	97 a
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	POST C			
	Roundup Original Max	4.5	SL	0.77	LB AE/A	22	OZ/A	POST D			
	Ammonium Sulfate		SG	1.0	% W/V	1.0	% W/V	POST D			
7	Nontreated									0 b	0 b
LSD (P=.05)										27.9	2.9
Standard Deviation										18.8	2.0
CV										22.88	2.34
Grand Mean										82.07	83.71
Bartlett's X2										0.0	2.534
P(Bartlett's X2)										.	0.771
Replicate F										1.000	0.099
Replicate Prob(F)										0.4155	0.9596
Treatment F										15.886	1415.941
Treatment Prob(F)										0.0001	0.0001

**Louisiana State University**  
School of Plant, Environmental, and Soil Sciences

**Weed Control with Callisto PRE and POST**

Experiment number ..... : 07GN03JG  
 Location ..... : Ben Hur Research Farm- Baton Rouge LA  
 Experimental design..... : Randomized Complete Block  
 Number of reps..... : 4  
 Plot size ..... : 10X25ft.  
 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	POST B
Date applied (mm-dd-yy).....	05-11-07	06-18-07
Time (hh:mm-hh:mm) .....	8:45-9:30am	8:15-8:30am
Incorporation equipment.....	N/A	N/A
Incorporation depth.....	N/A	N/A
Air/Soil temperature (F).....	80/72	86/75
Wind (mph/direction) .....	2-5/NE	4-6/SE
Cloud cover (%) .....	80%	25%
Relative humidity (%).....	80%	87%
Soil/Leaf surface moist .....	Dry/N/A	Dry/Moist
Crop stage/height .....	N/A	N/A
Sprayer type/mph.....	CO <sub>2</sub> bkpk/3.0	CO <sub>2</sub> 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 .....	Boudreaux	Boudreaux

Weed species (population/ft <sup>2</sup> ) . :	(height/# leaves)
ECHCG (2-3) .....	8-10"/15-18lf
IPOLA (1) .....	6-8" runners

Rainfall (in.)		
0-24 hr/1-3 days .....	0.00/0.49	0.00/5.76
4-7 days/2nd week.....	1.26/0.33	0.00/0.08
3rd week/4th week .....	1.00/0.11	3.15/1.53

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Comments:

# School of Plant, Environmental, and Soil Sciences

## Weed Control with Callisto PRE and POST

Trial ID: 07GN03JG  
Location: Ben Hur

Protocol ID: 07GN03JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code										ECHCG	IPOLA	ECHCG
Rating Date										6/Jun/2007	6/Jun/2007	22/Jun/2007
Rating Data Type										Control	Control	Control
Rating Unit										%	%	%
Trt No.	Treatment	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	AAtrex	4	L	4	LB A/A	4	QT/A	PRE	A	84 ab	94 a	69 ab
2	AAtrex	4	L	2	LB A/A	2	QT/A	PRE	A	74 ab	91 a	58 b
3	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	PRE	A	84 ab	90 a	69 ab
	AAtrex	4	L	4	LB A/A	4	QT/A	PRE	A			
4	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	PRE	A	75 ab	89 a	66 ab
	AAtrex	4	L	2	LB A/A	2	QT/A	PRE	A			
5	AAtrex	4	L	4	LB A/A	4	QT/A	PRE	A	83 ab	91 a	78 ab
	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	POST	B			
	AAtrex	4	L	2	LB A/A	2	QT/A	POST	B			
	Agridex			1.0	% V/V	1	% V/V	POST	B			
6	AAtrex	4	L	2	LB A/A	2	QT/A	PRE	A	58 b	89 a	59 b
	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	POST	B			
	AAtrex	4	L	2	LB A/A	2	QT/A	POST	B			
	Agridex			1.0	% V/V	1	% V/V	POST	B			
7	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	PRE	A	89 a	93 a	83 ab
	AAtrex	4	L	4	LB A/A	4	QT/A	PRE	A			
	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	POST	B			
	AAtrex	4	L	2	LB A/A	2	QT/A	POST	B			
	Agridex			1.0	% V/V	1	% V/V	POST	B			
8	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	PRE	A	74 ab	93 a	71 ab
	AAtrex	4	L	2	LB A/A	2	QT/A	PRE	A			
	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	POST	B			
	AAtrex	4	L	2	LB A/A	2	QT/A	POST	B			
	Agridex			1.0	% V/V	1	% V/V	POST	B			
9	AAtrex	4	L	4	LB A/A	4	QT/A	PRE	A	84 ab	89 a	74 ab
	Envoke	75	WG	0.014	LB A/A	0.3	OZ/A	POST	B			
	Asulox	3.34	L	1.67	LB A/A	64	OZ/A	POST	B			
	Induce			0.25	% V/V	0.25	% V/V	POST	B			
10	AAtrex	4	L	2	LB A/A	2	QT/A	PRE	A	66 ab	90 a	69 ab
	Envoke	75	WG	0.014	LB A/A	0.3	OZ/A	POST	B			
	Asulox	3.34	L	1.67	LB A/A	64	OZ/A	POST	B			
	Induce			0.25	% V/V	0.25	% V/V	POST	B			
11	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	PRE	A	90 a	97 a	87 a
	AAtrex	4	L	4	LB A/A	4	QT/A	PRE	A			
	Envoke	75	WG	0.014	LB A/A	0.3	OZ/A	POST	B			
	Asulox	3.34	L	1.67	LB A/A	64	OZ/A	POST	B			
	Induce			0.25	% V/V	0.25	% V/V	POST	B			

# School of Plant, Environmental, and Soil Sciences

## Weed Control with Callisto PRE and POST

Trial ID: 07GN03JG  
Location: Ben Hur

Protocol ID: 07GN03JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

										ECHCG	IPOLA	ECHCG
										6/Jun/2007	6/Jun/2007	22/Jun/2007
										Control	Control	Control
										%	%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
12	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	PRE	A	76 ab	89 a	71 ab
	AAtrex	4	L	2	LB A/A	2	QT/A	PRE	A			
	Enovke	75	WG	0.014	LB A/A	0.3	OZ/A	POST	B			
	Asulox	3.34	L	1.67	LB A/A	64	OZ/A	POST	B			
	Induce			0.25	% V/V	0.25	% V/V	POST	B			
13	AAtrex	4	L	4	LB A/A	4	QT/A	PRE	A	69 ab	86 a	68 ab
	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	POST	B			
	Asulox	3.34	L	1.67	LB A/A	64	OZ/A	POST	B			
	Agridex			0.25	% V/V	0.25	% V/V	POST	B			
14	Callisto	4	SC	0.24	LB A/A	7.7	OZ/A	PRE	A	93 a	98 a	90 a
	AAtrex	4	L	4	LB A/A	4	QT/A	PRE	A			
	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	POST	B			
	AAtrex	4	L	2	LB A/A	2	QT/A	POST	B			
	Agridex			1.0	% V/V	1	% V/V	POST	B			
15	Nontreated									0 c	0 b	0 c
LSD (P=.05)										16.1	7.7	15.1
Standard Deviation										11.3	5.4	10.6
CV										15.43	6.34	15.69
Grand Mean										73.21	85.23	67.27
Bartlett's X2										10.357	13.571	16.241
P(Bartlett's X2)										0.664	0.405	0.236
Replicate F										4.131	5.062	4.642
Replicate Prob(F)										0.0120	0.0045	0.0068
Treatment F										15.793	77.602	15.373
Treatment Prob(F)										0.0001	0.0001	0.0001

# School of Plant, Environmental, and Soil Sciences

## Weed Control with Callisto PRE and POST

Trial ID: 07GN03JG  
Location: Ben Hur

Protocol ID: 07GN03JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

										IPOLA
										22/Jun/2007
										Control
										%
Pest Code										
Rating Date										
Rating Data Type										
Rating Unit										
Trt No.	Treatment	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	AAtrex	4	L	4	LB A/A	4	QT/A	PRE	A	95 a
2	AAtrex	4	L	2	LB A/A	2	QT/A	PRE	A	84 a
3	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	PRE	A	84 a
	AAtrex	4	L	4	LB A/A	4	QT/A	PRE	A	
4	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	PRE	A	90 a
	AAtrex	4	L	2	LB A/A	2	QT/A	PRE	A	
5	AAtrex	4	L	4	LB A/A	4	QT/A	PRE	A	94 a
	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	POST	B	
	AAtrex	4	L	2	LB A/A	2	QT/A	POST	B	
	Agridex			1.0	% V/V	1	% V/V	POST	B	
6	AAtrex	4	L	2	LB A/A	2	QT/A	PRE	A	80 a
	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	POST	B	
	AAtrex	4	L	2	LB A/A	2	QT/A	POST	B	
	Agridex			1.0	% V/V	1	% V/V	POST	B	
7	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	PRE	A	95 a
	AAtrex	4	L	4	LB A/A	4	QT/A	PRE	A	
	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	POST	B	
	AAtrex	4	L	2	LB A/A	2	QT/A	POST	B	
	Agridex			1.0	% V/V	1	% V/V	POST	B	
8	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	PRE	A	94 a
	AAtrex	4	L	2	LB A/A	2	QT/A	PRE	A	
	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	POST	B	
	AAtrex	4	L	2	LB A/A	2	QT/A	POST	B	
	Agridex			1.0	% V/V	1	% V/V	POST	B	
9	AAtrex	4	L	4	LB A/A	4	QT/A	PRE	A	84 a
	Envoke	75	WG	0.014	LB A/A	0.3	OZ/A	POST	B	
	Asulox	3.34	L	1.67	LB A/A	64	OZ/A	POST	B	
	Induce			0.25	% V/V	0.25	% V/V	POST	B	
10	AAtrex	4	L	2	LB A/A	2	QT/A	PRE	A	94 a
	Envoke	75	WG	0.014	LB A/A	0.3	OZ/A	POST	B	
	Asulox	3.34	L	1.67	LB A/A	64	OZ/A	POST	B	
	Induce			0.25	% V/V	0.25	% V/V	POST	B	
11	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	PRE	A	93 a
	AAtrex	4	L	4	LB A/A	4	QT/A	PRE	A	
	Envoke	75	WG	0.014	LB A/A	0.3	OZ/A	POST	B	
	Asulox	3.34	L	1.67	LB A/A	64	OZ/A	POST	B	
	Induce			0.25	% V/V	0.25	% V/V	POST	B	

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## Weed Control with Callisto PRE and POST

Trial ID: 07GN03JG  
Location: Ben Hur

Protocol ID: 07GN03JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
	Pest Code									IPOLA
	Rating Date									22/Jun/2007
	Rating Data Type									Control
	Rating Unit									%
12	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	PRE	A	88 a
	AAtrex	4	L	2	LB A/A	2	QT/A	PRE	A	
	Enovke	75	WG	0.014	LB A/A	0.3	OZ/A	POST	B	
	Asulox	3.34	L	1.67	LB A/A	64	OZ/A	POST	B	
	Induce			0.25	% V/V	0.25	% V/V	POST	B	
13	AAtrex	4	L	4	LB A/A	4	QT/A	PRE	A	75 a
	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	POST	B	
	Asulox	3.34	L	1.67	LB A/A	64	OZ/A	POST	B	
	Agridex			0.25	% V/V	0.25	% V/V	POST	B	
14	Callisto	4	SC	0.24	LB A/A	7.7	OZ/A	PRE	A	95 a
	AAtrex	4	L	4	LB A/A	4	QT/A	PRE	A	
	Callisto	4	SC	0.094	LB A/A	3.0	OZ/A	POST	B	
	AAtrex	4	L	2	LB A/A	2	QT/A	POST	B	
	Agridex			1.0	% V/V	1	% V/V	POST	B	
15	Nontreated									0 b
LSD (P=.05)										16.3
Standard Deviation										11.4
CV										13.76
Grand Mean										82.83
Bartlett's X2										31.865
P(Bartlett's X2)										0.001*
Replicate F										1.048
Replicate Prob(F)										0.3813
Treatment F										17.384
Treatment Prob(F)										0.0001

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**Efficacy of Glyphosate Formulations**

Experiment number ..... : 07GN05JG  
Location ..... : Ben Hur Research Farm- Baton Rouge LA  
Experimental design..... : Randomized Complete Block  
Number of reps..... : 4  
Plot size ..... : 8' x 25'  
Row width/# per plot..... : 8'/1  
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 ..... : POST A  
Date applied (mm-dd-yy)..... : 05-24-07  
Time (hh:mm-hh:mm) ..... : 7:30-8:00am  
Incorporation equipment..... : N/A  
Incorporation depth..... : N/A  
Air/Soil temperature (F)..... : 77/60  
Wind (mph/direction) ..... : 1-2/NE  
Cloud cover (%) ..... : 0  
Relative humidity (%)..... : 71  
Soil/Leaf surface moist ..... : dry/moist  
Crop stage/height ..... : N/A  
Sprayer type/mph..... : CO2bkpk/3.0  
Nozzle type/size ..... : FF11015VS  
Boom ht/#noz/spacing (in) .... : 18/3/15  
GPA/psi (at nozzle) ..... : 15/32  
Applied by ..... : Boudreaux

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
ECHCG (1-2) ..... : 4-6"/10-12  
IPOHE (1) ..... : 6-10" runners  
CUMMD (1) ..... : 4-6"/4-6  
AMACH (1)..... : 6-8"/6-10  
MEOCO (1) ..... : 2-4"/4-6

Rainfall (in.)  
0-24 hr/1-3 days ..... : 0.30/0.41  
4-7 days/2nd week..... : 0.59/0.27  
3rd week/4th week ..... : 0.17/

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Comments:

# School of Plant, Environmental and Soil Sciences

## Efficacy of Glyphosate Formulations

Trial ID: 07GN05JG  
Location: Ben Hur

Protocol ID: 07GN01JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

											ECHCG	IPOHE	AMACH
											31/May/2007	31/May/2007	31/May/2007
											Control	Control	Control
											%	%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	MON 76111	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	79 a	35 a	85 a	
2	MON 76351	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	83 a	46 a	93 a	
3	MON 76105	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	78 a	43 a	90 a	
4	MON 76165	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	79 a	39 a	90 a	
5	MON 79789	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	74 a	38 a	91 a	
6	MON 76204	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	76 a	39 a	85 a	
7	MON 79770	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	78 a	45 a	93 a	
8	MON 79831	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	79 a	44 a	95 a	
9	MON 79614 LI 700	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	75 a	40 a	88 a	
				0.25	% V/V	0.25	% V/V	POST	A				
10	MON 79616	4.2	SL	0.75	LB AE/A	22.9	OZ/A	POST	A	79 a	44 a	92 a	
11	MON 79685	4	SL	0.75	LB AE/A	24	OZ/A	POST	A	83 a	49 a	88 a	
12	Nontreated									0 b	0 b	0 b	
LSD (P=.05)											5.9	9.3	6.3
Standard Deviation											4.1	6.4	4.3
CV											5.7	16.79	5.17
Grand Mean											71.67	38.33	82.4
Bartlett's X2											10.748	5.483	2.111
P(Bartlett's X2)											0.293	0.857	0.953
Replicate F											8.250	6.808	0.248
Replicate Prob(F)											0.0003	0.0011	0.8616
Treatment F											123.841	15.595	150.680
Treatment Prob(F)											0.0001	0.0001	0.0001

# School of Plant, Environmental and Soil Sciences

## Efficacy of Glyphosate Formulations

Trial ID: 07GN05JG  
Location: Ben Hur

Protocol ID: 07GN01JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

											CUMMD	ECHCG	IPOHE
											31/May/2007	6/Jun/2007	6/Jun/2007
											Control	Control	Control
											%	%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	MON 76111	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	29 b	95 a	59 a	
2	MON 76351	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	33 ab	96 a	70 a	
3	MON 76105	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	33 ab	96 a	71 a	
4	MON 76165	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	29 b	96 a	68 a	
5	MON 79789	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	30 b	95 a	70 a	
6	MON 76204	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	34 ab	96 a	66 a	
7	MON 79770	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	52 a	97 a	70 a	
8	MON 79831	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	43 ab	95 a	69 a	
9	MON 79614 LI 700	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	30 b	95 a	68 a	
				0.25	% V/V	0.25	% V/V	POST	A				
10	MON 79616	4.2	SL	0.75	LB AE/A	22.9	OZ/A	POST	A	50 ab	96 a	70 a	
11	MON 79685	4	SL	0.75	LB AE/A	24	OZ/A	POST	A	35 ab	97 a	70 a	
12	Nontreated									0 c	0 b	0 b	
LSD (P=.05)											12.6	1.9	7.4
Standard Deviation											8.6	1.3	5.1
CV											26.02	1.46	8.19
Grand Mean											33.02	87.65	62.56
Bartlett's X2											7.392	1.374	5.983
P(Bartlett's X2)											0.596	0.986	0.817
Replicate F											0.462	3.159	6.086
Replicate Prob(F)											0.7116	0.0375	0.0021
Treatment F											9.236	1856.511	60.750
Treatment Prob(F)											0.0001	0.0001	0.0001

# School of Plant, Environmental and Soil Sciences

## Efficacy of Glyphosate Formulations

Trial ID: 07GN05JG  
Location: Ben Hur

Protocol ID: 07GN01JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

											CUMMD	ECHCG	IPOLA
											6/Jun/2007	14/Jun/2007	14/Jun/2007
											Control	Control	Control
											%	%	%
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	MON 76111	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	58 a	97 a	54 a	
2	MON 76351	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	61 a	96 a	60 a	
3	MON 76105	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	61 a	95 a	60 a	
4	MON 76165	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	61 a	96 a	58 a	
5	MON 79789	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	68 a	96 a	63 a	
6	MON 76204	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	59 a	96 a	54 a	
7	MON 79770	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	64 a	96 a	60 a	
8	MON 79831	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	63 a	96 a	63 a	
9	MON 79614 LI 700	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	65 a	96 a	63 a	
				0.25	% V/V	0.25	% V/V	POST	A				
10	MON 79616	4.2	SL	0.75	LB AE/A	22.9	OZ/A	POST	A	61 a	97 a	61 a	
11	MON 79685	4	SL	0.75	LB AE/A	24	OZ/A	POST	A	69 a	97 a	61 a	
12	Nontreated									0 b	0 b	0 b	
LSD (P=.05)											11.3	1.6	5.8
Standard Deviation											7.8	1.1	4.0
CV											13.62	1.24	7.37
Grand Mean											57.32	87.9	54.58
Bartlett's X2											2.638	0.247	9.0
P(Bartlett's X2)											0.989	1.00	0.437
Replicate F											3.463	9.842	1.891
Replicate Prob(F)											0.0295	0.0001	0.1504
Treatment F											22.123	2581.453	75.469
Treatment Prob(F)											0.0001	0.0001	0.0001

# School of Plant, Environmental and Soil Sciences

## Efficacy of Glyphosate Formulations

Trial ID: 07GN05JG  
Location: Ben Hur

Protocol ID: 07GN01JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code  
Rating Date  
Rating Data Type  
Rating Unit

CUMMD  
14/Jun/2007  
Control  
%

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	MON 76111	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	58 a
2	MON 76351	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	55 a
3	MON 76105	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	56 a
4	MON 76165	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	63 a
5	MON 79789	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	60 a
6	MON 76204	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	55 a
7	MON 79770	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	61 a
8	MON 79831	4.5	SL	0.75	LB AE/A	21.3	OZ/A	POST	A	59 a
9	MON 79614 LI 700	4.5	SL	0.75 0.25	LB AE/A % V/V	21.3 0.25	OZ/A % V/V	POST POST	A A	61 a
10	MON 79616	4.2	SL	0.75	LB AE/A	22.9	OZ/A	POST	A	60 a
11	MON 79685	4	SL	0.75	LB AE/A	24	OZ/A	POST	A	59 a
12	Nontreated									0 b

LSD (P=.05)	6.6
Standard Deviation	4.6
CV	8.48
Grand Mean	53.85
Bartlett's X2	6.747
P(Bartlett's X2)	0.749
Replicate F	9.684
Replicate Prob(F)	0.0001
Treatment F	56.328
Treatment Prob(F)	0.0001

**Louisiana State University**  
School of Plant, Environmental, and Soil Sciences

**Bermudagrass Shade Study**

Experiment number ..... : 07GN06JG  
Location ..... : Ben Hur Research Farm- Baton Rouge LA  
Experimental design..... : Randomized Complete Block  
    Number of reps..... : 4  
    Plot size ..... : 2X2ft.  
    Row width/# per plot..... : N/A  
Soil type..... : clay loam  
    OM (%) ..... : 1.9  
    pH ..... : 6.3  
Planting date..... : 06-07-07  
Harvest date ..... : 08-01-07  
Crop/Variety ..... : Bermudagrass/Common  
Uniform std. treatment..... : Rotary Tiller 06-07-07

Application type ..... :  
Date applied (mm-dd-yy)..... : 06-07-07  
Time (hh:mm-hh:mm) ..... : 11:30am  
Incorporation equipment..... : N/A  
Incorporation depth..... : N/A  
Air/Soil temperature (F)..... : N/A  
Wind (mph/direction) ..... : N/A  
Cloud cover (%) ..... : N/A  
Relative humidity (%)..... : N/A  
Soil/Leaf surface moist ..... : N/A  
Crop stage/height ..... : N/A  
Sprayer type/mpg..... : N/A  
Nozzle type/size ..... : N/A  
Boom ht/#noz/spacing (in) .... : N/A  
GPA/psi (at nozzle) ..... : N/A  
Applied by ..... : N/A

Weed species (population/ft<sup>2</sup>) . : (height/# leaves)  
N/A

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

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Comments:

Bermudagrass shade study initiated 06-07-07  
Wet wts. Measured 08-01-07

# School of Plant, Environmental, and Soil Sciences

## Bermudagrass Shade Study

Trial ID: 07GN06JG  
Location: Ben Hur

Protocol ID: 07GN06JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code		CYNDA		CYNDA		CYNDA				
Rating Date		9/Jul/2007		9/Jul/2007		19/Jul/2007				
Rating Data Type		GroundCover		Heights		GroundCover				
Rating Unit		%		cm		%				
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Unit	Other Rate	Other Unit	Growth Stage	Appl Code	
1	90% Shade							23 b	24 b	19 b
2	70% Shade							34 b	29 a	30 b
3	50% Shade							54 a	27 ab	64 a
4	30% Shade							56 a	26 ab	60 a
5	No Shade							72 a	16 c	76 a
LSD (P=.05)				15.1		3.5		16.0		
Standard Deviation				9.7		2.2		10.3		
CV				20.33		9.18		20.68		
Grand Mean				47.68		24.23		49.63		
Bartlett's X2				10.415		3.704		10.161		
P(Bartlett's X2)				0.034*		0.448		0.017*		
Replicate F				3.235		2.610		4.299		
Replicate Prob(F)				0.0645		0.1040		0.0309		
Treatment F				15.707		20.872		22.039		
Treatment Prob(F)				0.0002		0.0001		0.0001		

# School of Plant, Environmental, and Soil Sciences

## Bermudagrass Shade Study

Trial ID: 07GN06JG  
Location: Ben Hur

Protocol ID: 07GN06JG  
Study Director: Joseph M. Boudreaux  
Investigator: Dr. James L. Griffin

Pest Code		CYNDA		CYNDA		CYNDA			
Rating Date		19/Jul/2007		1/Aug/2007		1/Aug/2007			
Rating Data Type		Heights		GroundCover		Heights			
Rating Unit		cm		%		cm			
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Unit	Other Rate	Growth Stage	Appl Code	
1	90% Shade						28 a	15 d	34 ab
2	70% Shade						33 a	30 c	40 a
3	50% Shade						35 a	66 b	41 a
4	30% Shade						33 a	73 b	37 ab
5	No Shade						27 a	88 a	30 b
LSD (P=.05)						11.3		10.0	6.3
Standard Deviation						7.3		6.4	4.0
CV						23.27		11.83	11.03
Grand Mean						31.17		54.44	36.51
Bartlett's X2						1.639		0.666	1.6
P(Bartlett's X2)						0.802		0.881	0.809
Replicate F						1.023		2.140	2.723
Replicate Prob(F)						0.4196		0.1531	0.0952
Treatment F						1.033		90.934	4.882
Treatment Prob(F)						0.4329		0.0001	0.0165

# School of Plant, Environmental, and Soil Sciences

## Bermudagrass Shade Study

Trial ID: 07GN06JG  
 Location: Ben Hur

Protocol ID: 07GN06JG  
 Study Director: Joseph M. Boudreaux  
 Investigator: Dr. James L. Griffin

Pest Code		CYNDA		CYNDA				
Rating Date		1/Aug/2007		3/Aug/2007				
Rating Data Type		Wet Weight		Dry Weight				
Rating Unit		grams		grams				
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Stage	Appl Code
1	90% Shade							
							34 b	14 c
2	70% Shade							
							68 b	25 c
3	50% Shade							
							260 a	121 b
4	30% Shade							
							327 a	152 b
5	No Shade							
							320 a	220 a
LSD (P=.05)							124.2	48.3
Standard Deviation							79.8	31.0
CV							39.59	29.16
Grand Mean							201.59	106.35
Bartlett's X2							22.263	23.503
P(Bartlett's X2)							0.001*	0.001*
Replicate F							1.585	3.339
Replicate Prob(F)							0.2488	0.0597
Treatment F							12.408	31.673
Treatment Prob(F)							0.0005	0.0001