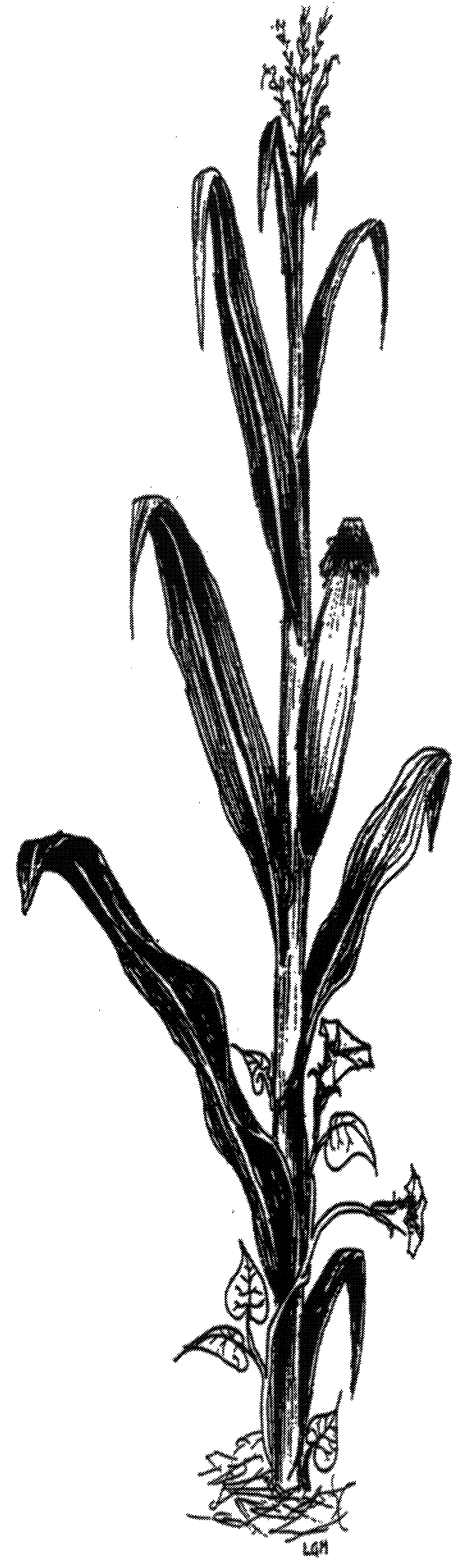




UNIVERSITY OF  
MARYLAND

**2006**  
**Results of**  
**Weed Control**  
**Research**



**RONALD L. RITTER**  
**HIWOT MENBERE**

**AGRICULTURE EXPERIMENT STATION**  
**DEPARTMENT OF PLANT SCIENCE**  
**AND LANDSCAPE ARCHITECTURE**

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**PREFACE**

**This publication contains a progress report of on going field research. Interpretation of the data herein may be modified through future experimentation. These results are compiled for reference by research, industry, regulatory, Extension, and other agribusiness personnel. Climatological data, crop and weed references, and a chemical product index are located in the back of this publication.**

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**ACKNOWLEDGMENTS**

**Appreciation is extended to the following individuals for their assistance:**

<b>Wye Research and Education Center:</b>	<b>Mark Sultenfuss, Manager</b> <b>Reese Stafford</b> <b>Joe Streett</b>
<b>Beltsville Field Unit: (Hayden Farm)</b>	<b>Kevin Conover, Manager</b> <b>Donny Murphy</b> <b>Dan Shirley (USDA)</b>

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## **FINANCIAL SUPPORT**

**Appreciation is extended to all of the companies and associations that provided financial support, chemicals, and other supplies to conduct these field studies. These companies and associations are acknowledged as follows:**

**AMVAC  
BASF  
Bayer  
Dow Agro Sciences  
DuPont  
Kumiai America  
Makhteshim-Agan Industries  
Monsanto  
Syngenta  
Valent  
MD Grain Producers  
MD Soybean Board**

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## **PUBLICATION RIGHTS**

**Publication of any data or statements should not be made without prior written approval of Dr. Ronald L. Ritter, Department of Plant Science and Landscape Architecture, Agricultural Experiment Station, University of Maryland, College Park, MD 20742-5821.**

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## LOCATION

Experiments were conducted at various locations including the Wye Research and Education Center (WREC), Queenstown, MD; University of Maryland Beltsville Field Unit (Hayden Farm), Beltsville, MD; and miscellaneous sites throughout Maryland. The location for each experiment can be found within the individual reports.

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## ABBREVIATIONS

The following abbreviations are used throughout the test:

<b>AC</b>	- at cracking
<b>BD</b>	- band
<b>C</b>	- conventional
<b>EP</b>	- early post
<b>EPP</b>	- early preplant
<b>EW</b>	- early winter
<b>FB (or fb)</b>	- followed by (sequential)
<b>IF</b>	- in furrow
<b>IR</b>	- imidazolinone resistant
<b>IT</b>	- imidazolinone tolerant
<b>LP</b>	- late postemergence
<b>LW</b>	- late winter
<b>MP</b>	- mid postemergence
<b>NIR (or NOIR)</b>	- not imidazolinone resistant
<b>NIT ( or NOIT)</b>	- not imidazolinone tolerant
<b>NT</b>	- no-till
<b>PD</b>	- post directed
<b>PM</b>	- package-mix
<b>PPI</b>	- preplant incorporated
<b>PRE</b>	- preemergence
<b>PREOT</b>	- preemergence over-the-top
<b>SB</b>	- surface blend
<b>S-PRE</b>	- sequential preemergence

<b>TM</b>	- tank-mix
<b>TR</b>	- triazine-resistant
<b>TRIF</b>	- trifoliolate
<b>TS</b>	- triazine-susceptible
<b>WK</b>	- week
<b>1-cut</b>	- after one (usually first) cutting
<b>2-cut</b>	- after second cutting

---

### APPLICATION

Except as noted within a report, forages (alfalfa), small grains (barley and wheat), corn, soybeans, tobacco, and noncrop land or cover crops were sprayed with a CO<sub>2</sub> pressurized backpack sprayer utilizing SS-8003 flat fan nozzles. Most sprayer applications, other than applications of postemergence soybean herbicides, were delivered in a total volume of 18 gpa (gallons per acre) at 20 psi (pounds per square inch). Spray delivery for the postemergence soybean herbicides measured 26 gpa at 38psi.

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### RATING SYSTEM

Visual ratings of weed control and crop injury were taken throughout the growing season based upon a 0 to 100 scale.

<b>% Weed Control:</b>	<b>0 = no weed control</b>
	<b>to</b>
<b>(% Bayer Code)</b>	<b>100 = total weed control</b>
<b>% Crop Injury</b>	<b>0 = no injury</b>
	<b>to</b>
<b>(% PHYTO)</b>	<b>100 = total crop dessication</b>

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## YIELD

Small grain, corn, and soybean yields, when available, were obtained using a standard field combine, generally from the center of the plot. Grain weights were measured per plot. Moisture content was measured with an electronic meter. Plot weights were then converted to bushels per acre (BU/A) at the standard moisture for the crop. Alfalfa was cut and weighed in the field, samples were dried down, and then the wet measurements were expressed in tons of dry matter per acre (TDM/A).

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**UNIVERSITY OF MARYLAND BELTSVILLE FIELD UNIT - HAYDEN FARM  
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TRIAL SUMMARY  
GENERAL SITE INFORMATION

**TRIAL #:** US 005/06/01 001 WA      **ALTERNATE ID#:** WY 01 2006  
**PROTOCOL#:** US 005/06/01      **ALTERNATE ID#:** WYE-2006  
**CREATED BY:** US RITTER R      **REVISED:** 10-30-2006      **COMPLETED:** Y  
**TITLE:** KIH-485 VERSUS ACETOCHLOR OR METOLACHLOR FOR GRASS CONTROL IN CONVENTIONAL CORN  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter      **DATA SOURCE:** UNIVERSITY  
**COOPERATOR:** MR. MARK SULTENFUSS      **TYPE:** FIELD TRIAL  
**LOCATION:** WYE RES. & ED. CNTR.      **SUBDIVISION:** MARYLAND  
**CITY:** QUEENSTOWN      **ZIP:** 21658  
**COUNTY:** QUEEN ANNE'S  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** WREC -- WYE RESEARCH AND EDUCATION CEI **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

## SOIL INFORMATION

**% SAND:** 21      **TILLAGE:** COT  
**% SILT:** 59      **PH:** 5.8  
**% CLAY:** 20      **CEC:** 5.9  
**TEXTURE:** SIL      **% OM:** 2.0  
**SOIL GEN:** M  
**PREVIOUS CROP:** GLXMA - SOYBEAN  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

## TRIAL INFORMATION

**DESIGN:** RCB      **RESIDUE TRIAL:** ---  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 14      **ACTUAL SUB-BLOCKS:** 14

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_



---

**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/09/2006. Variety - DeKalb 61-45.
2. 130 lb/a of nitrogen from ammonium nitrate applied preplant.
3. Starter fertilizer of 30-20-0 applied through the planter.
4. Preemergence applications made 05/09/2006.
5. Study harvested 09/26/2006.

APPL. NUMBER	01	UNIT
TIMINGS	00	
TYPE	LIQMIX	
APPLICATION DATE	05-09-06	USA
TIME - BEGIN	18:00	24H
TIME - END	19:00	24H
AIR TEMPERATURE	70	F
% REL. HUMIDITY	30	
WIND DIRECTION	WEST	
WIND SPEED	5.0	M/H
CLOUD COVER	CLEAR	
DEW	NO	
SOIL MOISTURE	DRY/MOIST	
SOIL CONDITION	FRIABLE	
SOIL TEMP/DEPTH	68/4.00	F /
METHOD	SPRAY	
EQUIPMENT	SPRBAC	
PROPELLANT	COMCO2	
PLACEMENT	BRFOSO	
NOZZLE	FLATFAN	
NOZZLE VOLUME	0.03	GPM
NOZZLE NUMBER	6	
NOZZLE SPACING	20.000	IN
SCREEN SIZE		
SCREEN SZ DESC	NA	
SWATH WIDTH	10.0	FT
BOOM HEIGHT	20.0	IN
SPEED	3.00	M/H
MIX SIZE	0.560	
MIX SIZE UNIT	GAL	
SPRAY VOLUME	18.00	
SCREEN SIZE	GPA	
PRESSURE	20.00	PSI
DILUENT	WATER	
INC. DATE		USA
INC. START		24H
INC. END		24H
INC. DEPTH		IN
INC. EQUIPMENT	---	

\* TIMING CODES  
00 = PREPRE / PREEMERGENCE

\* NOZZLE DESCRIPTION  
01 = SS-8003

---

01 P ZEAMX - CORN, VOLUNTEER, FIELD      VAR/SPC INFO: DEKALB 61-45  
**TARGET:** CROP    **SITE:** FG      **POPULATION:** 26000.00 IPA    **PLANTED:** 05-09-2006  
**PLANTING DEPTH:** 1.7 IN                      **ROW WIDTH:** 30.0 IN  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON**    **STAGE CODE** **POP.GEN.**    **POPULATION** **MN SIZE**    **MX SIZE**      **AV SIZE**    **CROP VIGOR**    **NOTES**  
05-09-2006      00            MED      26000.00 IPA      .            .            . IN            NA

---

02 P CHEAL - LAMBSQUARTERS, COMMON  
**TARGET:** PEST    **SITE:** FG                                      **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON**    **STAGE CODE** **POP.GEN.**    **POPULATION** **MN SIZE**    **MX SIZE**      **AV SIZE**    **CROP VIGOR**    **NOTES**  
05-09-2006      00            NA                      IND            .            .            . IN            ---

---

03 P SETFA - FOXTAIL, GIANT  
**TARGET:** PEST    **SITE:** FG                                      **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON**    **STAGE CODE** **POP.GEN.**    **POPULATION** **MN SIZE**    **MX SIZE**      **AV SIZE**    **CROP VIGOR**    **NOTES**  
05-09-2006      00            NA                      IND            .            .            . IN            ---

---

04 P ABUTH - VELVETLEAF  
**TARGET:** PEST    **SITE:** FG                                      **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON**    **STAGE CODE** **POP.GEN.**    **POPULATION** **MN SIZE**    **MX SIZE**      **AV SIZE**    **CROP VIGOR**    **NOTES**  
05-09-2006      00            NA                      IND            .            .            . IN            ---

---

\* **STAGE CODE** -- CORN  
00        = DRY SEED (CARYOPSIS)  
\* **STAGE CODE** -- GENERAL  
00        = DRY SEED; DORMANCY  
\* **STAGE CODE** -- GENERAL GRASS  
00        = DRY SEED (CARYOPSIS)

**TITLE:** KIH-485 VERSUS ACETOCHLOR OR METOLACHLOR FOR GRASS CONTROL IN CONVENTIONAL CORN  
**CREATED:** 04-11-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	05-24-06 P ZEAMX	06-05-06 P ZEAMX	06-05-06 P SETFA	06-19-06 P ZEAMX	06-19-06 P SETFA	
				VAR 01 PHY % 1.00	VAR 01 PHY % 1.00	CON % 1.00	VAR 01 PHY % 1.00	CON % 1.00	
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»KIH-485 (85WG)	0.144	LAA	0	0	0	82	0	80	
3A»KIH-485 (85WG)	0.181	LAA	0	0	3	87	0	85	
4A»KIH-485 (85WG)	0.217	LAA	0	0	7	88	0	88	
5A»KIH-485 (85WG)	0.362	LAA	0	0	10	100	7	100	
6A»HARNESS PLUS (7 EC)	1.51	LAA	0	0	3	97	0	95	
7A»HARNESS PLUS (7 EC)	1.94	LAA	0	0	10	100	0	98	
8A»DUAL II MAGNUM (7.64EC)	0.96	LAA	0	0	0	92	0	90	
9A»DUAL II MAGNUM (7.64EC)	1.43	LAA	0	0	3	93	0	92	
10A»DUAL II MAGNUM (7.64EC)	1.91	LAA	0	0	7	98	0	97	
11A»PARALLEL (7.8EC)	0.975	LAA	0	0	3	90	0	80	
12A»PARALLEL (7.8EC)	1.46	LAA	0	0	3	97	0	97	
13A»PARALLEL (7.8EC)	1.95	LAA	0	0	7	98	0	98	
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSL (0.05)	0.00	6.70	11.40	2.59	13.65
				SIGNIFICANCE OF F	ns	*	**	**	**
				STANDARD DEVIATION	0.00	3.26	5.54	1.26	6.64
				COEFFICIENT OF VARIANCE	0.00	98.62	8.48	324.00	10.35
				DAT APPLICATION # 01 TIMINGS (00)	15	27	27	41	41

**TITLE:** KIH-485 VERSUS ACETOCHLOR OR METOLACHLOR FOR GRASS CONTROL IN CONVENTIONAL CORN  
**CREATED:** 04-11-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			CON %	CON %	VAR 01	VAR 01	
	RATE	UNIT	TM	1.00	1.00	YLD LB	YLD BU	
				PL ALL	PL ALL	PL SD	A SD	
1A UNTREATED CHECK	0.00	NA	0	0	0	39.3	144.9	
2A»KIH-485 (85WG)	0.144	LAA	0	78	65	52.7	194.6	
3A»KIH-485 (85WG)	0.181	LAA	0	83	75	52.3	193.1	
4A»KIH-485 (85WG)	0.217	LAA	0	85	73	56.6	209.0	
5A»KIH-485 (85WG)	0.362	LAA	0	100	98	56.1	206.9	
6A»HARNES PLUS (7 EC)	1.51	LAA	0	95	93	51.8	191.3	
7A»HARNES PLUS (7 EC)	1.94	LAA	0	97	95	49.2	181.4	
8A»DUAL II MAGNUM (7.64EC)	0.96	LAA	0	90	88	45.1	166.3	
9A»DUAL II MAGNUM (7.64EC)	1.43	LAA	0	92	90	51.1	188.4	
10A»DUAL II MAGNUM (7.64EC)	1.91	LAA	0	97	95	56.9	210.0	
11A»PARALLEL (7.8EC)	0.975	LAA	0	77	70	51.7	190.7	
12A»PARALLEL (7.8EC)	1.46	LAA	0	95	90	55.7	205.5	
13A»PARALLEL (7.8EC)	1.95	LAA	0	98	98	49.6	183.2	
14A UNTREATED CHECK	0.00	NA	0	0	0	43.3	159.8	
				LSD (0.05)	15.42	23.92	10.07	37.14
				SIGNIFICANCE OF F	**	**	*	*
				STANDARD DEVIATION	7.50	11.63	4.90	18.07
				COEFFICIENT OF VARIANCE	11.83	19.34	11.80	11.80
				DAT APPLICATION # 01 TIMINGS (00)	55	84	140	140

» = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 05-09-2006(1)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	ZEAMX	% PHYTO	05-24-2006	01	P	ZEAMX		RAW	ALL	PHY	%	H	1.00 PL	NO	0001	0	N
002	ZEAMX	% PHYTO	06-05-2006	01	P	ZEAMX		RAW	ALL	PHY	%	H	1.00 PL	NO	0001	0	N
003	SETFA	% CON	06-05-2006	03	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
004	ZEAMX	% PHYTO	06-19-2006	01	P	ZEAMX		RAW	ALL	PHY	%	H	1.00 PL	NO	0001	0	N
005	SETFA	% CON	06-19-2006	03	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
006	SETFA	% CON	07-03-2006	03	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
007	SETFA	% CON	08-01-2006	03	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
008	ZEAMX	LB/PLOT	09-26-2006	01	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

VAR 01 = DEKALB 61-45

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = DEKALB 61-45

\* USER DEFINED CALCULATIONS

US 005/06/01 001 WA--- 008 -- {RAW}\*(3.69)

**\* USER DEFINED CALCULATIONS**

US 005/06/01 001 WA--- 008 -- {RAW}\*(3.69)

**TRIAL SUMMARY**  
**GENERAL SITE INFORMATION**

**TRIAL #:** US 003/06/01 001 WB      **ALTERNATE ID#:** WY 02 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** HAYDEN FARM-06  
**CREATED BY:** US RITTER R  
**CREATED:** 04-11-2006      **REVISED:** 10-30-2006      **COMPLETED:** Y  
**TITLE:** A COMPARISON OF PRE-PACKS AND TANK-MIXES FOR CONVENTIONAL CORN - I  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. LEW SMITH      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** WYE RES. & ED. CNTR.      **TYPE:** FIELD TRIAL  
**CITY:** QUEENSTOWN      **SUBDIVISION:** MARYLAND  
**COUNTY:** QUEEN ANNE'S      **ZIP:** 21658  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** WREC -- WYE RESEARCH AND EDUCATION CEI **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 21      **TILLAGE:** COT  
**% SILT:** 59      **PH:** 5.8  
**% CLAY:** 20      **CEC:** 5.9  
**TEXTURE:** SIL      **% OM:** 2.0  
**SOIL GEN:** M  
**PREVIOUS CROP:** GLXMA - SOYBEAN  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** EFF  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 14      **ACTUAL SUB-BLOCKS:** 14

**SUBMITTED BY:** \_\_\_\_\_

**REVIEWED BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/09/2006. Variety - DeKalb 61-45.
2. 130 lb/a of nitrogen from ammonium nitrate applied preplant.
3. Starter fertilizer of 30-20-0 applied through the planter.
4. Preemergence applications made 05/09/2006.
5. Study harvested 09/26/2006.



APPL. NUMBER	01	UNIT
TIMINGS	00	
TYPE	LIQMIX	
APPLICATION DATE	05-09-06	USA
TIME - BEGIN	18:00	24H
TIME - END	19:00	24H
AIR TEMPERATURE	70	F
% REL. HUMIDITY	30	
WIND DIRECTION	WEST	
WIND SPEED	5.0	M/H
CLOUD COVER	CLEAR	
DEW	NO	
SOIL MOISTURE	DRY/MOIST	
SOIL CONDITION	FRIABLE	
SOIL TEMP/DEPTH	68/4.00	F /
METHOD	SPRAY	
EQUIPMENT	SPRBAC	
PROPELLANT	COMCO2	
PLACEMENT	BRFOSO	
NOZZLE	FLATFAN	
NOZZLE VOLUME	0.03	GPM
NOZZLE NUMBER	6	
NOZZLE SPACING	20.000	IN
SCREEN SIZE		
SCREEN SZ DESC	NA	
SWATH WIDTH	10.0	FT
BOOM HEIGHT	20.0	IN
SPEED	3.00	M/H
MIX SIZE	0.560	
MIX SIZE UNIT	GAL	
SPRAY VOLUME	18.00	
SCREEN SIZE	GPA	
PRESSURE	20.00	PSI
DILUENT	WATER	
INC. DATE		USA
INC. START		24H
INC. END		24H
INC. DEPTH		IN
INC. EQUIPMENT	---	

\* TIMING CODES  
00 = PREPRE / PREEMERGENCE

\* NOZZLE DESCRIPTION  
01 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD      VAR/SPC INFO: DEKALB 61-45  
 TARGET: CROP      SITE: FG      POPULATION: 26000.00 IPA      PLANTED: 05-09-2006  
 PLANTING DEPTH: 1.7 IN      ROW WIDTH: 30.0 IN  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MK SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-09-2006      00      MED      26000.00 IPA      .      .      . IN      NA

02 P CHEAL - LAMBSQUARTERS, COMMON  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MK SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-09-2006      00      NA      IND      .      .      . IN      ---

03 P SETFA - FOXTAIL, GIANT  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MK SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-09-2006      00      NA      IND      .      .      . IN      ---

04 P ABUTH - VELVETLEAF  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MK SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-09-2006      00      NA      IND      .      .      . IN      ---

- \* STAGE CODE -- CORN
- 00 = DRY SEED (CARYOPSIS)
- \* STAGE CODE -- GENERAL
- 00 = DRY SEED; DORMANCY
- \* STAGE CODE -- GENERAL GRASS
- 00 = DRY SEED (CARYOPSIS)

**TITLE:** A COMPARISON OF PRE-PACKS AND TANK-MIXES FOR CONVENTIONAL CORN - I  
**CREATED:** 04-11-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	05-24-06 P ZEAMX	06-05-06 P ZEAMX	06-05-06 P SETFA	06-19-06 P ZEAMX	06-19-06 P SETFA	
				VAR 01 PHY % 1.00	VAR 01 PHY % 1.00	CON % 1.00	VAR 01 PHY % 1.00	CON % 1.00	
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	0	3	95	0	90	
3A»GUARDSMAN MAX (5L)	2.50	LAA	0	0	0	98	0	95	
4A»HARNESS XTRA (5.6FL)	3.36	LAA	0	0	3	97	0	95	
5A»DEGREE XTRA (4 CS)	3.70	LAA	0	0	0	90	0	82	
6A»FULTIME (4CS)	3.30	LAA	0	0	0	100	0	98	
7A»KEYSTONE (5.25SE)	3.24	LAA	0	0	0	98	0	95	
8A»LUMAX (3.94 SE)	2.46	LAA	0	0	0	97	0	92	
9A»LEXAR (3.7SC)	2.78	LAA	0	0	7	93	0	92	
10A»DEFINE (4SC)	0.56	LAA	0	0	0	95	0	95	
B ATRAZINE 4L (SC)	1.25	LAA	0						
11A»GUARDSMAN MAX (5L)	2.50	LAA	0	0	0	95	0	90	
B»PROWL H20 (3.8CS)	1.50	LAA	0						
12A»KIH-485 (85WG)	0.181	LAA	0	0	3	90	0	90	
B ATRAZINE 4L (SC)	1.25	LAA	0						
13A»RADIUS (4SC)	0.66	LAA	0	0	10	95	0	95	
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	0.00	5.18	5.80	0.00	10.42
				SIGNIFICANCE OF F	NS	**	**	NS	**
				STANDARD DEVIATION	0.00	2.52	2.82	0.00	5.07
				COEFFICIENT OF VARIANCE	0.00	162.00	4.23	0.00	7.84
				DAT APPLICATION # 01 TIMINGS (00)	15	27	27	41	41

**TITLE:** A COMPARISON OF PRE-PACKS AND TANK-MIXES FOR CONVENTIONAL CORN - I  
**CREATED:** 04-11-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE RATE UNIT TM	CON %		VAR 01	
		1.00 PL ALL	1.00 PL ALL	YLD LB PL SD	YLD BU A SD
006 RAW 07-03-06 P SETFA				008 RAW 09-26-06 P ZEAMX	008 CALC 09-26-06 P ZEAMX
1A UNTREATED CHECK	0.00 NA 0	0	0	45.9	169.5
2A»BICEP II MAGNUM (5.5SC)	2.89 LAA 0	87	78	54.3	200.5
3A»GUARDSMAN MAX (5L)	2.50 LAA 0	95	88	56.2	207.3
4A»HARNESX XTRA (5.6FL)	3.36 LAA 0	92	87	55.0	203.1
5A»DEGREE XTRA (4 CS)	3.70 LAA 0	73	57	56.7	209.1
6A»FULTIME (4CS)	3.30 LAA 0	98	92	55.5	204.8
7A»KEYSTONE (5.25SE)	3.24 LAA 0	93	88	57.0	210.5
8A»LUMAX (3.94 SE)	2.46 LAA 0	92	87	59.7	220.2
9A»LEXAR (3.7SC)	2.78 LAA 0	87	82	57.9	213.7
10A»DEFINE (4SC) B ATRAZINE 4L (SC)	0.56 LAA 0 1.25 LAA 0	95	93	59.0	217.8
11A»GUARDSMAN MAX (5L) B»PROWL H20 (3.8CS)	2.50 LAA 0 1.50 LAA 0	88	78	54.3	200.5
12A»KIH-485 (85WG) B ATRAZINE 4L (SC)	0.181 LAA 0 1.25 LAA 0	85	80	52.7	194.5
13A»RADIUS (4SC)	0.66 LAA 0	93	88	54.9	202.7
14A UNTREATED CHECK	0.00 NA 0	0	0	38.6	142.3
	LSL (0.05)	11.63	19.21	5.94	21.93
	SIGNIFICANCE OF F	**	**	**	**
	STANDARD DEVIATION	5.66	9.34	2.89	10.66
	COEFFICIENT OF VARIANCE	9.00	16.00	6.54	6.54
	DAT APPLICATION # 01 TIMINGS (00)	55	84	140	140

» = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 05-09-2006(1)

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR	SS	NOTE
001	ZEAMX	% PHYTO	05-24-2006	01	P	ZEAMX		RAW	ALL	PHY	%	H	1.00 PL	NO	0001	0	N
002	ZEAMX	% PHYTO	06-05-2006	01	P	ZEAMX		RAW	ALL	PHY	%	H	1.00 PL	NO	0001	0	N
003	SETFA	% CON	06-05-2006	03	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
004	ZEAMX	% PHYTO	06-19-2006	01	P	ZEAMX		RAW	ALL	PHY	%	H	1.00 PL	NO	0001	0	N
005	SETFA	% CON	06-19-2006	03	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
006	SETFA	% CON	07-03-2006	03	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
007	SETFA	% CON	08-01-2006	03	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
008	ZEAMX	LB/PLOT	09-26-2006	01	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

VAR 01 = DEKALB 61-45

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = DEKALB 61-45

**\* USER DEFINED CALCULATIONS**

US 003/06/01 001 WB--- 008 -- {RAW}\*(3.69)

US 003/06/01 001 WB--- 008 -- {RAW}\*(3.69)

**TRIAL SUMMARY  
GENERAL SITE INFORMATION**

**TRIAL #:** US 003/06/01 001 WC      **ALTERNATE ID#:** WY 03 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** HAYDEN FARM-06  
**CREATED BY:** US RITTER\_R  
**CREATED:** 04-11-06      **REVISED:** 10-30-06      **COMPLETED:** Y  
**TITLE:** A COMPARISON OF PRE-PACKS AND TANK-MIXES FOR CONVENTIONAL CORN - II  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. MARK SULTENFUSS      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** WYE RES. & ED. CNTR.      **TYPE:** FIELD TRIAL  
**CITY:** QUEENSTOWN      **SUBDIVISION:** MARYLAND  
**COUNTRY:** QUEEN ANNE'S      **ZIP:** 21658  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** WREC -- WYE RESEARCH AND EDUCATION CEI **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 21      **TILLAGE:** COT  
**% SILT:** 59      **PH:** 5.8  
**% CLAY:** 20      **CEC:** 5.9  
**TEXTURE:** SIL      **% OM:** 2.0  
**SOIL GEN:** M  
**PREVIOUS CROP:** GLXMA - SOYBEAN  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** EFF  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 14      **ACTUAL SUB-BLOCKS:** 14

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/09/2006. Variety - DeKalb 61-45.
2. 130 lb/a of nitrogen from ammonium nitrate applied preplant.
3. Starter fertilizer of 30-20-0 applied through the planter.
4. Preemergence applications made 05/09/2006.
5. Study harvested 09/26/2006.

APPL. NUMBER	01	UNIT
TIMINGS	00	
TYPE	LIQMIX	
APPLICATION DATE	05-09-06	USA
TIME - BEGIN	19:30	24H
TIME - END	20:30	24H
AIR TEMPERATURE	65	F
% REL. HUMIDITY	35	
WIND DIRECTION	WEST	
WIND SPEED	3.0	M/H
CLOUD COVER	CLEAR	
DEW	NO	
SOIL MOISTURE	DRY/MOIST	
SOIL CONDITION	FRIABLE	
SOIL TEMP/DEPTH	68/4.00	F /
METHOD	SPRAY	
EQUIPMENT	SPRBAC	
PROPELLANT	COMCO2	
PLACEMENT	BRFOSO	
NOZZLE	FLATFAN	
NOZZLE VOLUME	0.03	GPM
NOZZLE NUMBER	6	
NOZZLE SPACING	20.000	IN
SCREEN SIZE		
SCREEN SZ DESC	NA	
SWATH WIDTH	10.0	FT
BOOM HEIGHT	20.0	IN
SPEED	3.00	M/H
MIX SIZE	0.560	
MIX SIZE UNIT	GAL	
SPRAY VOLUME	18.00	
SCREEN SIZE	GPA	
PRESSURE	20.00	PSI
DILUENT	WATER	
INC. DATE		USA
INC. START		24H
INC. END		24H
INC. DEPTH		IN
INC. EQUIPMENT	---	

\* TIMING CODES  
00 = PREPRE / PREEMERGENCE

\* NOZZLE DESCRIPTION  
01 = SS-8003



01 P ZEAMX - CORN, VOLUNTEER, FIELD      VAR/SPC INFO: DEKALB 61-45  
 TARGET: CROP      SITE: FG      POPULATION: 26000.00 IPA      PLANTED: 05-09-2006  
 PLANTING DEPTH: 1.7 IN      ROW WIDTH: 30.0 IN  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MX SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-09-2006      00      MED      26000.00 IPA      .      .      . IN      NA

02 P ABUTH - VELVETLEAF  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MX SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-09-2006      00      NA      IND      .      .      . IN      ---

03 P CHEAL - LAMBSQUARTERS, COMMON  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MX SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-09-2006      00      NA      IND      .      .      . IN      ---

04 P SETFA - FOXTAIL, GIANT  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MX SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-09-2006      00      NA      IND      .      .      . IN      ---

\* STAGE CODE -- CORN  
 00 = DRY SEED (CARYOPSIS)  
 \* STAGE CODE -- GENERAL  
 00 = DRY SEED; DORMANCY  
 \* STAGE CODE -- GENERAL GRASS  
 00 = DRY SEED (CARYOPSIS)

**TITLE:** A COMPARISON OF PRE-PACKS AND TANK-MIXES FOR CONVENTIONAL CORN - II  
**CREATED:** 04-11-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	05-24-06 P ZEAMX	06-05-06 P ZEAMX	06-05-06 P SETFA	06-19-06 P ZEAMX	06-19-06 P SETFA	
				VAR 01 PHY % 1.00	VAR 01 PHY % 1.00	CON % 1.00	VAR 01 PHY % 1.00	CON % 1.00	
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»BICEP II MAGNUM (5.5SC)	1.79	LAA	0	0	0	93	0	85	
3A»BICEP II MAGNUM (5.5SC)	2.75	LAA	0	0	3	93	0	90	
4A»BICEP II MAGNUM (5.5SC)	3.58	LAA	0	0	7	95	0	95	
5A»PARALLEL PLUS EC (5.5L)	1.93	LAA	0	0	0	95	0	90	
6A»PARALLEL PLUS EC (5.5L)	3.09	LAA	0	0	3	98	0	93	
7A»PARALLEL PLUS EC (5.5L)	3.89	LAA	0	0	7	97	0	88	
8A»BICEP II MAGNUM (5.5SC)	2.75	LAA	0	0	0	98	0	90	
B»BASIS (75 DF)	0.016	LAA	0						
9A»BICEP II MAGNUM (5.5SC)	2.75	LAA	0	0	0	97	0	92	
B»BASIS (75 DF)	0.023	LAA	0						
10A»BICEP II MAGNUM (5.5SC)	2.75	LAA	0	0	0	93	0	85	
E»RESOLVE (25DF)	0.016	LAA	0						
11A»KEYSTONE (5.25SE)	3.28	LAA	0	0	0	100	0	98	
12A»KEYSTONE (5.25SE)	3.28	LAA	0	0	3	100	0	100	
B»HORNET (78.5DF)	0.147	LAA	0						
13A»KEYSTONE (5.25SE)	3.28	LAA	0	0	0	100	0	98	
B»PYTHON (80WG)	0.04	LAA	0						
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	0.00	5.70	4.11	0.00	7.10
				SIGNIFICANCE OF F	NS	NS	**	NS	**
				STANDARD DEVIATION	0.00	2.77	2.00	0.00	3.45
				COEFFICIENT OF VARIANCE	0.00	203.81	3.00	0.00	5.36
				DAT APPLICATION # 01 TIMINGS (00)	15	27	27	41	41

**TITLE:** A COMPARISON OF PRE-PACKS AND TANK-MIXES FOR CONVENTIONAL CORN - II  
**CREATED:** 04-11-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	008 CALC	
	RATE	UNIT	TM	07-03-06 P SETFA	08-01-06 P SETFA	09-26-06 P ZEAMX	09-26-06 P ZEAMX	
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	VAR 01 YLD LB 1.00 PL SD	VAR 01 YLD BU 1.00 A SD	
1A UNTREATED CHECK	0.00	NA	0	0	0	37.7	141.3	
2A»BICEP II MAGNUM (5.5SC)	1.79	LAA	0	80	78	58.3	218.8	
3A»BICEP II MAGNUM (5.5SC)	2.75	LAA	0	85	75	54.7	205.1	
4A»BICEP II MAGNUM (5.5SC)	3.58	LAA	0	93	90	54.7	205.3	
5A»PARALLEL PLUS EC (5.5L)	1.93	LAA	0	85	77	52.4	196.4	
6A»PARALLEL PLUS EC (5.5L)	3.09	LAA	0	92	87	54.5	204.4	
7A»PARALLEL PLUS EC (5.5L)	3.89	LAA	0	87	82	50.9	190.8	
8A»BICEP II MAGNUM (5.5SC) B»BASIS (75 DF)	2.75 0.016	LAA LAA	0 0	87 0	83	59.0	221.3	
9A»BICEP II MAGNUM (5.5SC) B»BASIS (75 DF)	2.75 0.023	LAA LAA	0 0	85	78	54.7	205.2	
10A»BICEP II MAGNUM (5.5SC) B»RESOLVE (25DF)	2.75 0.016	LAA LAA	0 0	77	70	55.8	209.3	
11A»KEYSTONE (5.25SE)	3.28	LAA	0	98	98	56.6	212.3	
12A»KEYSTONE (5.25SE) B»HORNET (78.5DF)	3.28 0.147	LAA LAA	0 0	97	93	56.1	210.4	
13A»KEYSTONE (5.25SE) B»PYTHON (80WG)	3.28 0.04	LAA LAA	0 0	95	93	54.6	204.7	
14A UNTREATED CHECK	0.00	NA	0	0	0	42.7	160.2	
				LSL (0.05)	11.80	11.71	7.27	27.27
				SIGNIFICANCE OF F	**	**	**	**
				STANDARD DEVIATION	5.74	5.69	3.54	13.26
				COEFFICIENT OF VARIANCE	9.28	9.71	8.17	8.17
				DAT APPLICATION # 01 TIMINGS (00)	55	84	140	140

» = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 05-09-2006(1)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	ZEAMX	% PHYTO	05-24-2006	01	P	ZEAMX		RAW	ALL	PHY	%	H	1.00 PL	NO	0001	0	N
002	ZEAMX	% PHYTO	06-05-2006	01	P	ZEAMX		RAW	ALL	PHY	%	H	1.00 PL	NO	0001	0	N
003	SETFA	% CON	06-05-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
004	ZEAMX	% PHYTO	06-19-2006	01	P	ZEAMX		RAW	ALL	PHY	%	H	1.00 PL	NO	0001	0	N
005	SETFA	% CON	06-19-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
006	SETFA	% CON	07-03-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
007	SETFA	% CON	08-01-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
008	ZEAMX	LB/PLOT	09-26-2006	01	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

VAR 01 = DEKALB 61-45

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = DEKALB 61-45

**\* USER DEFINED CALCULATIONS**

US 003/06/01 001 WC--- 008 -- {RAW}\*(3.75)

US 003/06/01 001 WC--- 008 -- {RAW}\*(3.75)

TRIAL SUMMARY  
GENERAL SITE INFORMATION

TRIAL #: US 005/06/01 001 WD      ALTERNATE ID#: WY 04 2006  
 PROTOCOL#: US 005/06/01      ALTERNATE ID#: WYE-2006  
 CREATED BY: US RITTER R  
 CREATED: 04-11-2006      REVISED: 10-30-2006      COMPLETED: Y  
 TITLE: LUMAX AND LEXAR IN GLYPHOSATE-RESISTANT CORN  
 COORDINATOR: US 001 Ron Ritter  
 TRIAL TYPE: HERBICIDE  
 PROJECT#2:  
 RESEARCHER: RITTER AND MENBERE      CONFIDENCE: HIGH CONFIDENCE IN TRIAL DATA  
 REPORTED BY: US Ron Ritter And Ron Ritter  
 COOPERATOR: MR. MARK SULTENFUSS      DATA SOURCE: UNIVERSITY  
 LOCATION: WYE RES. & ED. CNTR.      TYPE: FIELD TRIAL  
 CITY: QUEENSTOWN      SUBDIVISION: MARYLAND  
 COUNTY: QUEEN ANNE'S      ZIP: 21658  
 COUNTRY: UNITED STATES  
 WEATHER SITE: WREC -- WYE RESEARCH AND EDUCATION CEI      DISTANCE TO TRIAL: 5280.0 FT  
 WEEKS PRIOR TO FIRST APPLICATION: 4      WEEKS AFTER LAST APPLICATION: 4  
 EARLY WEATHER: NA      MID WEATHER: NA      LATE WEATHER: NA

SOIL INFORMATION

% SAND: 21      TILLAGE: COT  
 % SILT: 59      PH: 5.8  
 % CLAY: 20      CEC: 5.9  
 TEXTURE: SIL      % OM: 2.0  
 SOIL GEN: M  
 PREVIOUS CROP: GLXMA - SOYBEAN  
 % RESIDUE: 0  
 PLOT WIDTH: 10.00 FT  
 PLOT LENGTH: 20.00 FT  
 PLOT AREA: 200.00 SFT

TRIAL INFORMATION

DESIGN: RCB      RESIDUE TRIAL: ---  
 ACTUAL REPS: 3      ACTUAL BLOCKS: 1  
 ACTUAL TRTS: 16      ACTUAL SUB-BLOCKS: 16

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/09/2006. Variety - DeKalb 61-45.
2. 130 lb/a of nitrogen from ammonium nitrate applied preplant.
3. Starter fertilizer of 30-20-0 applied through the planter.
4. Preemergence applications made 05/09/2006.
5. Post timings 1 and 2 applied 06/05/2006.
6. Post timing 3 applied 06/09/2006.
7. Post timings 4,5 and 6 applied 06/14/2006.
8. Study harvested 09/26/2006.

APPL. NUMBER	01	02	03	04	05	06	07	UNIT
<b>TIMINGS</b>	00	01	02	03	04	05	06	
<b>TYPE</b>	LIQMIX	LIQMIX	LIQMIX	LIQMIX	LIQMIX	LIQMIX	LIQMIX	
<b>APPLICATION DATE</b>	05-09-06	06-05-06	06-05-06	06-09-06	06-14-06	06-14-06	06-14-06	USA
<b>TIME - BEGIN</b>	19:30	17:30	17:30	16:00	16:00	16:00	16:00	24H
<b>TIME - END</b>	20:30	18:30	18:30	17:00	17:00	17:00	17:00	24H
<b>AIR TEMPERATURE</b>	68	74	74	82	70	70	70	F
<b>% REL. HUMIDITY</b>	35	50	50	75	75	75	75	
<b>WIND DIRECTION</b>	WEST	SOUTHWEST	SOUTHWEST	SOUTHWEST	SOUTHWEST	SOUTHWEST	SOUTHWEST	
<b>WIND SPEED</b>	3.0	3.0	3.0	3.0	2.0	2.0	2.0	M/H
<b>CLOUD COVER</b>	CLEAR	PARTCLDY	PARTCLDY	HAZY SUN	CLOUDY	CLOUDY	CLOUDY	
<b>DEW</b>	NO	NO	NO	NO	NO	NO	NO	
<b>SOIL MOISTURE</b>	DRY/MOIST	MOIST/MOI	MOIST/MOI	MOIST/MOI	MOIST/MOI	MOIST/MOI	MOIST/MOI	
<b>SOIL CONDITION</b>	FRIABLE	FRIABLE	FRIABLE	FRIABLE	FRIABLE	FRIABLE	---	
<b>SOIL TEMP/DEPTH</b>	68/4.00	72/4.00	72/4.00	80/4.00	68/4.00	68/4.00	68/4.00	F /
<b>METHOD</b>	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	
<b>EQUIPMENT</b>	SPRBAC	SPRBAC	SPRBAC	SPRBAC	SPRBAC	SPRBAC	SPRBAC	
<b>PROPELLANT</b>	COMCO2	COMCO2	COMCO2	COMCO2	COMCO2	COMCO2	COMCO2	
<b>PLACEMENT</b>	BRFOSO	BRFOSO	BRFOSO	BRFOSO	BRFOSO	BRFOSO	BRFOSO	
<b>NOZZLE</b>	FLATFAN	FLATFAN	FLATFAN	FLATFAN	FLATFAN	FLATFAN	FLATFAN	
<b>NOZZLE VOLUME</b>	0.03	0.03	0.03	0.03	0.03	0.03	0.03	GPM
<b>NOZZLE NUMBER</b>	6	6	6	6	6	6	6	
<b>NOZZLE SPACING</b>	20.000	20.000	20.000	20.000	20.000	20.000	20.000	IN
<b>SCREEN SIZE</b>								
<b>SCREEN SZ DESC</b>	NA	NA	NA	NA	NA	NA	NA	
<b>SWATH WIDTH</b>	10.0	10.0	10.0	10.0	10.0	10.0	10.0	FT
<b>BOOM HEIGHT</b>	20.0	20.0	20.0	20.0	20.0	20.0	20.0	IN
<b>SPEED</b>	3.00	3.00	3.00	3.00	3.00	3.00	3.00	M/H
<b>MIX SIZE</b>	0.560	0.560	0.560	0.560	0.560	0.560	0.560	
<b>MIX SIZE UNIT</b>	GAL	GAL	GAL	GAL	GAL	GAL	GAL	
<b>SPRAY VOLUME</b>	18.00	18.00	18.00	18.00	18.00	18.00	18.00	
<b>SCREEN SIZE</b>	GPA	GPA	GPA	GPA	GPA	GPA	GPA	
<b>PRESSURE</b>	20.00	20.00	20.00	20.00	20.00	20.00	20.00	PSI
<b>DILUENT</b>	WATER	WATER	WATER	WATER	WATER	WATER	WATER	
<b>INC. DATE</b>								USA
<b>INC. START</b>								24H
<b>INC. END</b>								24H
<b>INC. DEPTH</b>								IN
<b>INC. EQUIPMENT</b>	---	---	---	---	---	---	---	

**\* TIMING CODES**

- 00 = PREPRE / A-PREEMERGENCE
- 01 = POSPOS / B-EARLY POSTEMERGENCE - 1-2" WEEDS
- 02 = POSPOS / C-POSTEMERGENCE - 3-4" WEEDS
- 03 = POSPOS / D-POSTEMERGENCE - 2-4" WEEDS OR V8
- 04 = POSPOS / E-POSTEMERGENCE - 2-4" WEEDS OR V8
- 05 = POSPOS / F-POSTEMERGENCE - 2-4" WEEDS OR V8
- 06 = POSPOS / G-POSTEMERGENCE - 2-4" WEEDS OR V8

**\* NOZZLE DESCRIPTION**

- 01 = SS-8003
- 02 = SS-8003
- 03 = SS-8003
- 04 = SS-8003
- 05 = SS-8003
- 06 = SS-8003
- 07 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD VAR/SPC INFO: DEKALB 61-45  
 TARGET: CROP SITE: FG POPULATION: 26000.00 IPA PLANTED: 05-09-2006  
 PLANTING DEPTH: 1.7 IN ROW WIDTH: 30.0 IN  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-09-2006	00	MED	26000.00	IPA	.	. IN		NA	
06-05-2006	16	MED	26000.00	IPA	16.00	16.00 IN		TUR	
06-09-2006	16	MED	26000.00	IPA	18.00	18.00 IN		TUR	
06-14-2006	17	MED	26000.00	IPA	24.00	24.00 IN		TUR	

02 P ABUTH - VELVETLEAF  
 TARGET: PEST SITE: FG PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-09-2006	00	NA		IND	.	. IN		---	

03 P CHEAL - LAMBSQUARTERS, COMMON  
 TARGET: PEST SITE: FG PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-09-2006	00	NA		IND	.	. IN		---	
06-05-2006	14	LOW	1.00	SQY	2.00	2.00 IN		TUR	
06-09-2006	19	HGH	1.00	IF2	4.00	6.00 IN		TUR	
06-14-2006	19	LOW	1.00	SQY	4.00	4.00 IN		TUR	

04 P SETFA - FOXTAIL, GIANT  
 TARGET: PEST SITE: FG PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-09-2006	00	NA		IND	.	. IN		---	
06-05-2006	14	LOW	1.00	SQY	4.00	4.00 IN		TUR	
06-09-2006	15	LOW	3.00	SQY	3.00	6.00 IN		TUR	
06-14-2006	13	LOW	1.00	SQY	3.00	3.00 IN		TUR	

05 P IPOSS - MORNINGGLORY  
 TARGET: PEST SITE: FG PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-09-2006	00	NA		IND	.	. IN		---	
06-14-2006	12	LOW	1.00	SQY	1.00	1.00 IN		TUR	

\* STAGE CODE -- CORN

- 00 = DRY SEED (CARYOPSIS)
- 16 = 6 LEAVES UNFOLDED
- 17 = 7 LEAVES UNFOLDED

\* STAGE CODE -- GENERAL

- 00 = DRY SEED; DORMANCY
- 12 = 2ND TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- 14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- 19 = >8 TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED

\* STAGE CODE -- GENERAL GRASS

- 00 = DRY SEED (CARYOPSIS)
- 13 = 3 LEAVES UNFOLDED
- 14 = 4 LEAVES UNFOLDED
- 15 = 5 LEAVES UNFOLDED



TITLE: LUMAX AND LEXAR IN GLYPHOSATE-RESISTANT CORN  
CREATED: 04-11-2006 REVISED: 10-30-2006 COMPLETED: Y  
PROJECT TYPE: HERBICIDE  
LOCATION: WYE RES. & ED. CNTR. RESEARCHED BY: RITTER AND MENBERE  
DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	06-12-06 P ZEAMX	06-12-06 P SETFA	06-12-06 P CHEAL	06-19-06 P SETFA	06-19-06 P CHEAL	
				VAR 01 PHY % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»LUMAX (3.94 SE)	2.95	LAA	0	0	98	98	95	95	
3A»LEXAR (3.7SC)	3.24	LAA	0	0	95	100	98	100	
4A»LUMAX (3.94 SE)	1.97	LAA	0	0	97	100	100	100	
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	5						
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	5						
5A»LEXAR (3.7SC)	2.17	LAA	0	0	93	97	100	100	
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	5						
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	5						
6A»LUMAX (3.94 SE)	1.97	LAA	1	10	100	100	100	100	
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	1						
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	1						
7A»LEXAR (3.7SC)	2.17	LAA	1	7	100	100	100	100	
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	1						
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	1						
8A»HARNES XTRA (5.6FL)	2.10	LAA	0	0	98	100	100	100	
B»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	4						
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	4						
9A»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	2	0	98	95	83	97	
B FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	2						
10A»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	3	0	73	30	97	87	
B FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	3						
11A»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	2	0	98	97	100	100	
B FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	2						
C»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	6						
D FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	6						
12A»LUMAX (3.94 SE)	2.95	LAA	0	0	98	100	100	100	
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	5						
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	5						
13A»LEXAR (3.7SC)	3.24	LAA	0	0	92	100	100	100	
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	5						
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	5						
14A»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	1	0	98	97	92	100	
B FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	1						
C»RESOLVE (25DF)	0.016	LAA	1						
15A»EXPERT (4.88EC)	3.66	LAA	1	0	98	100	100	100	
B FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	1						
16A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	2.41	5.00	3.27	4.61	3.89
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	1.18	2.43	1.60	2.26	1.91
				COEFFICIENT OF VARIANCE	138.56	3.56	2.39	3.24	2.71
				DAT APPLICATION # 01 TIMINGS (00)	34	34	34	41	41
				DAT APPLICATION # 02 TIMINGS (01)	7	7	7	14	14
				DAT APPLICATION # 03 TIMINGS (02)	7	7	7	14	14
				DAT APPLICATION # 04 TIMINGS (03)	3	3	3	10	10
				DAT APPLICATION # 05 TIMINGS (04)	NA	NA	NA	5	5
				DAT APPLICATION # 06 TIMINGS (05)	NA	NA	NA	5	5
				---	---	---	---	---	---

**TITLE:** LUMAX AND LEXAR IN GLYPHOSATE-RESISTANT CORN  
**CREATED:** 04-11-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			CON %	CON %	CON %	CON %	CON %	
	RATE	UNIT	TM	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	
006 RAW 06-28-06 P SETFA									
007 RAW 06-28-06 P CHEAL									
008 RAW 07-11-06 P SETFA									
009 RAW 07-11-06 P CHEAL									
010 RAW 08-01-06 P SETFA									
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»LUMAX (3.94 SE)	2.95	LAA	0	92	95	88	97	88	
3A»LEXAR (3.7SC)	3.24	LAA	0	95	100	93	100	90	
4A»LUMAX (3.94 SE)	1.97	LAA	0	100	100	100	100	100	
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	5						
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	5						
5A»LEXAR (3.7SC)	2.17	LAA	0	100	100	100	100	100	
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	5						
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	5						
6A»LUMAX (3.94 SE)	1.97	LAA	1	100	100	100	100	100	
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	1						
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	1						
7A»LEXAR (3.7SC)	2.17	LAA	1	100	100	100	100	100	
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	1						
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	1						
8A»HARNES XTRA (5.6FL)	2.10	LAA	0	100	100	100	100	98	
B»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	4						
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	4						
9A»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	2	65	90	60	90	42	
B FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	2						
10A»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	3	85	73	77	70	67	
B FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	3						
11A»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	2	100	100	100	100	95	
B FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	2						
C»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	6						
D FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	6						
12A»LUMAX (3.94 SE)	2.95	LAA	0	100	100	100	100	100	
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	5						
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	5						
13A»LEXAR (3.7SC)	3.24	LAA	0	100	100	100	100	100	
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	5						
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	5						
14A»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	1	80	100	75	97	60	
B FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	1						
C»RESOLVE (25DF)	0.016	LAA	1						
15A»EXPERT (4.88EC)	3.66	LAA	1	100	100	100	100	98	
B FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	1						
16A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	7.55	3.77	10.70	4.76	14.21
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	3.70	1.84	5.24	2.33	7.00
				COEFFICIENT OF VARIANCE	5.50	2.66	7.94	3.38	11.00
				DAT APPLICATION # 01 TIMINGS (00)	50	50	63	63	84
				DAT APPLICATION # 02 TIMINGS (01)	23	23	36	36	57
				DAT APPLICATION # 03 TIMINGS (02)	23	23	36	36	57
				DAT APPLICATION # 04 TIMINGS (03)	19	19	32	32	53
				DAT APPLICATION # 05 TIMINGS (04)	14	14	27	27	48
				DAT APPLICATION # 06 TIMINGS (05)	14	14	27	27	48

TITLE: LUMAX AND LEXAR IN GLYPHOSATE-RESISTANT CORN  
 CREATED: 04-11-2006 REVISED: 10-30-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: WYE RES. & ED. CNTR. RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			011 RAW	012 RAW	012 CALC
	RATE	UNIT	TM	08-01-06 P CHEAL	09-26-06 P ZEAMX	09-26-06 P ZEAMX
				CON % 1.00	VAR 01 YLD LB 1.00	VAR 01 YLD BU 1.00
				PL ALL	PL SD	A SD
1A UNTREATED CHECK	0.00	NA	0	0	44.0	165.1
2A»LUMAX (3.94 SE)	2.95	LAA	0	97	56.5	211.9
3A»LEXAR (3.7SC)	3.24	LAA	0	100	59.5	223.3
4A»LUMAX (3.94 SE)	1.97	LAA	0	100	56.9	213.4
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	5			
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	5			
5A»LEXAR (3.7SC)	2.17	LAA	0	100	57.0	213.9
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	5			
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	5			
6A»LUMAX (3.94 SE)	1.97	LAA	1	100	50.5	189.4
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	1			
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	1			
7A»LEXAR (3.7SC)	2.17	LAA	1	100	52.4	196.6
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	1			
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	1			
8A»HARNES XTRA (5.6FL)	2.10	LAA	0	100	53.9	202.0
B»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	4			
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	4			
9A»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	2	90	53.7	201.5
B FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	2			
10A»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	3	65	54.0	202.6
B FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	3			
11A»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	2	100	56.7	212.8
B FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	2			
C»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	6			
D FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	6			
12A»LUMAX (3.94 SE)	2.95	LAA	0	100	56.2	210.6
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	5			
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	5			
13A»LEXAR (3.7SC)	3.24	LAA	0	100	55.6	208.6
B»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	5			
C FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	5			
14A»ROUNDUP WEATHER MAX (5.5 SL)	0.77	LAA	1	97	54.7	205.0
B FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	1			
C»RESOLVE (25DF)	0.016	LAA	1			
15A»EXPERT (4.88EC)	3.66	LAA	1	100	54.0	202.5
B FERTILIZER-21% AMMONIUM SULFATE	8.50	PMG	1			
16A UNTREATED CHECK	0.00	NA	0	0	38.5	144.4
				LSD (0.05)	7.06	7.39
				SIGNIFICANCE OF F	**	**
				STANDARD DEVIATION	3.46	3.62
				COEFFICIENT OF VARIANCE	5.00	8.30
				DAT APPLICATION # 01 TIMINGS (00)	84	140
				DAT APPLICATION # 02 TIMINGS (01)	57	113
				DAT APPLICATION # 03 TIMINGS (02)	57	113
				DAT APPLICATION # 04 TIMINGS (03)	53	109
				DAT APPLICATION # 05 TIMINGS (04)	48	104
				DAT APPLICATION # 06 TIMINGS (05)	48	104
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TITLE: LUMAX AND LEXAR IN GLYPHOSATE-RESISTANT CORN

> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / A-PREEMERGENCE 05-09-2006(1)  
 01 = POSPOS / B-EARLY POSTEMERGENCE - 1-2" WEEDS 06-05-2006(2)  
 02 = POSPOS / C-POSTEMERGENCE - 3-4" WEEDS 06-05-2006(3)  
 03 = POSPOS / D-POSTEMERGENCE - 2-4" WEEDS OR V8 06-09-2006(4)  
 04 = POSPOS / E-POSTEMERGENCE - 2-4" WEEDS OR V8 06-14-2006(5)  
 05 = POSPOS / F-POSTEMERGENCE - 2-4" WEEDS OR V8 06-14-2006(6)  
 06 = POSPOS / G-POSTEMERGENCE - 2-4" WEEDS OR V8 06-14-2006(7)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRTR	SS	NOTE
001	ZEAMX	PHY %	06-12-2006	01	P	ZEAMX		RAW	ALL	PHY	%	H	1.00 PL	NO	0001	0	N
002	SETFA	CON %	06-12-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
003	CHEAL	CON %	06-12-2006	03	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
004	SETFA	CON %	06-19-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
005	CHEAL	CON %	06-19-2006	03	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
006	SETFA	CON %	06-28-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
007	CHEAL	CON %	06-28-2006	03	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
008	SETFA	CON %	07-11-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
009	CHEAL	CON %	07-11-2006	03	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
010	SETFA	CON %	08-01-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
011	CHEAL	CON %	08-01-2006	03	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
012	ZEAMX	LB/PLOT	09-26-2006	01	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

VAR 01 = DEKALB 61-45

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = DEKALB 61-45

\* USER DEFINED CALCULATIONS

US 005/06/01 001 WD--- 012 -- {RAW}\*(3.75)

US 005/06/01 001 WD--- 012 -- {RAW}\*(3.75)

**TRIAL SUMMARY**  
**GENERAL SITE INFORMATION**

**TRIAL #:** US 005/06/01 001 WE      **ALTERNATE ID#:** WY 05 2006  
**PROTOCOL#:** US 005/06/01      **ALTERNATE ID#:** WYE-2006  
**CREATED BY:** US RITTER R  
**CREATED:** 04-11-2006      **REVISED:** 10-30-2006      **COMPLETED:** Y  
**TITLE:** ROUNDUP-READY CORN WEED CONTROL SYSTEMS  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. MARK SULTENFUSS      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** WYE RES. & ED. CNTR.      **TYPE:** FIELD TRIAL  
**CITY:** QUEENSTOWN      **SUBDIVISION:** MARYLAND  
**COUNTY:** QUEEN ANNE'S      **ZIP:** 21658  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** WREC -- WYE RESEARCH AND EDUCATION CEI **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 21      **TILLAGE:** COT  
**% SILT:** 59      **PH:** 5.8  
**% CLAY:** 20      **CEC:** 5.9  
**TEXTURE:** SIL      **% OM:** 2.0  
**SOIL GEN:** M  
**PREVIOUS CROP:** GLXMA - SOYBEAN  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** ---  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 16      **ACTUAL SUB-BLOCKS:** 16

**SUBMITTED BY:** \_\_\_\_\_

**REVIEWED BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/09/2006. Variety - DeKalb 61-45.
2. 130 lb/a of nitrogen from ammonium nitrate applied preplant.
3. Starter fertilizer of 30-20-0 applied through the planter.
4. Preemergence applications made 05/10/2006.
5. Early post applications made 06/05/2006.
6. Pre fb Post applications made 06/09/2006.
7. Study harvested 09/26/2006.

APPL. NUMBER	01	02	03	UNIT
<b>TIMINGS</b>	00	01	02	
<b>TYPE</b>	LIQMIX	LIQMIX	LIQMIX	
<b>APPLICATION DATE</b>	05-10-06	06-05-06	06-09-06	USA
<b>TIME - BEGIN</b>	10:00	17:30	16:00	24H
<b>TIME - END</b>	11:00	18:30	17:00	24H
<b>AIR TEMPERATURE</b>	60	74	82	F
<b>% REL. HUMIDITY</b>	60	50	75	
<b>WIND DIRECTION</b>	SOUTH	SOUTHWEST	SOUTHWEST	
<b>WIND SPEED</b>	3.0	3.0	3.0	M/H
<b>CLOUD COVER</b>	CLEAR	PARTCLDY	HAZY SUN	
<b>DEW</b>	NO	NO	NO	
<b>SOIL MOISTURE</b>	DRY/MOIST	MOIST/MOI	MOIST/MOI	
<b>SOIL CONDITION</b>	FRIABLE	FRIABLE	FRIABLE	
<b>SOIL TEMP/DEPTH</b>	60/4.00	72/4.00	80/4.00	F /
<b>METHOD</b>	SPRAY	SPRAY	SPRAY	
<b>EQUIPMENT</b>	SPRBAC	SPRBAC	SPRBAC	
<b>PROPELLANT</b>	COMCO2	COMCO2	COMCO2	
<b>PLACEMENT</b>	BRFOSO	BRFOSO	BRFOSO	
<b>NOZZLE</b>	FLATFAN	FLATFAN	FLATFAN	
<b>NOZZLE VOLUME</b>	0.03	0.03	0.03	GPM
<b>NOZZLE NUMBER</b>	6	6	6	
<b>NOZZLE SPACING</b>	20.000	20.000	20.000	IN
<b>SCREEN SIZE</b>				
<b>SCREEN SZ DESC</b>	NA	NA	NA	
<b>SWATH WIDTH</b>	10.0	10.0	10.0	FT
<b>BOOM HEIGHT</b>	20.0	20.0	20.0	IN
<b>SPEED</b>	3.00	3.00	3.00	M/H
<b>MIX SIZE</b>	0.560	0.560	0.560	
<b>MIX SIZE UNIT</b>	GAL	GAL	GAL	
<b>SPRAY VOLUME</b>	18.00	18.00	18.00	
<b>SCREEN SIZE</b>	GPA	GPA	GPA	
<b>PRESSURE</b>	20.00	20.00	20.00	PSI
<b>DILUENT</b>	WATER	WATER	WATER	
<b>INC. DATE</b>				USA
<b>INC. START</b>				24H
<b>INC. END</b>				24H
<b>INC. DEPTH</b>				IN
<b>INC. EQUIPMENT</b>	---	---	---	

## \* TIMING CODES

00 = PREPRE / A-PREEMERGENCE  
01 = POSPOS / B - POSTEMERGENCE - 1-2" WEEDS  
02 = POSPOS / C - PRE FB POST

## \* NOZZLE DESCRIPTION

01 = SS-8003  
02 = SS-8003  
03 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD VAR/SPC INFO: DEKALB 61-45  
 TARGET: CROP SITE: FG POPULATION: 26000.00 IPA PLANTED: 05-09-2006  
 PLANTING DEPTH: 1.7 IN ROW WIDTH: 30.0 IN  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-09-2006	00	MED	26000.00 IPA	.	.	. IN	NA	
05-10-2006	00	MED	26000.00 IPA	.	.	. IN	NA	
06-05-2006	16	MED	26000.00 IPA	16.00	16.00	16.00 IN	TUR	
06-09-2006	16	MED	26000.00 IPA	18.00	18.00	18.00 IN	TUR	

02 P ABUTH - VELVETLEAF PLANTED:  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-10-2006	00	NA	IND	.	.	. IN	---	

03 P CHEAL - LAMBSQUARTERS, COMMON PLANTED:  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-10-2006	00	NA	IND	.	.	. IN	---	
06-05-2006	14	LOW	1.00 SQY	2.00	2.00	2.00 IN	TUR	

04 P SETFA - FOXTAIL, GIANT PLANTED:  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-10-2006	00	NA	IND	.	.	. IN	---	
06-05-2006	14	LOW	1.00 SQY	4.00	4.00	4.00 IN	TUR	
06-09-2006	13	LOW	1.00 SQY	2.00	2.00	2.00 IN	TUR	

05 P IPOSS - MORNINGGLORY PLANTED:  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-10-2006	00	NA	IND	.	.	. IN	---	
06-09-2006	13	LOW	1.00 SQY	2.00	2.00	2.00 IN	TUR	

- \* STAGE CODE -- CORN
- 00 = DRY SEED (CARYOPSIS)
- 16 = 6 LEAVES UNFOLDED
- \* STAGE CODE -- GENERAL
- 00 = DRY SEED; DORMANCY
- 13 = 3RD TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- 14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- \* STAGE CODE -- GENERAL GRASS
- 00 = DRY SEED (CARYOPSIS)
- 13 = 3 LEAVES UNFOLDED
- 14 = 4 LEAVES UNFOLDED



TITLE: ROUNDUP-READY CORN WEED CONTROL SYSTEMS  
 CREATED: 04-11-2006 REVISED: 10-30-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: WYE RES. & ED. CNTR. RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE RATE UNIT TM	VAR 01				
		PHY % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL
001 RAW 06-12-06 P ZEAMX						
002 RAW 06-12-06 P SETFA						
003 RAW 06-12-06 P CHEAL						
004 RAW 06-19-06 P SETFA						
005 RAW 06-19-06 P CHEAL						
1A UNTREATED CHECK	0.00 NA 0	0	0	0	0	0
2A»HARNESS XTRA (5.6FL)	3.36 LAA 0	0	98	100	98	100
3A»LUMAX (3.94 SE)	2.46 LAA 0	3	95	100	97	100
B ATRAZINE 4L (SC)	0.50 LAA 0					
4A»HARNESS XTRA (5.6FL)	2.80 LAA 0	3	98	100	98	100
B»PROWL H20 (3.8CS)	0.71 LAA 0					
5A»HARNESS XTRA (5.6FL)	2.80 LAA 0	0	100	100	100	100
B»BALANCE PRO (4SC)	0.063 LAA 0					
6A»HARNESS XTRA (5.6FL)	2.80 LAA 0	3	98	100	98	100
B»PYTHON (80WG)	0.03 LAA 0					
7A»HARNESS XTRA (5.6FL)	2.80 LAA 0	0	98	100	100	100
B»BASIS (75 DF)	0.015 LAA 0					
8A»LUMAX (3.94 SE)	2.46 LAA 0	3	98	100	100	100
B ATRAZINE 4L (SC)	0.50 LAA 0					
C»STEADFAST (75WDG)	0.035 LAA 2					
D ADJUVANT - COC (EC)	1.00 PMV 2					
9A»HARNESS XTRA (5.6FL)	3.36 LAA 0	0	100	100	100	100
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77 LAA 2					
10A»HARNESS XTRA (5.6FL)	2.10 LAA 0	0	100	100	100	100
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77 LAA 2					
11A»HARNESS XTRA (5.6FL)	2.10 LAA 0	3	98	100	100	100
B»STEADFAST (75WDG)	0.035 LAA 2					
C ADJUVANT - COC (EC)	1.00 PMV 2					
12A»HARNESS XTRA (5.6FL)	2.10 LAA 1	0	98	100	100	100
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77 LAA 1					
13A»DEGREE XTRA (4 CS)	2.00 LAA 1	0	100	100	100	100
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77 LAA 1					
14A»DEGREE XTRA (4 CS)	2.00 LAA 1	3	98	97	100	100
B»PROWL H20 (3.8CS)	0.71 LAA 1					
C»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77 LAA 1					
15A»STEADFAST (75WDG)	0.035 LAA 1	7	70	92	98	100
B ATRAZINE 4L (SC)	1.00 LAA 1					
C ADJUVANT - COC (EC)	1.00 PMV 1					
16A UNTREATED CHECK	0.00 NA 0	0	0	0	0	0
	LSLSD (0.05)	5.16	3.89	1.64	3.47	0.00
	SIGNIFICANCE OF F	NS	**	**	**	**
	STANDARD DEVIATION	2.53	1.91	0.805	1.70	0.00
	COEFFICIENT OF VARIANCE	185.74	2.76	1.14	2.40	0.00
	DAT APPLICATION # 01 TIMINGS (00)	33	33	33	40	40
	DAT APPLICATION # 02 TIMINGS (01)	7	7	7	14	14
	DAT APPLICATION # 03 TIMINGS (02)	3	3	3	10	10

TITLE: ROUNDUP-READY CORN WEED CONTROL SYSTEMS  
 CREATED: 04-11-2006 REVISED: 10-30-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: WYE RES. & ED. CNTR. RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	009 RAW	010 RAW	
	RATE	UNIT	TM	06-28-06 P SETFA	06-28-06 P CHEAL	06-28-06 P ABUTH	07-11-06 P SETFA	07-11-06 P CHEAL	
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»HARNESS XTRA (5.6FL)	3.36	LAA	0	98	100	73	98	100	
3A»LUMAX (3.94 SE)	2.46	LAA	0	92	100	98	92	100	
B ATRAZINE 4L (SC)	0.50	LAA	0						
4A»HARNESS XTRA (5.6FL)	2.80	LAA	0	97	100	88	97	100	
B»PROWL H20 (3.8CS)	0.71	LAA	0						
5A»HARNESS XTRA (5.6FL)	2.80	LAA	0	98	100	95	98	100	
B»BALANCE PRO (4SC)	0.063	LAA	0						
6A»HARNESS XTRA (5.6FL)	2.80	LAA	0	98	100	65	97	100	
B»PYTHON (80WG)	0.03	LAA	0						
7A»HARNESS XTRA (5.6FL)	2.80	LAA	0	100	100	73	100	100	
B»BASIS (75 DF)	0.015	LAA	0						
8A»LUMAX (3.94 SE)	2.46	LAA	0	100	100	100	100	100	
B ATRAZINE 4L (SC)	0.50	LAA	0						
C»STEADFAST (75WDG)	0.035	LAA	2						
D ADJUVANT - COC (EC)	1.00	PMV	2						
9A»HARNESS XTRA (5.6FL)	3.36	LAA	0	100	100	100	100	100	
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77	LAA	2						
10A»HARNESS XTRA (5.6FL)	2.10	LAA	0	100	100	98	100	100	
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77	LAA	2						
11A»HARNESS XTRA (5.6FL)	2.10	LAA	0	100	100	100	100	100	
B»STEADFAST (75WDG)	0.035	LAA	2						
C ADJUVANT - COC (EC)	1.00	PMV	2						
12A»HARNESS XTRA (5.6FL)	2.10	LAA	1	100	100	100	100	100	
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77	LAA	1						
13A»DEGREE XTRA (4 CS)	2.00	LAA	1	100	100	97	100	100	
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77	LAA	1						
14A»DEGREE XTRA (4 CS)	2.00	LAA	1	100	100	98	100	100	
B»PROWL H20 (3.8CS)	0.71	LAA	1						
C»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77	LAA	1						
15A»STEADFAST (75WDG)	0.035	LAA	1	95	100	98	95	100	
B ATRAZINE 4L (SC)	1.00	LAA	1						
C ADJUVANT - COC (EC)	1.00	PMV	1						
16A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	4.94	0.00	29.73	5.44	0.00
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	2.42	0.00	14.56	2.67	0.00
				COEFFICIENT OF VARIANCE	3.44	0.00	22.20	3.79	0.00
				DAT APPLICATION # 01 TIMINGS (00)	49	49	49	62	62
				DAT APPLICATION # 02 TIMINGS (01)	23	23	23	36	36
				DAT APPLICATION # 03 TIMINGS (02)	19	19	19	32	32

**TITLE:** ROUNDUP-READY CORN WEED CONTROL SYSTEMS  
**CREATED:** 04-11-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			011 RAW	012 RAW	013 RAW	014 RAW	015 RAW	VAR 01 YLD LB 1.00 PL SD
	RATE	UNIT	TM	07-11-06 P ABUTH	08-01-06 P SETFA	08-01-06 P CHEAL	08-01-06 P ABUTH	09-26-06 P ZEAMX	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	43.4
2A»HARNESS XTRA (5.6FL)	3.36	LAA	0	70	97	100	70	70	60.5
3A»LUMAX (3.94 SE)	2.46	LAA	0	98	90	100	98	98	57.0
B ATRAZINE 4L (SC)	0.50	LAA	0						
4A»HARNESS XTRA (5.6FL)	2.80	LAA	0	85	95	100	78	78	52.2
B»PROWL H20 (3.8CS)	0.71	LAA	0						
5A»HARNESS XTRA (5.6FL)	2.80	LAA	0	93	98	100	93	93	57.5
B»BALANCE PRO (4SC)	0.063	LAA	0						
6A»HARNESS XTRA (5.6FL)	2.80	LAA	0	65	95	100	65	65	53.3
B»PYTHON (80WG)	0.03	LAA	0						
7A»HARNESS XTRA (5.6FL)	2.80	LAA	0	70	97	100	70	70	56.2
B»BASIS (75 DF)	0.015	LAA	0						
8A»LUMAX (3.94 SE)	2.46	LAA	0	100	100	100	100	100	53.0
B ATRAZINE 4L (SC)	0.50	LAA	0						
C»STEADFAST (75WDG)	0.035	LAA	2						
D ADJUVANT - COC (EC)	1.00	PMV	2						
9A»HARNESS XTRA (5.6FL)	3.36	LAA	0	100	98	100	100	100	56.0
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77	LAA	2						
10A»HARNESS XTRA (5.6FL)	2.10	LAA	0	97	98	100	97	97	57.2
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77	LAA	2						
11A»HARNESS XTRA (5.6FL)	2.10	LAA	0	93	100	100	90	90	54.5
B»STEADFAST (75WDG)	0.035	LAA	2						
C ADJUVANT - COC (EC)	1.00	PMV	2						
12A»HARNESS XTRA (5.6FL)	2.10	LAA	1	100	98	100	100	100	55.8
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77	LAA	1						
13A»DEGREE XTRA (4 CS)	2.00	LAA	1	97	100	100	97	97	54.3
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77	LAA	1						
14A»DEGREE XTRA (4 CS)	2.00	LAA	1	97	100	100	98	98	49.5
B»PROWL H20 (3.8CS)	0.71	LAA	1						
C»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77	LAA	1						
15A»STEADFAST (75WDG)	0.035	LAA	1	98	90	100	97	97	54.5
B ATRAZINE 4L (SC)	1.00	LAA	1						
C ADJUVANT - COC (EC)	1.00	PMV	1						
16A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	40.8
				LSD (0.05)	31.11	6.36	0.00	32.07	8.80
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	15.24	3.11	0.00	15.70	4.31
				COEFFICIENT OF VARIANCE	23.63	4.50	0.00	24.55	9.87
				DAT APPLICATION # 01 TIMINGS (00)	62	83	83	83	139
				DAT APPLICATION # 02 TIMINGS (01)	36	57	57	57	113
				DAT APPLICATION # 03 TIMINGS (02)	32	53	53	53	109

**TITLE:** ROUNDUP-READY CORN WEED CONTROL SYSTEMS  
**CREATED:** 04-11-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			TM	015 CALC 09-26-06 P ZEAMX  VAR 01 YLD BU 1.00 A SD
	RATE	UNIT			
1A UNTREATED CHECK	0.00	NA	0		162.7
2A»HARNESS XTRA (5.6FL)	3.36	LAA	0		227.0
3A»LUMAX (3.94 SE)	2.46	LAA	0		213.9
B»ATRAZINE 4L (SC)	0.50	LAA	0		
4A»HARNESS XTRA (5.6FL)	2.80	LAA	0		195.9
B»PROWL H20 (3.8CS)	0.71	LAA	0		
5A»HARNESS XTRA (5.6FL)	2.80	LAA	0		215.5
B»BALANCE PRO (4SC)	0.063	LAA	0		
6A»HARNESS XTRA (5.6FL)	2.80	LAA	0		200.0
B»PYTHON (80WG)	0.03	LAA	0		
7A»HARNESS XTRA (5.6FL)	2.80	LAA	0		210.9
B»BASIS (75 DF)	0.015	LAA	0		
8A»LUMAX (3.94 SE)	2.46	LAA	0		198.6
B»ATRAZINE 4L (SC)	0.50	LAA	0		
C»STEADFAST (75WDG)	0.035	LAA	2		
D ADJUVANT - COC (EC)	1.00	PMV	2		
9A»HARNESS XTRA (5.6FL)	3.36	LAA	0		210.0
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77	LAA	2		
10A»HARNESS XTRA (5.6FL)	2.10	LAA	0		214.5
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77	LAA	2		
11A»HARNESS XTRA (5.6FL)	2.10	LAA	0		204.5
B»STEADFAST (75WDG)	0.035	LAA	2		
C ADJUVANT - COC (EC)	1.00	PMV	2		
12A»HARNESS XTRA (5.6FL)	2.10	LAA	1		209.4
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77	LAA	1		
13A»DEGREE XTRA (4 CS)	2.00	LAA	1		203.5
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77	LAA	1		
14A»DEGREE XTRA (4 CS)	2.00	LAA	1		185.5
B»PROWL H20 (3.8CS)	0.71	LAA	1		
C»ROUNDUP ORIGINAL MAX (4.5 AE)	0.77	LAA	1		
15A»STEADFAST (75WDG)	0.035	LAA	1		204.5
B»ATRAZINE 4L (SC)	1.00	LAA	1		
C ADJUVANT - COC (EC)	1.00	PMV	1		
16A UNTREATED CHECK	0.00	NA	0		152.9
				LSD (0.05)	33.00
				SIGNIFICANCE OF F	**
				STANDARD DEVIATION	16.17
				COEFFICIENT OF VARIANCE	9.87
				DAT APPLICATION # 01 TIMINGS (00)	139
				DAT APPLICATION # 02 TIMINGS (01)	113
				DAT APPLICATION # 03 TIMINGS (02)	109

» = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / A-PREEMERGENCE 05-10-2006(1)

\* TIMING CODES

01 = POSPOS / B - POSTEMERGENCE - 1-2" WEEDS 06-05-2006(2)  
02 = POSPOS / C - PRE FB POST 06-09-2006(3)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	ZEAMX	% PHYTO	06-12-2006	01	P	ZEAMX		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	SETFA	CON %	06-12-2006	04	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
003	CHEAL	CON %	06-12-2006	03	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
004	SETFA	CON %	06-19-2006	04	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	CHEAL	CON %	06-19-2006	03	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	SETFA	CON %	06-28-2006	04	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
007	CHEAL	CON %	06-28-2006	03	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
008	ABUTH	CON %	06-28-2006	02	P	ABUTH		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
009	SETFA	CON %	07-11-2006	04	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
010	CHEAL	CON %	07-11-2006	03	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
011	ABUTH	CON %	07-11-2006	02	P	ABUTH		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
012	SETFA	CON %	08-01-2006	04	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
013	CHEAL	CON %	08-01-2006	03	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
014	ABUTH	CON %	08-01-2006	02	P	ABUTH		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
015	ZEAMX	LB/PLOT	09-26-2006	01	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

VAR 01 = DEKALB 61-45

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = DEKALB 61-45

\* USER DEFINED CALCULATIONS

US 005/06/01 001 WE--- 015 -- {RAW}\*(3.75)

US 005/06/01 001 WE--- 015 -- {RAW}\*(3.75)

**TRIAL SUMMARY  
GENERAL SITE INFORMATION**

**TRIAL #:** US 005/06/01 001 WF      **ALTERNATE ID#:** WY 06 2006  
**PROTOCOL#:** US 005/06/01      **ALTERNATE ID#:** WYE-2006  
**CREATED BY:** US RITTER R  
**CREATED:** 04-14-2006      **REVISED:** 10-30-2006      **COMPLETED:** Y  
**TITLE:** PRE AND EARLY POST PROGRAMS FOR CONVENTIONAL CORN - 1  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. MARK SULTENFUSS      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** WYE RES. & ED. CNTR.      **TYPE:** FIELD TRIAL  
**CITY:** QUEENSTOWN      **SUBDIVISION:** MARYLAND  
**COUNTY:** QUEEN ANNE'S      **ZIP:** 21658  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** WREC -- WYE RESEARCH AND EDUCATION CEI **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 21      **TILLAGE:** COT  
**% SILT:** 59      **PH:** 5.8  
**% CLAY:** 20      **CEC:** 5.9  
**TEXTURE:** SIL      **% OM:** 2.0  
**SOIL GEN:** M  
**PREVIOUS CROP:** GLXMA - SOYBEAN  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** ---  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 14      **ACTUAL SUB-BLOCKS:** 14

**SUBMITTED BY:** \_\_\_\_\_

**REVIEWED BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/09/2006. Variety - DeKalb 61-45.
2. 130 lb/a of nitrogen from ammonium nitrate applied preplant.
3. Starter fertilizer of 30-20-0 applied through the planter.
4. Preemergence applications made 05/10/2006.
5. Early post applications made 06/05/2006.
6. Mid-post applications made 06/09/2006.
7. Study harvested 09/26/2006.

APPL. NUMBER	01	02	03	UNIT
TIMINGS	00	01	02	
TYPE	LIQMIX	LIQMIX	LIQMIX	
APPLICATION DATE	05-10-06	06-05-06	06-09-06	USA
TIME - BEGIN	10:00	17:30	16:00	24H
TIME - END	11:00	18:30	17:00	24H
AIR TEMPERATURE	60	74	82	F
% REL. HUMIDITY	60	50	75	
WIND DIRECTION	SOUTH	SOUTHWEST	SOUTHWEST	
WIND SPEED	3.0	3.0	3.0	M/H
CLOUD COVER	CLEAR	PARTCLDY	HAZY SUN	
DEW	NO	NO	NO	
SOIL MOISTURE	DRY/MOIST	MOIST/MOI	MOIST/MOI	
SOIL CONDITION	FRIABLE	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	60/4.00	72/4.00	80/4.00	F /
METHOD	SPRAY	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	0.03	GPM
NOZZLE NUMBER	6	6	6	
NOZZLE SPACING	20.000	20.000	20.000	IN
SCREEN SIZE				
SCREEN SZ DESC	NA	NA	NA	
SWATH WIDTH	10.0	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	20.0	IN
SPEED	3.00	3.00	3.00	M/H
MIX SIZE	0.560	0.560	0.560	
MIX SIZE UNIT	GAL	GAL	GAL	
SPRAY VOLUME	18.00	18.00	18.00	
SCREEN SIZE	GPA	GPA	GPA	
PRESSURE	20.00	20.00	20.00	PSI
DILUENT	WATER	WATER	WATER	
INC. DATE				USA
INC. START				24H
INC. END				24H
INC. DEPTH				IN
INC. EQUIPMENT	---	---	---	

## \* TIMING CODES

00 = PREPRE / PREEMERGENCE  
01 = POSPOS / EARLY POSTEMERGENCE  
02 = MIDPOS / MID-POSTEMERGENCE

## \* NOZZLE DESCRIPTION

01 = SS-8003  
02 = SS-8003  
03 = SS-8003



01 P ZEAMX - CORN, VOLUNTEER, FIELD VAR/SPC INFO: DEKALB 61-45  
**TARGET:** CROP **SITE:** FG **POPULATION:** 26000.00 IPA **PLANTED:** 05-09-2006  
**PLANTING DEPTH:** 1.7 IN **ROW WIDTH:** 30.0 IN  
**INFESTATION DATE:** - - **METHOD:** NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-09-2006	00	MED	26000.00	IPA	.	. IN	NA	
05-10-2006	00	MED	26000.00	IPA	.	. IN	NA	
06-05-2006	16	MED	26000.00	IPA	16.00	16.00 IN	TUR	
06-09-2006	16	MED	26000.00	IPA	18.00	18.00 IN	TUR	

02 P ABUTH - VELVETLEAF  
**TARGET:** PEST **SITE:** FG **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-10-2006	00	NA	IND	.	.	. IN	---	

03 P CHEAL - LAMBSQUARTERS, COMMON  
**TARGET:** PEST **SITE:** FG **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-10-2006	00	NA	IND	.	.	. IN	---	
06-05-2006	14	LOW	1.00	SQY	2.00	2.00 IN	TUR	
06-09-2006	19	LOW	3.00	SQY	4.00	4.00 IN	TUR	

04 P SETFA - FOXTAIL, GIANT  
**TARGET:** PEST **SITE:** FG **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-10-2006	00	NA	IND	.	.	. IN	---	
06-05-2006	14	LOW	1.00	SQY	4.00	4.00 IN	TUR	
06-09-2006	13	LOW	1.00	SQY	3.00	3.00 IN	TUR	

05 P IPOSS - MORNINGGLORY  
**TARGET:** PEST **SITE:** FG **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-10-2006	00	NA	IND	.	.	. IN	---	
06-09-2006	14	LOW	1.00	SQY	3.00	3.00 IN	TUR	

- \* **STAGE CODE -- CORN**
- 00 = DRY SEED (CARYOPSIS)
- 16 = 6 LEAVES UNFOLDED
- \* **STAGE CODE -- GENERAL**
- 00 = DRY SEED; DORMANCY
- 14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- 19 = >8 TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- \* **STAGE CODE -- GENERAL GRASS**
- 00 = DRY SEED (CARYOPSIS)
- 13 = 3 LEAVES UNFOLDED
- 14 = 4 LEAVES UNFOLDED

TITLE: PRE AND EARLY POST PROGRAMS FOR CONVENTIONAL CORN - 1  
 CREATED: 04-14-2006 REVISED: 10-30-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: WYE RES. & ED. CNTR. RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW
	RATE	UNIT	TM	06-12-06 P ZEAMX	06-12-06 P SETFA	06-12-06 P CHEAL	06-19-06 P SETFA	06-19-06 P CHEAL
				VAR 01 PHY % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
2A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	0	95	100	93	100
3A»LUMAX (3.94 SE)	2.46	LAA	0	0	97	100	95	100
4A»LEXAR (3.7SC)	2.78	LAA	0	0	98	100	95	100
5A»BICEP II MAGNUM (5.5SC)	1.45	LAA	0	0	97	100	100	100
B»IMPACT (2.8SC)	0.016	LAA	2					
C ATRAZINE 4L (SC)	0.50	LAA	2					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	2					
E FERTILIZER - 28%UAN	2.50	PMV	2					
6A»GUARDSMAN MAX (5L)	1.25	LAA	0	0	100	100	100	100
B»IMPACT (2.8SC)	0.016	LAA	2					
C ATRAZINE 4L (SC)	0.50	LAA	2					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	2					
E FERTILIZER - 28%UAN	2.50	PMV	2					
7A»KIH-485 (85WG)	0.09	LAA	0	0	90	90	100	100
B»IMPACT (2.8SC)	0.016	LAA	2					
C ATRAZINE 4L (SC)	0.50	LAA	2					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	2					
E FERTILIZER - 28%UAN	2.50	PMV	2					
8A»IMPACT (2.8SC)	0.016	LAA	1	0	100	100	100	100
B ATRAZINE 4L (SC)	0.50	LAA	1					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	1					
D FERTILIZER - 28%UAN	2.50	PMV	1					
9A»CALLISTO (4SC)	0.094	LAA	1	0	70	98	80	100
B ATRAZINE 4L (SC)	0.25	LAA	1					
C ADJUVANT - COC (EC)	1.00	PMV	1					
D FERTILIZER - 28%UAN	2.50	PMV	1					
10A»AE 0172747 (5.25SC)	0.123	LAA	1	0	93	97	93	100
B ATRAZINE 4L (SC)	0.50	LAA	1					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	1					
D FERTILIZER - 28%UAN	1.50	QMA	1					
11A»IMPACT (2.8SC)	0.016	LAA	1	0	95	97	100	100
B ATRAZINE 4L (SC)	0.50	LAA	1					
C ACCENT (75WG)	0.031	LAA	1					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	1					
E FERTILIZER - 28%UAN	2.50	PMV	1					
12A»CALLISTO (4SC)	0.094	LAA	1	0	70	97	98	100
B ATRAZINE 4L (SC)	0.25	LAA	1					
C ACCENT (75WG)	0.031	LAA	1					
D ADJUVANT - COC (EC)	1.00	PMV	1					
E FERTILIZER - 28%UAN	2.50	PMV	1					
13A»AE 0172747 (5.25SC)	0.123	LAA	1	0	95	100	100	100
B ATRAZINE 4L (SC)	0.50	LAA	1					
C ACCENT (75WG)	0.031	LAA	1					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	1					
E FERTILIZER - 28%UAN	1.50	QMA	1					
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0

**TITLE:** PRE AND EARLY POST PROGRAMS FOR CONVENTIONAL CORN - 1

LSD (0.05)	0.00	4.68	4.59	8.73	0.00
SIGNIFICANCE OF F	NS	**	**	**	**
STANDARD DEVIATION	0.00	2.28	2.23	4.25	0.00
COEFFICIENT OF VARIANCE	0.00	3.55	3.25	6.31	0.00
DAT APPLICATION # 01 TIMINGS (00)	33	33	33	40	40
DAT APPLICATION # 02 TIMINGS (01)	7	7	7	14	14
DAT APPLICATION # 03 TIMINGS (02)	3	3	3	10	10

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**TITLE:** PRE AND EARLY POST PROGRAMS FOR CONVENTIONAL CORN - 1  
**CREATED:** 04-14-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	009 RAW	010 RAW
	RATE	UNIT	TM	06-28-06 P SETFA	06-28-06 P CHEAL	07-11-06 P SETFA	07-11-06 P CHEAL	08-01-06 P SETFA
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
2A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	90	97	88	97	85
3A»LUMAX (3.94 SE)	2.46	LAA	0	95	100	93	100	92
4A»LEXAR (3.7SC)	2.78	LAA	0	93	100	92	100	92
5A»BICEP II MAGNUM (5.5SC)	1.45	LAA	0	100	100	100	100	100
B»IMPACT (2.8SC)	0.016	LAA	2					
C ATRAZINE 4L (SC)	0.50	LAA	2					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	2					
E FERTILIZER - 28%UAN	2.50	PMV	2					
6A»GUARDSMAN MAX (5L)	1.25	LAA	0	100	100	100	100	100
B»IMPACT (2.8SC)	0.016	LAA	2					
C ATRAZINE 4L (SC)	0.50	LAA	2					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	2					
E FERTILIZER - 28%UAN	2.50	PMV	2					
7A»KIH-485 (85WG)	0.09	LAA	0	100	100	100	100	100
B»IMPACT (2.8SC)	0.016	LAA	2					
C ATRAZINE 4L (SC)	0.50	LAA	2					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	2					
E FERTILIZER - 28%UAN	2.50	PMV	2					
8A»IMPACT (2.8SC)	0.016	LAA	1	97	100	97	100	93
B ATRAZINE 4L (SC)	0.50	LAA	1					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	1					
D FERTILIZER - 28%UAN	2.50	PMV	1					
9A»CALLISTO (4SC)	0.094	LAA	1	70	100	67	100	60
B ATRAZINE 4L (SC)	0.25	LAA	1					
C ADJUVANT - COC (EC)	1.00	PMV	1					
D FERTILIZER - 28%UAN	2.50	PMV	1					
10A»AE 0172747 (5.25SC)	0.123	LAA	1	92	100	90	100	87
B ATRAZINE 4L (SC)	0.50	LAA	1					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	1					
D FERTILIZER - 28%UAN	1.50	QMA	1					
11A»IMPACT (2.8SC)	0.016	LAA	1	100	100	100	100	100
B ATRAZINE 4L (SC)	0.50	LAA	1					
C ACCENT (75WG)	0.031	LAA	1					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	1					
E FERTILIZER - 28%UAN	2.50	PMV	1					
12A»CALLISTO (4SC)	0.094	LAA	1	95	100	95	100	93
B ATRAZINE 4L (SC)	0.25	LAA	1					
C ACCENT (75WG)	0.031	LAA	1					
D ADJUVANT - COC (EC)	1.00	PMV	1					
E FERTILIZER - 28%UAN	2.50	PMV	1					
13A»AE 0172747 (5.25SC)	0.123	LAA	1	100	100	100	100	98
B ATRAZINE 4L (SC)	0.50	LAA	1					
C ACCENT (75WG)	0.031	LAA	1					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	1					
E FERTILIZER - 28%UAN	1.50	QMA	1					
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0

**TITLE:** PRE AND EARLY POST PROGRAMS FOR CONVENTIONAL CORN - 1

LSD (0.05)	14.00	2.59	14.82	2.59	16.38
SIGNIFICANCE OF F	**	**	**	**	**
STANDARD DEVIATION	6.80	1.26	7.21	1.26	8.00
COEFFICIENT OF VARIANCE	10.31	1.81	11.00	1.81	12.42
DAT APPLICATION # 01 TIMINGS (00)	49	49	62	62	83
DAT APPLICATION # 02 TIMINGS (01)	23	23	36	36	57
DAT APPLICATION # 03 TIMINGS (02)	19	19	32	32	53

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**TITLE:** PRE AND EARLY POST PROGRAMS FOR CONVENTIONAL CORN - 1  
**CREATED:** 04-14-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			011 RAW	012 RAW	012 CALC
	RATE	UNIT	TM	08-01-06 P CHEAL	09-26-06 P ZEAMX	09-26-06 P ZEAMX
				CON % 1.00	VAR 01 YLD LB 1.00	VAR 01 YLD BU 1.00
				PL ALL	PL SD	A SD
1A UNTREATED CHECK	0.00	NA	0	0	45.0	165.9
2A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	97	54.9	202.7
3A»LUMAX (3.94 SE)	2.46	LAA	0	100	59.7	220.3
4A»LEXAR (3.7SC)	2.78	LAA	0	100	54.1	199.6
5A»BICEP II MAGNUM (5.5SC)	1.45	LAA	0	100	58.2	214.6
B»IMPACT (2.8SC)	0.016	LAA	2			
C ATRAZINE 4L (SC)	0.50	LAA	2			
D ADJUVANT - VEGETABLE OIL	1.00	PMV	2			
E FERTILIZER - 28%UAN	2.50	PMV	2			
6A»GUARDSMAN MAX (5L)	1.25	LAA	0	100	55.8	206.0
B»IMPACT (2.8SC)	0.016	LAA	2			
C ATRAZINE 4L (SC)	0.50	LAA	2			
D ADJUVANT - VEGETABLE OIL	1.00	PMV	2			
E FERTILIZER - 28%UAN	2.50	PMV	2			
7A»KIH-485 (85WG)	0.09	LAA	0	100	55.2	203.6
B»IMPACT (2.8SC)	0.016	LAA	2			
C ATRAZINE 4L (SC)	0.50	LAA	2			
D ADJUVANT - VEGETABLE OIL	1.00	PMV	2			
E FERTILIZER - 28%UAN	2.50	PMV	2			
8A»IMPACT (2.8SC)	0.016	LAA	1	100	57.4	211.9
B ATRAZINE 4L (SC)	0.50	LAA	1			
C ADJUVANT - VEGETABLE OIL	1.00	PMV	1			
D FERTILIZER - 28%UAN	2.50	PMV	1			
9A»CALLISTO (4SC)	0.094	LAA	1	100	53.8	198.4
B ATRAZINE 4L (SC)	0.25	LAA	1			
C ADJUVANT - COC (EC)	1.00	PMV	1			
D FERTILIZER - 28%UAN	2.50	PMV	1			
10A»AE 0172747 (5.25SC)	0.123	LAA	1	100	54.1	199.5
B ATRAZINE 4L (SC)	0.50	LAA	1			
C ADJUVANT - VEGETABLE OIL	1.00	PMV	1			
D FERTILIZER - 28%UAN	1.50	QMA	1			
11A»IMPACT (2.8SC)	0.016	LAA	1	100	56.2	207.3
B ATRAZINE 4L (SC)	0.50	LAA	1			
C ACCENT (75WG)	0.031	LAA	1			
D ADJUVANT - VEGETABLE OIL	1.00	PMV	1			
E FERTILIZER - 28%UAN	2.50	PMV	1			
12A»CALLISTO (4SC)	0.094	LAA	1	100	57.4	211.9
B ATRAZINE 4L (SC)	0.25	LAA	1			
C ACCENT (75WG)	0.031	LAA	1			
D ADJUVANT - COC (EC)	1.00	PMV	1			
E FERTILIZER - 28%UAN	2.50	PMV	1			
13A»AE 0172747 (5.25SC)	0.123	LAA	1	100	56.0	206.8
B ATRAZINE 4L (SC)	0.50	LAA	1			
C ACCENT (75WG)	0.031	LAA	1			
D ADJUVANT - VEGETABLE OIL	1.00	PMV	1			
E FERTILIZER - 28%UAN	1.50	QMA	1			
14A UNTREATED CHECK	0.00	NA	0	0	42.1	155.2

TITLE: PRE AND EARLY POST PROGRAMS FOR CONVENTIONAL CORN - 1

LSLSD (0.05)	2.59	8.88	32.77
SIGNIFICANCE OF F	**	*	*
STANDARD DEVIATION	1.26	4.32	15.94
COEFFICIENT OF VARIANCE	1.81	9.74	9.75
DAT APPLICATION # 01 TIMINGS (00)	83	139	139
DAT APPLICATION # 02 TIMINGS (01)	57	113	113
DAT APPLICATION # 03 TIMINGS (02)	53	109	109

>> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 05-10-2006(1)  
 01 = POSPOS / EARLY POSTEMERGENCE 06-05-2006(2)  
 02 = MIDPOS / MID-POSTEMERGENCE 06-09-2006(3)

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR	SS	NOTE
001	ZEAMX	% PHYTO	06-12-2006	01	P	ZEAMX		RAW	ALL	PHY	%	H	1.00 PL	NO	0001	0	N
002	SETFA	CON %	06-12-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
003	CHEAL	CON %	06-12-2006	03	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
004	SETFA	CON %	06-19-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
005	CHEAL	CON %	06-19-2006	03	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
006	SETFA	CON %	06-28-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
007	CHEAL	CON %	06-28-2006	03	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
008	SETFA	CON %	07-11-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
009	CHEAL	CON %	07-11-2006	03	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
010	SETFA	CON %	08-01-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
011	CHEAL	CON %	08-01-2006	03	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
012	ZEAMX	LB/PLOT	09-26-2006	01	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

VAR 01 = DEKALB 61-45

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = DEKALB 61-45

\* USER DEFINED CALCULATIONS

US 005/06/01 001 WF--- 012 -- {RAW}\*(3.69)

US 005/06/01 001 WF--- 012 -- {RAW}\*(3.69)

**TRIAL SUMMARY  
GENERAL SITE INFORMATION**

**TRIAL #:** US 005/06/01 001 WG      **ALTERNATE ID#:** WY 07 2006  
**PROTOCOL#:** US 005/06/01      **ALTERNATE ID#:** WYE-2006  
**CREATED BY:** US RITTER R  
**CREATED:** 04-14-2006      **REVISED:** 10-30-2006      **COMPLETED:** Y  
**TITLE:** PRE AND EARLY POST PROGRAMS FOR CONVENTIONAL CORN - II  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. MARK SULTENFUSS      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** WYE RES. & ED. CNTR.      **TYPE:** FIELD TRIAL  
**CITY:** QUEENSTOWN      **SUBDIVISION:** MARYLAND  
**COUNTY:** QUEEN ANNE'S      **ZIP:** 21658  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** WREC -- WYE RESEARCH AND EDUCATION CEI **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 21      **TILLAGE:** COT  
**% SILT:** 59      **PH:** 5.8  
**% CLAY:** 20      **CEC:** 5.9  
**TEXTURE:** SIL      **% OM:** 2.0  
**SOIL GEN:** M  
**PREVIOUS CROP:** GLXMA - SOYBEAN  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** ---  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 14      **ACTUAL SUB-BLOCKS:** 14

**SUBMITTED BY:** \_\_\_\_\_

**REVIEWED BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_



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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/09/2006. Variety - DeKalb 61-45.
2. 130 lb/a of nitrogen from ammonium nitrate applied preplant.
3. Starter fertilizer of 30-20-0 applied through the planter.
4. Preemergence applications made 05/10/2006.
5. Early post applications made 06/05/2006.
6. Mid-post applications made 06/09/2006.
7. Study harvested 09/26/2006.

APPL. NUMBER	01	02	03	UNIT
TIMINGS	00	01	02	
TYPE	LIQMIX	LIQMIX	LIQMIX	
APPLICATION DATE	05-10-06	06-05-06	06-09-06	USA
TIME - BEGIN	10:00	17:30	16:00	24H
TIME - END	11:00	18:30	17:00	24H
AIR TEMPERATURE	60	74	82	F
% REL. HUMIDITY	60	50	75	
WIND DIRECTION	SOUTH	SOUTHWEST	SOUTHWEST	
WIND SPEED	3.0	3.0	3.0	M/H
CLOUD COVER	CLEAR	PARTCLDY	HAZY SUN	
DEW	NO	NO	NO	
SOIL MOISTURE	DRY/MOIST	MOIST/MOI	MOIST/MOI	
SOIL CONDITION	FRIABLE	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	60/4.00	72/4.00	80/4.00	F /
METHOD	SPRAY	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	0.03	GPM
NOZZLE NUMBER	6	6	6	
NOZZLE SPACING	20.000	20.000	20.000	IN
SCREEN SIZE				
SCREEN SZ DESC	NA	NA	NA	
SWATH WIDTH	10.0	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	20.0	IN
SPEED	3.00	3.00	3.00	M/H
MIX SIZE	0.560	0.560	0.560	
MIX SIZE UNIT	GAL	GAL	GAL	
SPRAY VOLUME	18.00	18.00	18.00	
SCREEN SIZE	GPA	GPA	GPA	
PRESSURE	20.00	20.00	20.00	PSI
DILUENT	WATER	WATER	WATER	
INC. DATE				USA
INC. START				24H
INC. END				24H
INC. DEPTH				IN
INC. EQUIPMENT	---	---	---	

\* TIMING CODES

00 = PREPRE / PREEMERGENCE  
 01 = POSPOS / EARLY POSTEMERGENCE  
 02 = MIDPOS / MID-POSTEMERGENCE

\* NOZZLE DESCRIPTION

01 = SS-8003  
 02 = SS-8003  
 03 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD      VAR/SPC INFO: DEKALB 61-45  
 TARGET: CROP      SITE: FG      POPULATION: 26000.00 IPA      PLANTED: 05-09-2006  
 PLANTING DEPTH: 1.7 IN      ROW WIDTH: 30.0 IN  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-09-2006	00	MED	26000.00 IPA	.	.	. IN	NA	
05-10-2006	00	MED	26000.00 IPA	.	.	. IN	NA	
06-05-2006	16	MED	26000.00 IPA	16.00	16.00	16.00 IN	TUR	
06-09-2006	16	MED	26000.00 IPA	18.00	18.00	18.00 IN	TUR	

02 P ABUTH - VELVETLEAF  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-10-2006	00	NA	IND	.	.	. IN	---	
06-09-2006	14	LOW	3.00 SQY	2.00	2.00	2.00 IN	TUR	

03 P CHEAL - LAMBSQUARTERS, COMMON  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-10-2006	00	NA	IND	.	.	. IN	---	
06-05-2006	14	LOW	1.00 SQY	2.00	2.00	2.00 IN	TUR	

04 P SETFA - FOXTAIL, GIANT  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-10-2006	00	NA	IND	.	.	. IN	---	
06-05-2006	14	LOW	1.00 SQY	4.00	4.00	4.00 IN	TUR	

05 P IPOSS - MORNINGGLORY  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-10-2006	00	NA	IND	.	.	. IN	---	
06-09-2006	14	LOW	3.00 SQY	2.00	2.00	2.00 IN	TUR	

- \* STAGE CODE -- CORN
- 00 = DRY SEED (CARYOPSIS)
- 16 = 6 LEAVES UNFOLDED
- \* STAGE CODE -- GENERAL
- 00 = DRY SEED; DORMANCY
- 14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- \* STAGE CODE -- GENERAL GRASS
- 00 = DRY SEED (CARYOPSIS)
- 14 = 4 LEAVES UNFOLDED

**TITLE:** PRE AND EARLY POST PROGRAMS FOR CONVENTIONAL CORN - II  
**CREATED:** 04-14-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	06-12-06 P ZEAMX	06-12-06 P SETFA	06-12-06 P CHEAL	06-19-06 P SETFA	06-19-06 P CHEAL	
				VAR 01 PHY % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	0	92	100	83	100	
3A»KEYSTONE (5.25SE)	3.24	LAA	0	0	98	100	97	100	
4A»KEYSTONE (5.25SE)	1.44	LAA	0	0	100	100	100	100	
B»GLYPHOMAX XRT (5.4SL)	1.00	LAA	2						
C FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	2						
5A»GF-1834 (4.073 EW)	0.71	LAA	0	0	98	98	100	100	
B»GLYPHOMAX XRT (5.4SL)	1.00	LAA	2						
C FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	2						
6A»KEYSTONE (5.25SE)	1.44	LAA	1	0	100	100	100	100	
B»GLYPHOMAX XRT (5.4SL)	1.00	LAA	1						
C FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	1						
7A»GF-1834 (4.073 EW)	0.71	LAA	1	3	100	98	100	100	
B»GLYPHOMAX XRT (5.4SL)	1.00	LAA	1						
C FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	1						
8A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	0	98	100	85	100	
9A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	0	100	98	98	100	
B»PROWL H20 (3.8CS)	1.00	LAA	1						
10A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	3	100	100	98	100	
B»DISTINCT (70WG)	0.175	LAA	1						
11A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	3	100	100	100	100	
B»BAS 799 (56WG)	0.175	LAA	1						
12A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	3	100	98	100	100	
B»RESOLVE (25DF)	0.016	LAA	1						
13A ACCENT (75WG)	0.023	LAA	1	0	70	100	98	100	
B»HARMONY GT (50SG)	0.002	LAA	1						
C»CALLISTO (4SC)	0.047	LAA	1						
D ATRAZINE 4L (SC)	0.50	LAA	1						
E ADJUVANT - COC (EC)	1.00	OAG	1						
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSL (0.05)	4.54	2.66	2.27	4.54	0.00
				SIGNIFICANCE OF F	NS	**	**	**	**
				STANDARD DEVIATION	2.21	1.30	1.10	2.21	0.00
				COEFFICIENT OF VARIANCE	284.20	1.92	1.59	3.27	0.00
				DAT APPLICATION # 01 TIMINGS (00)	33	33	33	40	40
				DAT APPLICATION # 02 TIMINGS (01)	7	7	7	14	14
				DAT APPLICATION # 03 TIMINGS (02)	3	3	3	10	10

TITLE: PRE AND EARLY POST PROGRAMS FOR CONVENTIONAL CORN - II  
 CREATED: 04-14-2006 REVISED: 10-30-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: WYE RES. & ED. CNTR. RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			CON %	CON %	CON %	CON %	CON %	
	RATE	UNIT	TM	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	72	100	65	100	63	
3A»KEYSTONE (5.25SE)	3.24	LAA	0	93	100	93	100	87	
4A»KEYSTONE (5.25SE)	1.44	LAA	0	100	100	100	100	100	
B»GLYPHOMAX XRT (5.4SL)	1.00	LAA	2						
C FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	2						
5A»GF-1834 (4.073 EW)	0.71	LAA	0	100	100	98	100	100	
B»GLYPHOMAX XRT (5.4SL)	1.00	LAA	2						
C FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	2						
6A»KEYSTONE (5.25SE)	1.44	LAA	1	100	100	100	100	100	
B»GLYPHOMAX XRT (5.4SL)	1.00	LAA	1						
C FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	1						
7A»GF-1834 (4.073 EW)	0.71	LAA	1	100	100	100	100	100	
B»GLYPHOMAX XRT (5.4SL)	1.00	LAA	1						
C FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	1						
8A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	73	97	67	97	90	
9A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	92	97	92	97	97	
B»PROWL H20 (3.8CS)	1.00	LAA	1						
10A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	97	100	93	100	100	
B»DISTINCT (70WG)	0.175	LAA	1						
11A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	97	100	93	100	97	
B»BAS 799 (56WG)	0.175	LAA	1						
12A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	100	100	97	100	93	
B»RESOLVE (25DF)	0.016	LAA	1						
13A ACCENT (75WG)	0.023	LAA	1	93	100	93	100	100	
B»HARMONY GT (50SG)	0.002	LAA	1						
C»CALLISTO (4SC)	0.047	LAA	1						
D ATRAZINE 4L (SC)	0.50	LAA	1						
E ADJUVANT - COC (EC)	1.00	OAG	1						
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSL (0.05)	5.91	3.73	6.06	3.73	14.26
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	2.88	1.82	2.95	1.82	6.93
				COEFFICIENT OF VARIANCE	4.42	2.61	4.63	2.61	10.55
				DAT APPLICATION # 01 TIMINGS (00)	49	49	62	62	62
				DAT APPLICATION # 02 TIMINGS (01)	23	23	36	36	36
				DAT APPLICATION # 03 TIMINGS (02)	19	19	32	32	32

**TITLE:** PRE AND EARLY POST PROGRAMS FOR CONVENTIONAL CORN - II  
**CREATED:** 04-14-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			CON %	CON %	CON %	VAR 01	VAR 01	
	RATE	UNIT	TM	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	YLD LB 1.00 PL SD	YLD BU 1.00 A SD	
011 RAW 08-01-06 P SETFA									
012 RAW 08-01-06 P CHEAL									
013 RAW 08-01-06 P ABUTH									
014 RAW 09-26-06 P ZEAMX									
014 CALC 09-26-06 P ZEAMX									
1A UNTREATED CHECK	0.00	NA	0	0	0	0	44.2	162.7	
2A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	60	100	50	55.4	203.9	
3A»KEystone (5.25SE)	3.24	LAA	0	93	100	83	54.7	201.4	
4A»KEystone (5.25SE)	1.44	LAA	0	98	100	98	55.0	202.5	
B»GLYPHOMAX XRT (5.4SL)	1.00	LAA	2						
C FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	2						
5A»GF-1834 (4.073 EW)	0.71	LAA	0	95	100	98	55.0	202.4	
B»GLYPHOMAX XRT (5.4SL)	1.00	LAA	2						
C FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	2						
6A»KEystone (5.25SE)	1.44	LAA	1	100	100	100	54.9	201.9	
B»GLYPHOMAX XRT (5.4SL)	1.00	LAA	1						
C FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	1						
7A»GF-1834 (4.073 EW)	0.71	LAA	1	98	100	100	56.6	208.4	
B»GLYPHOMAX XRT (5.4SL)	1.00	LAA	1						
C FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	1						
8A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	60	97	90	55.3	203.6	
9A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	92	97	97	57.6	212.1	
B»PROWL H20 (3.8CS)	1.00	LAA	1						
10A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	90	100	95	54.3	200.0	
B»DISTINCT (70WG)	0.175	LAA	1						
11A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	92	100	97	54.8	201.5	
B»BAS 799 (56WG)	0.175	LAA	1						
12A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	90	100	93	53.1	195.3	
B»RESOLVE (25DF)	0.016	LAA	1						
13A ACCENT (75WG)	0.023	LAA	1	90	100	100	56.9	209.4	
B»HARMONY GT (50SG)	0.002	LAA	1						
C»CALLISTO (4SC)	0.047	LAA	1						
D ATRAZINE 4L (SC)	0.50	LAA	1						
E ADJUVANT - COC (EC)	1.00	OAG	1						
14A UNTREATED CHECK	0.00	NA	0	0	0	0	46.3	170.4	
				LSL (0.05)	7.00	3.73	17.18	6.27	23.08
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	3.42	1.82	8.36	3.00	11.22
				COEFFICIENT OF VARIANCE	5.55	2.61	13.00	6.93	6.93
				DAT APPLICATION # 01 TIMINGS (00)	83	83	83	139	139
				DAT APPLICATION # 02 TIMINGS (01)	57	57	57	113	113
				DAT APPLICATION # 03 TIMINGS (02)	53	53	53	109	109

> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 05-10-2006(1)  
 01 = POSPOS / EARLY POSTEMERGENCE 06-05-2006(2)  
 02 = MIDPOS / MID-POSTEMERGENCE 06-09-2006(3)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	ZEAMX	% PHYTO	06-12-2006	01	P	ZEAMX		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N

TITLE: PRE AND EARLY POST PROGRAMS FOR CONVENTIONAL CORN - II

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRTR	SS	NOTE
002	SETFA	CON %	06-12-2006	04	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
003	CHEAL	CON %	06-12-2006	03	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
004	SETFA	CON %	06-19-2006	04	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	CHEAL	CON %	06-19-2006	03	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	SETFA	CON %	06-28-2006	04	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
007	CHEAL	CON %	06-28-2006	03	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
008	SETFA	CON %	07-11-2006	04	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
009	CHEAL	CON %	07-11-2006	03	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
010	ABUTH	CON %	07-11-2006	02	P	ABUTH		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
011	SETFA	CON %	08-01-2006	04	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
012	CHEAL	CON %	08-01-2006	03	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
013	ABUTH	CON %	08-01-2006	02	P	ABUTH		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
014	ZEAMX	LB/PLOT	09-26-2006	01	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

VAR 01 = DEKALB 61-45

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = DEKALB 61-45

\* USER DEFINED CALCULATIONS

US 005/06/01 001 WG--- 014 -- {RAW}\*(3.68)

US 005/06/01 001 WG--- 014 -- {RAW}\*(3.68)

**TRIAL SUMMARY  
GENERAL SITE INFORMATION**

**TRIAL #:** US 005/06/01 001 WH      **ALTERNATE ID#:** WY 08 2006  
**PROTOCOL#:** US 005/06/01      **ALTERNATE ID#:** US 005/01/01  
**CREATED BY:** US RITTER R  
**CREATED:** 04-14-2006      **REVISED:** 12-06-2006      **COMPLETED:** Y  
**TITLE:** GLYPHOSATE TIMING STUDY IN CONVENTIONAL CORN

**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. MARK SULTENFUSS  
**LOCATION:** WYE RES. & ED. CNTR.  
**CITY:** QUEENSTOWN  
**COUNTY:** QUEEN ANNE'S  
**COUNTRY:** UNITED STATES

**CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA

**DATA SOURCE:** UNIVERSITY  
**TYPE:** FIELD TRIAL  
**SUBDIVISION:** MARYLAND  
**ZIP:** 21658

**WEATHER SITE:** WREC -- WYE RESEARCH AND EDUCATION CEI **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4 **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 21      **TILLAGE:** COT  
**% SILT:** 59      **PH:** 5.8  
**% CLAY:** 20      **CEC:** 5.9  
**TEXTURE:** SIL      **% OM:** 2.0  
**SOIL GEN:** M  
**PREVIOUS CROP:** GLXMA - SOYBEAN  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** EFF  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 14      **ACTUAL SUB-BLOCKS:** 14

**SUBMITTED BY:** \_\_\_\_\_

**REVIEWED BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_



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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/09/2006. Variety - DeKalb 61-45.
2. 130 lb/a of nitrogen from ammonium nitrate applied preplant.
3. Starter fertilizer of 30-20-0 applied through the planter.
4. 1 week application made 05/17/2006.
5. 2 week application made 05/25/2006.
6. 3 week application made 05/30/2006.
7. 4 week application made 06/05/2006.
8. 5 week application made 06/14/2006.
9. 6 week application made 06/22/2006.
10. 7 week application made 06/30/2006.
11. 8 week application made 07/03/2006.
12. 9 week application made 07/13/2006.
13. 10 week application made 07/17/2006.
14. 11 week application made 07/26/2006.
15. 12 week application made 07/31/2006.
16. Study harvested 09/26/2006.

APPL. NUMBER	01	02	03	04	05	06	07	08	UNIT
<b>TIMINGS</b>	00	01	02	03	04	05	06	07	
<b>TYPE</b>	LIQMIX	LIQMIX	LIQMIX	LIQMIX	LIQMIX	LIQMIX	LIQMIX	LIQMIX	
<b>APPLICATION DATE</b>	05-17-06	05-25-06	05-30-06	06-05-06	06-14-06	06-22-06	06-30-06	07-03-06	USA
<b>TIME - BEGIN</b>	14:00	20:00	15:00	19:45	16:00	17:00	13:00	13:00	24H
<b>TIME - END</b>	14:15	20:15	15:15	20:00	17:00	18:00	13:30	13:30	24H
<b>AIR TEMPERATURE</b>	68	65	90	72	70	92	86	86	F
<b>% REL. HUMIDITY</b>	50	40	60	50	75	80	80	80	
<b>WIND DIRECTION</b>	SOUTHWEST	SOUTHWEST	SOUTHWEST	SOUTHWEST	SOUTHWEST	SOUTHWEST	SOUTH	SOUTH	
<b>WIND SPEED</b>	3.0	3.0	3.0	3.0	2.0	2.0	3.0	3.0	M/H
<b>CLOUD COVER</b>	PARTCLDY	HAZY SUN	HAZY SUN	PARTCLDY	CLOUDY	HAZY SUN	HAZY SUN	HAZY SUN	
<b>DEW</b>	NO	NO	NO	NO	NO	NO	NO	NO	
<b>SOIL MOISTURE</b>	DRY/MOIST	DRY/DRY	DRY/DRY	MOIST/MOI	MOIST/MOI	MOIST/MOI	MOIST/MOI	MOIST/MOI	
<b>SOIL CONDITION</b>	FRIABLE	FRIABLE	FRIABLE	FRIABLE	FRIABLE	FRIABLE	FRIABLE	FRIABLE	
<b>SOIL TEMP/DEPTH</b>	68/4.00	68/4.00	88/4.00	74/4.00	68/4.00	90/4.00	84/4.00	84/4.00	F /
<b>METHOD</b>	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	
<b>EQUIPMENT</b>	SPRBAC	SPRBAC	SPRBAC	SPRBAC	SPRBAC	SPRBAC	SPRBAC	SPRBAC	
<b>PROPELLANT</b>	COMCO2	COMCO2	COMCO2	COMCO2	COMCO2	COMCO2	COMCO2	COMCO2	
<b>PLACEMENT</b>	BRFOSO	BRFOSO	BRFOSO	BRFOSO	BRFOSO	BRFOSO	BRFOSO	BRFOSO	
<b>NOZZLE</b>	FLATFAN	FLATFAN	FLATFAN	FLATFAN	FLATFAN	FLATFAN	FLATFAN	FLATFAN	
<b>NOZZLE VOLUME</b>	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	GPM
<b>NOZZLE NUMBER</b>	6	6	6	6	6	6	6	6	
<b>NOZZLE SPACING</b>	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000	IN
<b>SCREEN SIZE</b>									
<b>SCREEN SZ DESC</b>	NA	NA	NA	NA	NA	NA	NA	NA	
<b>SWATH WIDTH</b>	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	FT
<b>BOOM HEIGHT</b>	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	IN
<b>SPEED</b>	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	M/H
<b>MIX SIZE</b>	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	
<b>MIX SIZE UNIT</b>	GAL	GAL	GAL	GAL	GAL	GAL	GAL	GAL	
<b>SPRAY VOLUME</b>	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	
<b>SCREEN SIZE</b>	GPA	GPA	GPA	GPA	GPA	GPA	GPA	GPA	
<b>PRESSURE</b>	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	PSI
<b>DILUENT</b>	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	
<b>INC. DATE</b>									USA
<b>INC. START</b>									24H
<b>INC. END</b>									24H
<b>INC. DEPTH</b>									IN
<b>INC. EQUIPMENT</b>	---	---	---	---	---	---	---	---	

APPL. NUMBER	09	10	11	12	UNIT
<b>TIMINGS</b>	08	09	10	11	
<b>TYPE</b>	LIQMIX	LIQMIX	LIQMIX	LIQMIX	
<b>APPLICATION DATE</b>	07-13-00	07-17-06	07-26-06	07-31-06	USA
<b>TIME - BEGIN</b>	18:00	18:00	17:00	17:00	24H
<b>TIME - END</b>	18:30	18:30	17:30	17:30	24H
<b>AIR TEMPERATURE</b>	88	88	85	85	F
<b>% REL. HUMIDITY</b>	80	80	60	60	
<b>WIND DIRECTION</b>	SOUTHWEST	SOUTHWEST	SOUTHWEST	SOUTHWEST	
<b>WIND SPEED</b>	3.0	3.0	3.0	3.0	M/H
<b>CLOUD COVER</b>	HAZY SUN	HAZY SUN	HAZY SUN	HAZY SUN	
<b>DEW</b>	NO	NO	NO	NO	
<b>SOIL MOISTURE</b>	MOIST/MOI	MOIST/MOI	MOIST/MOI	MOIST/MOI	
<b>SOIL CONDITION</b>	FRIABLE	FRIABLE	FRIABLE	FRIABLE	
<b>SOIL TEMP/DEPTH</b>	88/4.00	88/4.00	85/4.00	85/4.00	F /
<b>METHOD</b>	SPRAY	SPRAY	SPRAY	SPRAY	
<b>EQUIPMENT</b>	SPRBAC	SPRBAC	SPRBAC	SPRBAC	
<b>PROPELLANT</b>	COMCO2	COMCO2	COMCO2	COMCO2	
<b>PLACEMENT</b>	BRFOSO	BRFOSO	BRFOSO	BRFOSO	
<b>NOZZLE</b>	FLATFAN	FLATFAN	FLATFAN	FLATFAN	
<b>NOZZLE VOLUME</b>	0.03	0.03	0.03	0.03	GPM
<b>NOZZLE NUMBER</b>	6	6	6	6	
<b>NOZZLE SPACING</b>	20.000	20.000	20.000	20.000	IN
<b>SCREEN SIZE</b>					
<b>SCREEN SZ DESC</b>	NA	NA	NA	NA	
<b>SWATH WIDTH</b>	10.0	10.0	10.0	10.0	FT
<b>BOOM HEIGHT</b>	20.0	20.0	20.0	20.0	IN
<b>SPEED</b>	3.00	3.00	3.00	3.00	M/H
<b>MIX SIZE</b>	0.560	0.560	0.560	0.560	
<b>MIX SIZE UNIT</b>	GAL	GAL	GAL	GAL	
<b>SPRAY VOLUME</b>	18.00	18.00	18.00	18.00	
<b>SCREEN SIZE</b>	GPA	GPA	GPA	GPA	
<b>PRESSURE</b>	20.00	20.00	20.00	20.00	PSI
<b>DILUENT</b>	WATER	WATER	WATER	WATER	
<b>INC. DATE</b>					USA
<b>INC. START</b>					24H
<b>INC. END</b>					24H
<b>INC. DEPTH</b>					IN
<b>INC. EQUIPMENT</b>	---	---	---	---	

**\* TIMING CODES**

- 00 = POSPOS / POSTEMERGENCE - 1 WEEK
- 01 = POSPOS / POSTEMERGENCE - 2 WEEK
- 02 = POSPOS / POSTEMERGENCE - 3 WEEK
- 03 = POSPOS / POSTEMERGENCE - 4 WEEK
- 04 = POSPOS / POSTEMERGENCE - 5 WEEK
- 05 = POSPOS / POSTEMERGENCE - 6 WEEK
- 06 = POSPOS / POSTEMERGENCE - 7 WEEK
- 07 = POSPOS / POSTEMERGENCE - 8 WEEK
- 08 = POSPOS / POSTEMERGENCE - 9 WEEK
- 09 = POSPOS / POSTEMERGENCE - 10 WEEK
- 10 = POSPOS / POSTEMERGENCE - 11 WEEK
- 11 = POSPOS / POSTEMERGENCE - 12 WEEK

**\* NOZZLE DESCRIPTION**

- 01 = SS-8003
- 02 = SS-8003
- 03 = SS-8003
- 04 = SS-8003
- 05 = SS-8003
- 06 = SS-8003
- 07 = SS-8003
- 08 = SS-8003
- 09 = SS-8003
- 10 = SS-8003
- 11 = SS-8003
- 12 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD      VAR/SPC INFO: DEKALB 61-45  
**TARGET:** CROP    **SITE:** FG      **POPULATION:** 26000.00 IPA    **PLANTED:** 05-09-2006  
**PLANTING DEPTH:** 1.7 IN      **ROW WIDTH:** 30.0 IN  
**INFESTATION DATE:** - - **METHOD:** NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-09-2006	00	MED	26000.00 IPA	.	.	. IN	NA	
05-17-2006	09	MED	26000.00 IPA	1.00	1.00	1.00 IN	TUR	
05-25-2006	14	MED	26000.00 IPA	5.00	5.00	5.00 IN	TUR	
05-30-2006	14	MED	26000.00 IPA	8.00	8.00	8.00 IN	TUR	
06-05-2006	16	MED	26000.00 IPA	16.00	16.00	16.00 IN	TUR	
06-14-2006	17	MED	26000.00 IPA	24.00	24.00	24.00 IN	TUR	
06-22-2006	18	MED	26000.00 IPA	48.00	48.00	48.00 IN	TUR	
06-30-2006	38	MED	26000.00 IPA	60.00	60.00	60.00 IN	TUR	
07-03-2006	39	MED	26000.00 IPA	60.00	60.00	60.00 IN	TUR	
07-13-2006	51	MED	26000.00 IPA	84.00	84.00	84.00 IN	TUR	
07-17-2006	55	MED	26000.00 IPA	84.00	84.00	84.00 IN	TUR	
07-26-2006	69	MED	26000.00 IPA	84.00	84.00	84.00 IN	TUR	
07-31-2006	73	MED	26000.00 IPA	84.00	84.00	84.00 IN	TUR	

02 P SETFA - FOXTAIL, GIANT  
**TARGET:** PEST    **SITE:** FG      **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-09-2006	00	NA		IND	.	. IN	---	
05-17-2006	00	NA		IND	.	. IN	---	
05-25-2006	12	HGH	10.00 IF2	0.50	0.50	0.50 IN	TUR	
05-30-2006	13	HGH	10.00 IF2	1.50	1.50	1.50 IN	TUR	
06-05-2006	14	HGH	10.00 IF2	4.00	4.00	4.00 IN	TUR	
06-14-2006	15	HGH	10.00 IF2	4.00	8.00	6.00 IN	TUR	
06-22-2006	16	HGH	10.00 IF2	24.00	24.00	24.00 IN	TUR	
06-30-2006	16	HGH	10.00 IF2	36.00	36.00	36.00 IN	TUR	
07-03-2006	16	HGH	10.00 IF2	36.00	36.00	36.00 IN	TUR	
07-13-2006	16	HGH	10.00 IF2	48.00	48.00	48.00 IN	TUR	
07-17-2006	37	HGH	10.00 IF2	56.00	56.00	56.00 IN	TUR	
07-26-2006	55	HGH	10.00 IF2	62.00	62.00	62.00 IN	TUR	
07-31-2006	65	HGH	10.00 IF2	72.00	72.00	72.00 IN	TUR	

**\* STAGE CODE -- CORN**

- 00 = DRY SEED (CARYOPSIS)
- 09 = EMERGENCE: COLEOPTILE PENETRATES SOIL SURFACE (CRACKING STAGE)
- 14 = 4 LEAVES UNFOLDED
- 16 = 6 LEAVES UNFOLDED
- 17 = 7 LEAVES UNFOLDED
- 18 = 8 LEAVES UNFOLDED
- 38 = 8 NODES DETECTABLE
- 39 = 9 OR MORE NODES DETECTABLE
- 51 = BEGINNING OF TASSEL EMERGENCE: TASSEL DETECTABLE AT TOP OF STEM
- 55 = MIDDLE OF TASSEL EMERGENCE: MIDDLE OF TASSEL BEGINS TO SEPARATE
- 69 = END OF FLOWERING: STIGMATA COMPLETELY DRY
- 73 = EARLY MILK

**\* STAGE CODE -- GENERAL GRASS**

- 00 = DRY SEED (CARYOPSIS)
- 12 = 2 LEAVES UNFOLDED
- 13 = 3 LEAVES UNFOLDED
- 14 = 4 LEAVES UNFOLDED
- 15 = 5 LEAVES UNFOLDED
- 16 = 6 LEAVES UNFOLDED
- 37 = FLAG LEAF JUST VISIBLE, STILL ROLLED
- 55 = MIDDLE OF HEADING: HALF OF INFLORESCENCE EMERGED
- 65 = FULL FLOWERING: 50% OF ANTHERS MATURE

TITLE: GLYPHOSATE TIMING STUDY IN CONVENTIONAL CORN

CREATED: 04-14-2006 REVISED: 12-06-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: WYE RES. & ED. CNTR. RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE RATE UNIT TM	001 RAW 002 RAW 003 RAW 004 RAW 005 RAW 06-12-06 06-28-06 07-11-06 08-01-06 09-26-06 P SETFA P SETFA P SETFA P SETFA P ZEAMX					VAR 01 YLD LB 1.00 PL SD
		CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	
1A UNTREATED CHECK	0.00 NA 0	0	0	0	0	51.7	
2A»TOUCHDOWN TOTAL (4.17AE)	0.78 LAA 0	33	10	10	7	50.6	
3A»TOUCHDOWN TOTAL (4.17AE)	0.78 LAA 1	88	62	57	45	60.7	
4A»TOUCHDOWN TOTAL (4.17AE)	0.78 LAA 2	88	60	48	38	56.2	
5A»TOUCHDOWN TOTAL (4.17AE)	0.78 LAA 3	98	75	68	63	57.7	
6A»TOUCHDOWN TOTAL (4.17AE)	0.78 LAA 4	0	93	95	92	58.1	
7A»TOUCHDOWN TOTAL (4.17AE)	0.78 LAA 5	0	93	97	95	52.5	
8A»TOUCHDOWN TOTAL (4.17AE)	0.78 LAA 6	0	0	90	100	44.1	
9A»TOUCHDOWN TOTAL (4.17AE)	0.78 LAA 7	0	10	97	100	46.1	
10A»TOUCHDOWN TOTAL (4.17AE)	0.78 LAA 8	0	0	0	67	42.6	
11A»TOUCHDOWN TOTAL (4.17AE)	0.78 LAA 9	0	0	0	97	43.5	
12A»TOUCHDOWN TOTAL (4.17AE)	0.78 LAA 10	0	0	0	0	45.4	
13A»TOUCHDOWN TOTAL (4.17AE)	0.78 LAA 11	0	0	0	0	43.1	
14A UNTREATED CHECK	0.00 NA 0	0	0	0	33	45.1	
	LSD (0.05)	16.00	13.53	11.46	39.14	7.06	
	SIGNIFICANCE OF F	**	**	**	**	**	
	STANDARD DEVIATION	7.78	6.58	5.57	19.00	3.44	
	COEFFICIENT OF VARIANCE	43.24	28.00	17.00	44.31	8.45	
	DAT APPLICATION # 01 TIMINGS (00)	26	42	55	76	132	
	DAT APPLICATION # 02 TIMINGS (01)	18	34	47	68	124	
	DAT APPLICATION # 03 TIMINGS (02)	13	29	42	63	119	
	DAT APPLICATION # 04 TIMINGS (03)	7	23	36	57	113	
	DAT APPLICATION # 05 TIMINGS (04)	NA	14	27	48	104	
	DAT APPLICATION # 06 TIMINGS (05)	NA	6	19	40	96	
	DAT APPLICATION # 07 TIMINGS (06)	NA	NA	11	32	88	
	DAT APPLICATION # 08 TIMINGS (07)	NA	NA	8	29	85	
	DAT APPLICATION # 09 TIMINGS (08)	NA	NA	NA	NA	NA	
	DAT APPLICATION # 10 TIMINGS (09)	NA	NA	NA	15	71	
	DAT APPLICATION # 11 TIMINGS (10)	NA	NA	NA	6	62	
	DAT APPLICATION # 12 TIMINGS (11)	NA	NA	NA	1	57	

TITLE: GLYPHOSATE TIMING STUDY IN CONVENTIONAL CORN

CREATED: 04-14-2006 REVISED: 12-06-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: WYE RES. & ED. CNTR. RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			YLD BU A SD
	RATE	UNIT	TM	
1A UNTREATED CHECK	0.00	NA	0	193.8
2A»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	0	189.8
3A»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	1	227.5
4A»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	2	210.9
5A»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	3	216.5
6A»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	4	218.0
7A»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	5	196.9
8A»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	6	165.3
9A»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	7	172.8
10A»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	8	159.6
11A»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	9	163.0
12A»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	10	170.2
13A»TOUCHDOWN TOTAL (4.17AE)	0.78	LAA	11	161.8
14A UNTREATED CHECK	0.00	NA	0	169.0
				005 CALC
				09-26-06
				P ZEAMX
				VAR 01
				YLD BU
				1.00
				A SD
				LSD (0.05)
				26.50
				SIGNIFICANCE OF F
				**
				STANDARD DEVIATION
				12.89
				COEFFICIENT OF VARIANCE
				8.45
				DAT APPLICATION # 01 TIMINGS (00)
				132
				DAT APPLICATION # 02 TIMINGS (01)
				124
				DAT APPLICATION # 03 TIMINGS (02)
				119
				DAT APPLICATION # 04 TIMINGS (03)
				113
				DAT APPLICATION # 05 TIMINGS (04)
				104
				DAT APPLICATION # 06 TIMINGS (05)
				96
				DAT APPLICATION # 07 TIMINGS (06)
				88
				DAT APPLICATION # 08 TIMINGS (07)
				85
				DAT APPLICATION # 09 TIMINGS (08)
				NA
				DAT APPLICATION # 10 TIMINGS (09)
				71
				DAT APPLICATION # 11 TIMINGS (10)
				62
				DAT APPLICATION # 12 TIMINGS (11)
				57

» = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

- 00 = POSPOS / POSTEMERGENCE - 1 WEEK 05-17-2006(1)
- 01 = POSPOS / POSTEMERGENCE - 2 WEEK 05-25-2006(2)
- 02 = POSPOS / POSTEMERGENCE - 3 WEEK 05-30-2006(3)
- 03 = POSPOS / POSTEMERGENCE - 4 WEEK 06-05-2006(4)
- 04 = POSPOS / POSTEMERGENCE - 5 WEEK 06-14-2006(5)
- 05 = POSPOS / POSTEMERGENCE - 6 WEEK 06-22-2006(6)
- 06 = POSPOS / POSTEMERGENCE - 7 WEEK 06-30-2006(7)
- 07 = POSPOS / POSTEMERGENCE - 8 WEEK 07-03-2006(8)
- 08 = POSPOS / POSTEMERGENCE - 9 WEEK 07-13-4200(9)
- 09 = POSPOS / POSTEMERGENCE - 10 WEEK 07-17-2006(10)
- 10 = POSPOS / POSTEMERGENCE - 11 WEEK 07-26-2006(11)
- 11 = POSPOS / POSTEMERGENCE - 12 WEEK 07-31-2006(12)

TITLE: GLYPHOSATE TIMING STUDY IN CONVENTIONAL CORN

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR	SS	NOTE
001	SETFA	CON %	06-12-2006	02	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
002	SETFA	CON %	06-28-2006	02	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
003	SETFA	CON %	07-11-2006	02	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
004	SETFA	CON %	08-01-2006	02	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
005	ZEAMX	LB/PLOT	09-26-2006	01	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

VAR 01 = DEKALB 61-45

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = DEKALB 61-45

\* USER DEFINED CALCULATIONS

US 005/06/01 001 WH--- 005 -- {RAW}\*(3.75)

US 005/06/01 001 WH--- 005 -- {RAW}\*(3.75)

**TRIAL SUMMARY  
GENERAL SITE INFORMATION**

**TRIAL #:** US 005/06/01 001 WI      **ALTERNATE ID#:** WY 09 2006  
**PROTOCOL#:** US 005/06/01      **ALTERNATE ID#:** WYE-2006  
**CREATED BY:** US RITTER R  
**CREATED:** 04-14-2006      **REVISED:** 10-30-2006      **COMPLETED:** Y  
**TITLE:** WEED CONTROL PROGRAMS FOR LIBERTY-LINK CORN  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. MARK SULTENFUSS      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** WYE RES. & ED. CNTR.      **TYPE:** FIELD TRIAL  
**CITY:** QUEENSTOWN      **SUBDIVISION:** MARYLAND  
**COUNTRY:** QUEEN ANNE'S      **ZIP:** 21658  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** WREC -- WYE RESEARCH AND EDUCATION CEI **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 21      **TILLAGE:** COT  
**% SILT:** 59      **PH:** 5.8  
**% CLAY:** 20      **CEC:** 5.9  
**TEXTURE:** SIL      **% OM:** 2.0  
**SOIL GEN:** M  
**PREVIOUS CROP:** GLXMA - SOYBEAN  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** ---  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 16      **ACTUAL SUB-BLOCKS:** 16

**SUBMITTED BY:** \_\_\_\_\_

**REVIEWED BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_



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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/09/2006. Variety - DeKalb 61-45.
2. 130 lb/a of nitrogen from ammonium nitrate applied preplant.
3. Starter fertilizer of 30-20-0 applied through the planter.
4. Preemergence applications made 05/10/2006.
5. Early post applications made 06/05/2006.
6. Mid-post applications made 06/09/2006.
7. Study harvested 09/25/2006.

APPL. NUMBER	01	02	03	UNIT
<b>TIMINGS</b>	00	01	02	
<b>TYPE</b>	LIQMIX	LIQMIX	LIQMIX	
<b>APPLICATION DATE</b>	05-10-06	06-05-06	06-09-06	USA
<b>TIME - BEGIN</b>	10:00	20:00	16:00	24H
<b>TIME - END</b>	11:00	20:30	17:00	24H
<b>AIR TEMPERATURE</b>	60	72	82	F
<b>% REL. HUMIDITY</b>	60	50	75	
<b>WIND DIRECTION</b>	SOUTH	SOUTHWEST	SOUTHWEST	
<b>WIND SPEED</b>	3.0	3.0	3.0	M/H
<b>CLOUD COVER</b>	CLEAR	PARTCLDY	HAZY SUN	
<b>DEW</b>	NO	NO	NO	
<b>SOIL MOISTURE</b>	DRY/MOIST	MOIST/MOI	MOIST/MOI	
<b>SOIL CONDITION</b>	FRIABLE	FRIABLE	FRIABLE	
<b>SOIL TEMP/DEPTH</b>	60/4.00	74/4.00	80/4.00	F /
<b>METHOD</b>	SPRAY	SPRAY	SPRAY	
<b>EQUIPMENT</b>	SPRBAC	SPRBAC	SPRBAC	
<b>PROPELLANT</b>	COMCO2	COMCO2	COMCO2	
<b>PLACEMENT</b>	BRFOSO	BRFOSO	BRFOSO	
<b>NOZZLE</b>	FLATFAN	FLATFAN	FLATFAN	
<b>NOZZLE VOLUME</b>	0.03	0.03	0.03	GPM
<b>NOZZLE NUMBER</b>	6	6	6	
<b>NOZZLE SPACING</b>	20.000	20.000	20.000	IN
<b>SCREEN SIZE</b>				
<b>SCREEN SZ DESC</b>	NA	NA	NA	
<b>SWATH WIDTH</b>	10.0	10.0	10.0	FT
<b>BOOM HEIGHT</b>	20.0	20.0	20.0	IN
<b>SPEED</b>	3.00	3.00	3.00	M/H
<b>MIX SIZE</b>	0.560	0.560	0.560	
<b>MIX SIZE UNIT</b>	GAL	GAL	GAL	
<b>SPRAY VOLUME</b>	18.00	18.00	18.00	
<b>SCREEN SIZE</b>	GPA	GPA	GPA	
<b>PRESSURE</b>	20.00	20.00	20.00	PSI
<b>DILUENT</b>	WATER	WATER	WATER	
<b>INC. DATE</b>				USA
<b>INC. START</b>				24H
<b>INC. END</b>				24H
<b>INC. DEPTH</b>				IN
<b>INC. EQUIPMENT</b>	---	---	---	

**\* TIMING CODES**

00 = PREPRE / PREEMERGENCE  
01 = POSPOS / EARLY POSTEMERGENCE  
02 = MIDPOS / MID-POSTEMERGENCE

**\* NOZZLE DESCRIPTION**

01 = SS-8003  
02 = SS-8003  
03 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD      VAR/SPC INFO: PIONEER 34M93 YG/LL  
**TARGET:** CROP    **SITE:** FG      **POPULATION:** 26000.00 IPA    **PLANTED:** 05-09-2006  
**PLANTING DEPTH:** 1.7 IN      **ROW WIDTH:** 30.0 IN  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON**    **STAGE CODE**    **POP.GEN.**    **POPULATION**    **MN SIZE**    **MX SIZE**    **AV SIZE**    **CROP VIGOR**    **NOTES**  
05-09-2006    00            MED            26000.00 IPA    .            .            . IN            NA  
05-10-2006    00            MED            26000.00 IPA    .            .            . IN            NA  
06-05-2006    16            MED            26000.00 IPA    12.00       12.00       12.00 IN       TUR  
06-09-2006    16            MED            26000.00 IPA    14.00       14.00       14.00 IN       TUR

02 P ABUTH - VELVETLEAF  
**TARGET:** PEST    **SITE:** FG      **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON**    **STAGE CODE**    **POP.GEN.**    **POPULATION**    **MN SIZE**    **MX SIZE**    **AV SIZE**    **CROP VIGOR**    **NOTES**  
05-10-2006    00            NA            IND            .            .            . IN            ---

03 P CHEAL - LAMBSQUARTERS, COMMON  
**TARGET:** PEST    **SITE:** FG      **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON**    **STAGE CODE**    **POP.GEN.**    **POPULATION**    **MN SIZE**    **MX SIZE**    **AV SIZE**    **CROP VIGOR**    **NOTES**  
05-10-2006    00            NA            IND            .            .            . IN            ---  
06-05-2006    14            LOW            1.00 SQY       2.00       2.00       2.00 IN       TUR

04 P SETFA - FOXTAIL, GIANT  
**TARGET:** PEST    **SITE:** FG      **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON**    **STAGE CODE**    **POP.GEN.**    **POPULATION**    **MN SIZE**    **MX SIZE**    **AV SIZE**    **CROP VIGOR**    **NOTES**  
05-10-2006    00            NA            IND            .            .            . IN            ---  
06-05-2006    14            LOW            1.00 SQY       4.00       4.00       4.00 IN       TUR  
06-09-2006    15            MED            1.00 IF2       4.00       8.00       5.00 IN       TUR

05 P AMARE - PIGWEED, REDROOT, ROUGH  
**TARGET:** PEST    **SITE:** FG      **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON**    **STAGE CODE**    **POP.GEN.**    **POPULATION**    **MN SIZE**    **MX SIZE**    **AV SIZE**    **CROP VIGOR**    **NOTES**  
05-10-2006    00            NA            IND            .            .            . IN            ---  
06-09-2006    14            LOW            1.00 SQY       3.00       3.00       3.00 IN       TUR

06 P IPOSS - MORNINGGLORY  
**TARGET:** PEST    **SITE:** FG      **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON**    **STAGE CODE**    **POP.GEN.**    **POPULATION**    **MN SIZE**    **MX SIZE**    **AV SIZE**    **CROP VIGOR**    **NOTES**  
05-10-2006    00            NA            IND            .            .            . IN            ---  
06-09-2006    13            LOW            1.00 SQY       2.00       2.00       2.00 IN       TUR

## \* STAGE CODE -- CORN

00 = DRY SEED (CARYOPSIS)

16 = 6 LEAVES UNFOLDED

## \* STAGE CODE -- GENERAL

00 = DRY SEED; DORMANCY

13 = 3RD TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED

14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED

## \* STAGE CODE -- GENERAL GRASS

00 = DRY SEED (CARYOPSIS)

14 = 4 LEAVES UNFOLDED

15 = 5 LEAVES UNFOLDED

**TITLE:** WEED CONTROL PROGRAMS FOR LIBERTY-LINK CORN  
**CREATED:** 04-14-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE RATE UNIT TM	001 RAW 002 RAW 003 RAW 004 RAW 005 RAW 06-12-06 06-12-06 06-12-06 06-19-06 06-19-06 P ZEAMX P SETFA P IPOSS P SETFA P IPOSS				
		VAR 01 PHY % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL
1A UNTREATED CHECK	0.00 NA 0	0	0	0	0	0
2A»DEFINE (4SC)	0.56 LAA 0	0	100	93	100	100
B»LIBERTY (1.67 SL)	0.42 LAA 2					
C ATRAZINE 4L (SC)	0.50 LAA 2					
D FERTILIZER-21% AMMONIUM SULFATE	17.00 PMG 2					
3A»LIBERTY (1.67 SL)	0.42 LAA 1	0	100	100	97	100
B ATRAZINE 4L (SC)	0.50 LAA 1					
C FERTILIZER-21% AMMONIUM SULFATE	17.00 PMG 1					
4A»LIBERTY (1.67 SL)	0.42 LAA 2	0	90	97	97	100
B»AE 0172747 (5.25SC)	0.04 LAA 2					
C FERTILIZER-21% AMMONIUM SULFATE	17.00 PMG 2					
5A»LIBERTY (1.67 SL)	0.42 LAA 2	0	90	97	98	100
B»AE 0172747 (5.25SC)	0.04 LAA 2					
C ATRAZINE 4L (SC)	0.50 LAA 2					
D FERTILIZER-21% AMMONIUM SULFATE	17.00 PMG 2					
6A»DEFINE (4SC)	0.56 LAA 0	0	97	95	97	100
B»AE 0172747 (5.25SC)	0.123 LAA 2					
C ATRAZINE 4L (SC)	0.50 LAA 2					
D ADJUVANT - COC (EC)	1.00 PMV 2					
E FERTILIZER - 28%UAN	1.50 QMA 2					
7A»AE 0172747 (5.25SC)	0.123 LAA 1	10	85	65	98	93
B»OPTION (35WG)	0.033 LAA 1					
C ADJUVANT - VEGETABLE OIL	1.00 PMV 1					
D FERTILIZER - 28%UAN	1.50 QMA 1					
8A»AE 0172747 (5.25SC)	0.123 LAA 1	0	83	60	98	93
B ACCENT (75WG)	0.023 LAA 1					
C ADJUVANT - VEGETABLE OIL	1.00 PMV 1					
D FERTILIZER - 28%UAN	1.50 QMA 1					
9A»OPTION (35WG)	0.033 LAA 2	0	70	30	95	93
B»CALLISTO (4SC)	0.05 LAA 2					
C ADJUVANT - VEGETABLE OIL	1.50 PMA 2					
D FERTILIZER - 28%UAN	1.50 QMA 2					
10A»OPTION (35WG)	0.033 LAA 2	0	70	48	98	77
B»DISTINCT (70WG)	0.175 LAA 2					
C ADJUVANT - VEGETABLE OIL	1.50 PMA 2					
D FERTILIZER - 28%UAN	1.50 QMA 2					
11A»OPTION (35WG)	0.033 LAA 1	0	80	93	97	98
B»DEFINE (4SC)	0.31 LAA 1					
C ATRAZINE 4L (SC)	1.00 LAA 1					
D ADJUVANT - VEGETABLE OIL	1.50 PMA 1					
E FERTILIZER - 28%UAN	1.50 QMA 1					
12A»LIBERTY (1.67 EC)	0.42 LAA 2	0	92	95	100	100
B ATRAZINE 4L (SC)	0.50 LAA 2					
C»CALLISTO (4SC)	0.03 LAA 2					
D FERTILIZER-21% AMMONIUM SULFATE	17.00 PMG 2					
13A»LIBERTY (1.67 EC)	0.42 LAA 2	0	93	93	98	100
B ATRAZINE 4L (SC)	1.00 LAA 2					
C FERTILIZER-21% AMMONIUM SULFATE	17.00 PMG 2					

TITLE: WEED CONTROL PROGRAMS FOR LIBERTY-LINK CORN

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	06-12-06 P ZEAMX	06-12-06 P SETFA	06-12-06 P IPOSS	06-19-06 P SETFA	06-19-06 P IPOSS	
				VAR 01 PHY % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	
14A»LIBERTY (1.67 EC)	0.42	LAA	1	0	100	100	100	100	
B ATRAZINE 4L (SC)	1.00	LAA	1						
C»DEFINE (4SC)	0.31	LAA	1						
D FERTILIZER-21% AMMONIUM SULFATE	17.00	PMG	1						
15A»DEFINE (4SC)	0.56	LAA	0	0	98	85	98	98	
B ATRAZINE 4L (SC)	1.25	LAA	0						
C»EQUIP (32WG)	0.02	LAA	2						
D ADJUVANT - VEGETABLE OIL	1.50	PMA	2						
E FERTILIZER - 28%UAN	1.50	QMA	2						
16A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSL (0.05)	0.00	3.46	11.00	3.53	8.60
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	0.00	1.69	5.40	1.73	4.21
				COEFFICIENT OF VARIANCE	0.00	2.66	9.19	2.47	6.10
				DAT APPLICATION # 01 TIMINGS (00)	33	33	33	40	40
				DAT APPLICATION # 02 TIMINGS (01)	7	7	7	14	14
				DAT APPLICATION # 03 TIMINGS (02)	3	3	3	10	10

**TITLE:** WEED CONTROL PROGRAMS FOR LIBERTY-LINK CORN  
**CREATED:** 04-14-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	009 RAW	010 RAW
	RATE	UNIT	TM	06-28-06 P SETFA	06-28-06 P IPOSS	07-11-06 P SETFA	07-11-06 P IPOSS	08-01-06 P SETFA
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
2A»DEFINE (4SC)	0.56	LAA	0	100	100	98	100	98
B»LIBERTY (1.67 SL)	0.42	LAA	2					
C ATRAZINE 4L (SC)	0.50	LAA	2					
D FERTILIZER-21% AMMONIUM SULFATE	17.00	PMG	2					
3A»LIBERTY (1.67 SL)	0.42	LAA	1	90	100	88	100	83
B ATRAZINE 4L (SC)	0.50	LAA	1					
C FERTILIZER-21% AMMONIUM SULFATE	17.00	PMG	1					
4A»LIBERTY (1.67 SL)	0.42	LAA	2	90	93	88	92	85
B»AE 0172747 (5.25SC)	0.04	LAA	2					
C FERTILIZER-21% AMMONIUM SULFATE	17.00	PMG	2					
5A»LIBERTY (1.67 SL)	0.42	LAA	2	95	100	93	97	88
B»AE 0172747 (5.25SC)	0.04	LAA	2					
C ATRAZINE 4L (SC)	0.50	LAA	2					
D FERTILIZER-21% AMMONIUM SULFATE	17.00	PMG	2					
6A»DEFINE (4SC)	0.56	LAA	0	95	100	95	100	95
B»AE 0172747 (5.25SC)	0.123	LAA	2					
C ATRAZINE 4L (SC)	0.50	LAA	2					
D ADJUVANT - COC (EC)	1.00	PMV	2					
E FERTILIZER - 28%UAN	1.50	QMA	2					
7A»AE 0172747 (5.25SC)	0.123	LAA	1	95	92	95	90	90
B»OPTION (35WG)	0.033	LAA	1					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	1					
D FERTILIZER - 28%UAN	1.50	QMA	1					
8A»AE 0172747 (5.25SC)	0.123	LAA	1	97	87	97	87	93
B ACCENT (75WG)	0.023	LAA	1					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	1					
D FERTILIZER - 28%UAN	1.50	QMA	1					
9A»OPTION (35WG)	0.033	LAA	2	92	97	93	92	88
B»CALLISTO (4SC)	0.05	LAA	2					
C ADJUVANT - VEGETABLE OIL	1.50	PMA	2					
D FERTILIZER - 28%UAN	1.50	QMA	2					
10A»OPTION (35WG)	0.033	LAA	2	98	100	97	98	97
B»DISTINCT (70WG)	0.175	LAA	2					
C ADJUVANT - VEGETABLE OIL	1.50	PMA	2					
D FERTILIZER - 28%UAN	1.50	QMA	2					
11A»OPTION (35WG)	0.033	LAA	1	97	100	97	100	97
B»DEFINE (4SC)	0.31	LAA	1					
C ATRAZINE 4L (SC)	1.00	LAA	1					
D ADJUVANT - VEGETABLE OIL	1.50	PMA	1					
E FERTILIZER - 28%UAN	1.50	QMA	1					
12A»LIBERTY (1.67 EC)	0.42	LAA	2	97	100	97	100	95
B ATRAZINE 4L (SC)	0.50	LAA	2					
C»CALLISTO (4SC)	0.03	LAA	2					
D FERTILIZER-21% AMMONIUM SULFATE	17.00	PMG	2					
13A»LIBERTY (1.67 EC)	0.42	LAA	2	97	98	97	98	97
B ATRAZINE 4L (SC)	1.00	LAA	2					
C FERTILIZER-21% AMMONIUM SULFATE	17.00	PMG	2					

TITLE: WEED CONTROL PROGRAMS FOR LIBERTY-LINK CORN

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	009 RAW	010 RAW	
	RATE	UNIT	TM	06-28-06 P SETFA	06-28-06 P IPOSS	07-11-06 P SETFA	07-11-06 P IPOSS	08-01-06 P SETFA	
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	
14A»LIBERTY (1.67 EC)	0.42	LAA	1	100	100	100	100	100	
B ATRAZINE 4L (SC)	1.00	LAA	1						
C»DEFINE (4SC)	0.31	LAA	1						
D FERTILIZER-21% AMMONIUM SULFATE	17.00	PMG	1						
15A»DEFINE (4SC)	0.56	LAA	0	100	98	100	97	98	
B ATRAZINE 4L (SC)	1.25	LAA	0						
C»EQUIP (32WG)	0.02	LAA	2						
D ADJUVANT - VEGETABLE OIL	1.50	PMA	2						
E FERTILIZER - 28%UAN	1.50	QMA	2						
16A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSL (0.05)	4.26	4.06	5.23	5.09	5.67
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	2.09	2.00	2.56	2.49	2.78
				COEFFICIENT OF VARIANCE	3.00	2.86	3.76	3.62	4.17
				DAT APPLICATION # 01 TIMINGS (00)	49	49	62	62	83
				DAT APPLICATION # 02 TIMINGS (01)	23	23	36	36	57
				DAT APPLICATION # 03 TIMINGS (02)	19	19	32	32	53

TITLE: WEED CONTROL PROGRAMS FOR LIBERTY-LINK CORN  
 CREATED: 04-14-2006 REVISED: 10-30-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: WYE RES. & ED. CNTR. RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			011 RAW	011 CALC
	RATE	UNIT	TM	09-25-06 P ZEAMX	09-25-06 P ZEAMX
				VAR 01 YLD LB	VAR 01 YLD BU
				1.00 PL SD	1.00 A SD
1A UNTREATED CHECK	0.00	NA	0	35.0	131.1
2A»DEFINE (4SC)	0.56	LAA	0	51.0	191.1
B»LIBERTY (1.67 SL)	0.42	LAA	2		
C ATRAZINE 4L (SC)	0.50	LAA	2		
D FERTILIZER-21% AMMONIUM SULFATE	17.00	PMG	2		
3A»LIBERTY (1.67 SL)	0.42	LAA	1	49.6	186.0
B ATRAZINE 4L (SC)	0.50	LAA	1		
C FERTILIZER-21% AMMONIUM SULFATE	17.00	PMG	1		
4A»LIBERTY (1.67 SL)	0.42	LAA	2	48.2	180.8
B»AE 0172747 (5.25SC)	0.04	LAA	2		
C FERTILIZER-21% AMMONIUM SULFATE	17.00	PMG	2		
5A»LIBERTY (1.67 SL)	0.42	LAA	2	49.6	185.9
B»AE 0172747 (5.25SC)	0.04	LAA	2		
C ATRAZINE 4L (SC)	0.50	LAA	2		
D FERTILIZER-21% AMMONIUM SULFATE	17.00	PMG	2		
6A»DEFINE (4SC)	0.56	LAA	0	50.1	188.0
B»AE 0172747 (5.25SC)	0.123	LAA	2		
C ATRAZINE 4L (SC)	0.50	LAA	2		
D ADJUVANT - COC (EC)	1.00	PMV	2		
E FERTILIZER - 28%UAN	1.50	QMA	2		
7A»AE 0172747 (5.25SC)	0.123	LAA	1	51.7	193.9
B»OPTION (35WG)	0.033	LAA	1		
C ADJUVANT - VEGETABLE OIL	1.00	PMV	1		
D FERTILIZER - 28%UAN	1.50	QMA	1		
8A»AE 0172747 (5.25SC)	0.123	LAA	1	49.4	185.1
B ACCENT (75WG)	0.023	LAA	1		
C ADJUVANT - VEGETABLE OIL	1.00	PMV	1		
D FERTILIZER - 28%UAN	1.50	QMA	1		
9A»OPTION (35WG)	0.033	LAA	2	49.8	186.9
B»CALLISTO (4SC)	0.05	LAA	2		
C ADJUVANT - VEGETABLE OIL	1.50	PMA	2		
D FERTILIZER - 28%UAN	1.50	QMA	2		
10A»OPTION (35WG)	0.033	LAA	2	50.4	189.0
B»DISTINCT (70WG)	0.175	LAA	2		
C ADJUVANT - VEGETABLE OIL	1.50	PMA	2		
D FERTILIZER - 28%UAN	1.50	QMA	2		
11A»OPTION (35WG)	0.033	LAA	1	49.5	185.8
B»DEFINE (4SC)	0.31	LAA	1		
C ATRAZINE 4L (SC)	1.00	LAA	1		
D ADJUVANT - VEGETABLE OIL	1.50	PMA	1		
E FERTILIZER - 28%UAN	1.50	QMA	1		
12A»LIBERTY (1.67 EC)	0.42	LAA	2	47.8	179.1
B ATRAZINE 4L (SC)	0.50	LAA	2		
C»CALLISTO (4SC)	0.03	LAA	2		
D FERTILIZER-21% AMMONIUM SULFATE	17.00	PMG	2		
13A»LIBERTY (1.67 EC)	0.42	LAA	2	50.6	189.9
B ATRAZINE 4L (SC)	1.00	LAA	2		
C FERTILIZER-21% AMMONIUM SULFATE	17.00	PMG	2		



TITLE: WEED CONTROL PROGRAMS FOR LIBERTY-LINK CORN

TRT TREATMENT NUM COMPONENT	DOSAGE			011 RAW	011 CALC
	RATE	UNIT	TM	09-25-06 P ZEAMX	09-25-06 P ZEAMX
14A»LIBERTY (1.67 EC)	0.42	LAA	1	51.1	191.6
B ATRAZINE 4L (SC)	1.00	LAA	1		
C»DEFINE (4SC)	0.31	LAA	1		
D FERTILIZER-21% AMMONIUM SULFATE	17.00	PMG	1		
15A»DEFINE (4SC)	0.56	LAA	0	50.2	188.2
B ATRAZINE 4L (SC)	1.25	LAA	0		
C»EQUIP (32WG)	0.02	LAA	2		
D ADJUVANT - VEGETABLE OIL	1.50	PMA	2		
E FERTILIZER - 28%UAN	1.50	QMA	2		
16A UNTREATED CHECK	0.00	NA	0	47.2	176.9
				VAR 01 YLD LB	VAR 01 YLD BU
				1.00	1.00
				PL SD	A SD
				LSD (0.05)	7.00 26.08
				SIGNIFICANCE OF F	* *
				STANDARD DEVIATION	3.40 12.77
				COEFFICIENT OF VARIANCE	8.54 8.54
				DAT APPLICATION # 01 TIMINGS (00)	138 138
				DAT APPLICATION # 02 TIMINGS (01)	112 112
				DAT APPLICATION # 03 TIMINGS (02)	108 108

>> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 05-10-2006(1)  
01 = POSPOS / EARLY POSTEMERGENCE 06-05-2006(2)  
02 = MIDPOS / MID-POSTEMERGENCE 06-09-2006(3)

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	ZEAMX	PHY %	06-12-2006	01	P	ZEAMX		RAW	ALL	PHY	%	H	1.00 PL	NO	0001	O	N
002	SETFA	CON %	06-12-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	O	N
003	IPOSS	CON %	06-12-2006	06	P	IPOSS		RAW	ALL	CON	%	H	1.00 PL	NO	0001	O	N
004	SETFA	CON %	06-19-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	O	N
005	IPOSS	CON %	06-19-2006	06	P	IPOSS		RAW	ALL	CON	%	H	1.00 PL	NO	0001	O	N
006	SETFA	CON %	06-28-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	O	N
007	IPOSS	CON %	06-28-2006	06	P	IPOSS		RAW	ALL	CON	%	H	1.00 PL	NO	0001	O	N
008	SETFA	CON %	07-11-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	O	N
009	IPOSS	CON %	07-11-2006	06	P	IPOSS		RAW	ALL	CON	%	H	1.00 PL	NO	0001	O	N
010	SETFA	CON %	08-01-2006	04	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	O	N
011	ZEAMX	LB/PLOT	09-25-2006	01	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	O	N
	ZEAMX	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES  
VAR 01 = PIONEER 34M93 YG/LL

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)  
01 = PIONEER 34M93 YG/LL

\* USER DEFINED CALCULATIONS  
US 005/06/01 001 WI--- 011 -- {RAW}\*(3.75)  
US 005/06/01 001 WI--- 011 -- {RAW}\*(3.75)

**TRIAL SUMMARY  
GENERAL SITE INFORMATION**

**TRIAL #:** US 005/06/01 001 WM      **ALTERNATE ID#:** WY 13 2006  
**PROTOCOL#:** US 005/06/01      **ALTERNATE ID#:** WREC-2005  
**CREATED BY:** US RITTER R  
**CREATED:** 05-08-2006      **REVISED:** 12-11-2006      **COMPLETED:** Y  
**TITLE:** USE OF KIH-485 IN CONVENTIONAL SOYBEANS  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter      **DATA SOURCE:** UNIVERSITY  
**COOPERATOR:** MR. MARK SULTENFUSS      **TYPE:** FIELD TRIAL  
**LOCATION:** WYE RES. & ED. CNTR.      **SUBDIVISION:** MARYLAND  
**CITY:** QUEENSTOWN      **ZIP:** 21658  
**COUNTY:** QUEEN ANNE'S  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** WREC -- WYE RESEARCH AND EDUCATION CEI **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 21      **TILLAGE:** COT  
**% SILT:** 59      **PH:** 5.8  
**% CLAY:** 20      **CEC:** 5.9  
**TEXTURE:** SIL      **% OM:** 2.0

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** ---  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 16      **ACTUAL SUB-BLOCKS:** 16

**SOIL GEN:** M  
**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**SUBMITTED BY:** \_\_\_\_\_

**REVIEWED BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted - 05/25/2006. Variety DeKalb DK 55-51.
2. Preemergence applications made 05/25/2005.
3. Early postemergence applications made 06/14/2006.
4. Study harvested 12/06/2006.

APPL. NUMBER	01	02	UNIT
TIMINGS	00	01	
TYPE	LIQMIX	LIQMIX	
APPLICATION DATE	05-25-06	06-14-06	USA
TIME - BEGIN	18:30	18:00	24H
TIME - END	19:30	19:00	24H
AIR TEMPERATURE	65	68	F
% REL. HUMIDITY	40	80	
WIND DIRECTION	SOUTHWEST	SOUTHWEST	
WIND SPEED	5.0	1.0	M/H
CLOUD COVER	HAZY SUN	CLOUDY	
DEW	NO	NO	
SOIL MOISTURE	DRY/DRY	MOIST/MOI	
SOIL CONDITION	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	68/4.00	68/4.00	F /
METHOD	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	GPM
NOZZLE NUMBER	6	6	
NOZZLE SPACING	20.000	20.000	IN
SCREEN SIZE			
SCREEN SZ DESC	NA	NA	
SWATH WIDTH	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	IN
SPEED	3.00	3.00	M/H
MIX SIZE	0.560	0.750	
MIX SIZE UNIT	GAL	GAL	
SPRAY VOLUME	18.00	26.00	
SCREEN SIZE	GPA	GPA	
PRESSURE	20.00	38.00	PSI
DILUENT	WATER	WATER	
INC. DATE			USA
INC. START			24H
INC. END			24H
INC. DEPTH			IN
INC. EQUIPMENT	---	---	

**\* TIMING CODES**

00 = PREPRE / PREEMERGENCE  
01 = POSPOS / POSTEMERGENCE - 2-3 LEAF (WEED STAGE)

**\* NOZZLE DESCRIPTION**

01 = SS-8003  
02 = SS-8003

01 P CHEAL - LAMBSQUARTERS, COMMON

TARGET: PEST SITE: FG PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON STAGE CODE POP.GEN. POPULATION MN SIZE MX SIZE AV SIZE CROP VIGOR NOTES  
 05-25-2006 00 NA IND . . . IN ---  
 06-14-2006 13 NA IND 10.00 IF2 1.00 1.00 1.00 IN TUR

02 P SETFA - FOXTAIL, GIANT

TARGET: PEST SITE: FG PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON STAGE CODE POP.GEN. POPULATION MN SIZE MX SIZE AV SIZE CROP VIGOR NOTES  
 05-25-2006 00 NA IND . . . IN ---  
 06-14-2006 13 HGH 10.00 IF2 1.00 1.00 1.00 IN TUR

03 P GLXMA - SOYBEAN

VAR/SPC INFO: DEKALB 44-51RR  
 TARGET: CROP SITE: FG POPULATION: 5.00 SFR PLANTED: 05-25-2006  
 PLANTING DEPTH: 1.0 IN ROW WIDTH: 15.0 IN  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON STAGE CODE POP.GEN. POPULATION MN SIZE MX SIZE AV SIZE CROP VIGOR NOTES  
 05-25-2006 00 MED 5.00 SFR . . . IN NA  
 06-14-2006 13 MED 5.00 SFR 3.00 3.00 3.00 IN TUR

04 P IPOSS - MORNINGGLORY

TARGET: PEST SITE: FG PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON STAGE CODE POP.GEN. POPULATION MN SIZE MX SIZE AV SIZE CROP VIGOR NOTES  
 05-25-2006 00 NA IND . . . IN ---  
 06-14-2006 13 LOW 1.00 SQY 2.00 2.00 2.00 IN TUR

05 P DATST - JIMSONWEED

TARGET: PEST SITE: FG PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON STAGE CODE POP.GEN. POPULATION MN SIZE MX SIZE AV SIZE CROP VIGOR NOTES  
 05-25-2006 00 NA IND . . . IN ---  
 06-14-2006 14 LOW 1.00 SQY 3.00 3.00 3.00 IN TUR

06 P XANST - COCKLEBUR, COMMON

TARGET: PEST SITE: FG PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON STAGE CODE POP.GEN. POPULATION MN SIZE MX SIZE AV SIZE CROP VIGOR NOTES  
 05-25-2006 00 NA IND . . . IN ---  
 06-14-2006 14 LOW 1.00 SQY 4.00 4.00 4.00 IN TUR

## \* STAGE CODE -- GENERAL

00 = DRY SEED; DORMANCY  
 13 = 3RD TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED  
 14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED

## \* STAGE CODE -- GENERAL GRASS

00 = DRY SEED (CARYOPSIS)  
 13 = 3 LEAVES UNFOLDED

## \* STAGE CODE -- SOYBEAN

00 = DRY SEED  
 13 = 3RD LEAF (1ST TRIFOLIATE LEAF) UNFOLDED, 2 NODES

TITLE: USE OF KIH-485 IN CONVENTIONAL SOYBEANS  
 CREATED: 05-08-2006 REVISED: 12-11-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: WYE RES. & ED. CNTR. RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	06-14-06 P GLXMA 13 VAR 03 PHY % 1.00 PL ALL	06-14-06 P SETFA 13 CON % 1.00 PL ALL	06-22-06 P SETFA CON % 1.00 PL ALL	06-28-06 P SETFA CON % 1.00 PL ALL	06-28-06 P IPOSS CON % 1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»KIH-485 (85WG)	0.144	LAA	0	3	100	100	88	20	
3A»KIH-485 (85WG)	0.181	LAA	0	13	100	100	98	42	
4A»KIH-485 (85WG)	0.27	LAA	0	20	100	100	100	40	
5A»DUAL II MAGNUM (7.64EC)	1.55	LAA	0	10	100	100	92	10	
6A»DUAL II MAGNUM (7.64EC)	3.10	LAA	0	35	100	100	100	10	
7A»OUTLOOK (6EC)	0.83	LAA	0	43	100	100	97	10	
8A»KIH-485 (85WG)	0.144	LAA	0	12	100	100	100	77	
B»ROUNDUP WEATHER MAX (5.5 SL)	0.76	LAA	1						
9A»KIH-485 (85WG)	0.072	LAA	1	0	0	100	100	47	
B»ROUNDUP WEATHER MAX (5.5 SL)	0.76	LAA	1						
10A»KIH-485 (85WG)	0.11	LAA	1	0	0	100	100	48	
B»ROUNDUP WEATHER MAX (5.5 SL)	0.76	LAA	1						
11A»KIH-485 (85WG)	0.144	LAA	1	0	0	100	98	62	
B»ROUNDUP WEATHER MAX (5.5 SL)	0.76	LAA	1						
12A»KIH-485 (85WG)	0.22	LAA	1	0	0	100	100	60	
B»ROUNDUP WEATHER MAX (5.5 SL)	0.76	LAA	1						
13A»DUAL II MAGNUM (7.64EC)	0.77	LAA	0	13	100	100	97	63	
B»ROUNDUP WEATHER MAX (5.5 SL)	0.76	LAA	1						
14A»DUAL II MAGNUM (7.64EC)	1.55	LAA	0	17	98	100	100	70	
B»ROUNDUP WEATHER MAX (5.5 SL)	0.76	LAA	1						
15A»ROUNDUP WEATHER MAX (5.5 SL)	0.76	LAA	1	0	0	100	98	75	
16A UNTREATED CHECK	0.00	NA	1	0	0	0	0	0	
				LSLSD (0.05)	12.31	1.20	0.00	6.48	32.23
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	6.00	0.589	0.00	3.17	15.78
				COEFFICIENT OF VARIANCE	70.90	1.29	0.00	4.54	48.84
				DAT APPLICATION # 01 TIMINGS (00)	20	20	28	34	34
				DAT APPLICATION # 02 TIMINGS (01)	0	0	8	14	14

TITLE: USE OF KIH-485 IN CONVENTIONAL SOYBEANS  
 CREATED: 05-08-2006 REVISD: 12-11-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: WYE RES. & ED. CNTR. RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			CON %	CON %	CON %	VAR 03	VAR 03	
	RATE	UNIT	TM	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	YLD LB 1.00 PL SD	YLD BU 1.00 A SD	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	1.2	14.3	
2A»KIH-485 (85WG)	0.144	LAA	0	83	10	83	2.3	28.3	
3A»KIH-485 (85WG)	0.181	LAA	0	97	23	92	1.9	23.8	
4A»KIH-485 (85WG)	0.27	LAA	0	98	37	97	1.6	19.7	
5A»DUAL II MAGNUM (7.64EC)	1.55	LAA	0	88	0	82	1.8	21.7	
6A»DUAL II MAGNUM (7.64EC)	3.10	LAA	0	100	10	97	0.8	9.4	
7A»OUTLOOK (6EC)	0.83	LAA	0	88	10	82	2.7	33.2	
8A»KIH-485 (85WG)	0.144	LAA	0	98	78	98	2.9	35.7	
B»ROUNDUP WEATHER MAX (5.5 SL)	0.76	LAA	1						
9A»KIH-485 (85WG)	0.072	LAA	1	100	48	100	2.8	34.0	
B»ROUNDUP WEATHER MAX (5.5 SL)	0.76	LAA	1						
10A»KIH-485 (85WG)	0.11	LAA	1	100	43	100	3.4	41.4	
B»ROUNDUP WEATHER MAX (5.5 SL)	0.76	LAA	1						
11A»KIH-485 (85WG)	0.144	LAA	1	100	62	100	3.2	39.0	
B»ROUNDUP WEATHER MAX (5.5 SL)	0.76	LAA	1						
12A»KIH-485 (85WG)	0.22	LAA	1	100	62	100	3.7	45.1	
B»ROUNDUP WEATHER MAX (5.5 SL)	0.76	LAA	1						
13A»DUAL II MAGNUM (7.64EC)	0.77	LAA	0	98	68	100	3.5	43.1	
B»ROUNDUP WEATHER MAX (5.5 SL)	0.76	LAA	1						
14A»DUAL II MAGNUM (7.64EC)	1.55	LAA	0	100	73	100	3.6	43.9	
B»ROUNDUP WEATHER MAX (5.5 SL)	0.76	LAA	1						
15A»ROUNDUP WEATHER MAX (5.5 SL)	0.76	LAA	1	90	70	82	3.3	41.0	
16A UNTREATED CHECK	0.00	NA	1	0	0	0	1.5	18.4	
				LSD (0.05)	10.15	31.32	15.51	1.14	14.00
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	5.00	15.34	7.59	0.559	6.87
				COEFFICIENT OF VARIANCE	7.26	50.51	11.34	27.36	27.36
				DAT APPLICATION # 01 TIMINGS (00)	47	47	68	195	195
				DAT APPLICATION # 02 TIMINGS (01)	27	27	48	175	175

>> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 05-25-2006(1)  
 01 = POSPOS / POSTEMERGENCE - 2-3 LEAF (WEED STAGE) 06-14-2006(2)

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRTR	SS	NOTE
001	GLXMA	% PHYTO	06-14-2006	03	P	GLXMA	13	RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	SETFA	CON %	06-14-2006	02	P	SETFA	13	RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
003	SETFA	CON %	06-22-2006	02	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
004	SETFA	CON %	06-28-2006	02	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	IPOSS	CON %	06-28-2006	04	P	IPOSS		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N

TITLE: USE OF KIH-485 IN CONVENTIONAL SOYBEANS

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR	SS	NOTE
006	SETFA	CON %	07-11-2006	02	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
007	IPOSS	CON %	07-11-2006	04	P	IPOSS		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
008	SETFA	CON %	08-01-2006	02	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
009	GLXMA	YLD/PLOT	12-06-2006	03	P	GLXMA		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	GLXMA	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

VAR 03 = DEKALB 44-51RR

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

03 = DEKALB 44-51RR

\* STAGE CODE

13 = 3RD LEAF (1ST TRIFOLIATE LEAF) UNFOLDED, 2 NODES

13 = 3 LEAVES UNFOLDED

\* USER DEFINED CALCULATIONS

US 005/06/01 001 WM--- 009 -- {RAW} \* (12.3)

US 005/06/01 001 WM--- 009 -- {RAW} \* (12.3)



TRIAL SUMMARY  
GENERAL SITE INFORMATION

**TRIAL #:** US 005/06/01 001 WN      **ALTERNATE ID#:** WY 14 2006  
**PROTOCOL#:** US 005/06/01      **ALTERNATE ID#:** WREC-2005  
**CREATED BY:** US RITTER R  
**CREATED:** 05-08-2006      **REVISED:** 12-11-2006      **COMPLETED:** Y  
**TITLE:** PRE AND POST PROGRAMS FOR CONVENTIONAL AND ROUNDUP-READY SOYBEANS  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. MARK SULTENFUSS      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** WYE RES. & ED. CNTR.      **TYPE:** FIELD TRIAL  
**CITY:** QUEENSTOWN      **SUBDIVISION:** MARYLAND  
**COUNTRY:** QUEEN ANNE'S      **ZIP:** 21658  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** WREC -- WYE RESEARCH AND EDUCATION CEI **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 21      **TILLAGE:** COT  
**% SILT:** 59      **PH:** 5.8  
**% CLAY:** 20      **CEC:** 5.9  
**TEXTURE:** SIL      **% OM:** 2.0

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** ---  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 14      **ACTUAL SUB-BLOCKS:** 14

**SOIL GEN:** M**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD**% RESIDUE:** 0**PLOT WIDTH:** 10.00 FT**PLOT LENGTH:** 20.00 FT**PLOT AREA:** 200.00 SFT**SUBMITTED BY:** \_\_\_\_\_**REVIEWED BY:** \_\_\_\_\_**DATE:** \_\_\_\_\_**DATE:** \_\_\_\_\_

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**ABSTRACT**

## A.. Trial Initiation

1. Study planted - 05/25/2006. Variety DeKalb DK 55-51.
2. Preemergence applications made 05/25/2005.
3. Early postemergence applications made 06/14/2006.
4. Mid-postemergence applications made 06/22/2006.
5. Study harvested 12/06/2006.

APPL. NUMBER	01	02	03	UNIT
TIMINGS	00	01	02	
TYPE	LIQMIX	LIQMIX	LIQMIX	
APPLICATION DATE	05-25-06	06-14-06	06-22-06	USA
TIME - BEGIN	18:30	18:00	17:00	24H
TIME - END	19:30	19:00	18:00	24H
AIR TEMPERATURE	65	68	92	F
% REL. HUMIDITY	40	80	80	
WIND DIRECTION	SOUTHWEST	SOUTHWEST	SOUTHWEST	
WIND SPEED	5.0	1.0	2.0	M/H
CLOUD COVER	HAZY SUN	CLOUDY	HAZY SUN	
DEW	NO	NO	NO	
SOIL MOISTURE	DRY/DRY	MOIST/MOI	MOIST/MOI	
SOIL CONDITION	FRIABLE	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	68/4.00	68/4.00	90/4.00	F /
METHOD	SPRAY	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	0.03	GPM
NOZZLE NUMBER	6	6	6	
NOZZLE SPACING	20.000	20.000	20.000	IN
SCREEN SIZE				
SCREEN SZ DESC	NA	NA	NA	
SWATH WIDTH	10.0	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	20.0	IN
SPEED	3.00	3.00	3.00	M/H
MIX SIZE	0.560	0.750	0.750	
MIX SIZE UNIT	GAL	GAL	GAL	
SPRAY VOLUME	18.00	26.00	26.00	
SCREEN SIZE	GPA	GPA	GPA	
PRESSURE	20.00	38.00	38.00	PSI
DILUENT	WATER	WATER	WATER	
INC. DATE				USA
INC. START				24H
INC. END				24H
INC. DEPTH				IN
INC. EQUIPMENT	---	---	---	

## \* TIMING CODES

00 = PREPRE / PREEMERGENCE  
01 = POSPOS / EARLY POSTEMERGENCE - 2 TO 3 WAP  
02 = MIDPOS / MID-POSTEMERGENCE - 4 TO 5 WAP

## \* NOZZLE DESCRIPTION

01 = SS-8003  
02 = SS-8003  
03 = SS-8003

01 P GLXMA - SOYBEAN VAR/SPC INFO: DEKALB 44-51RR  
**TARGET:** CROP **SITE:** FG **POPULATION:** 5.00 SFR **PLANTED:** 05-25-2006  
**PLANTING DEPTH:** 1.0 IN **ROW WIDTH:** 15.0 IN  
**INFESTATION DATE:** - - **METHOD:** NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-25-2006	00	MED	5.00 SFR	.	.	. IN	NA	
06-14-2006	13	MED	5.00 SFR	3.00	3.00	3.00 IN	TUR	
06-22-2006	15	MED	5.00 SFR	6.00	6.00	6.00 IN	TUR	

02 P CHEAL - LAMBSQUARTERS, COMMON PLANTED:  
**TARGET:** PEST **SITE:** FG  
**INFESTATION DATE:** - - **METHOD:** NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-25-2005	00	NA	IND	.	.	. IN	---	

03 P SETFA - FOXTAIL, GIANT PLANTED:  
**TARGET:** PEST **SITE:** FG  
**INFESTATION DATE:** - - **METHOD:** NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-25-2006	00	NA	IND	.	.	. IN	---	
06-14-2006	13	HGH	10.00 IF2	1.00	1.00	1.00 IN	TUR	
06-22-2006	14	HGH	10.00 IF2	6.00	6.00	6.00 IN	TUR	

04 P IPOSS - MORNINGGLORY PLANTED:  
**TARGET:** PEST **SITE:** FG  
**INFESTATION DATE:** - - **METHOD:** NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-25-2006	00	NA	IND	.	.	. IN	---	
06-14-2006	13	LOW	1.00 SQY	2.00	2.00	2.00 IN	TUR	
06-22-2006	16	LOW	1.00 SQY	4.00	4.00	4.00 IN	TUR	

- \* **STAGE CODE -- GENERAL**
- 00 = DRY SEED; DORMANCY
- 13 = 3RD TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- 16 = 6TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- \* **STAGE CODE -- GENERAL GRASS**
- 00 = DRY SEED (CARYOPSIS)
- 13 = 3 LEAVES UNFOLDED
- 14 = 4 LEAVES UNFOLDED
- \* **STAGE CODE -- SOYBEAN**
- 00 = DRY SEED
- 13 = 3RD LEAF (1ST TRIFOLIATE LEAF) UNFOLDED, 2 NODES
- 15 = 5TH LEAF (3RD TRIFOLIATE LEAF) UNFOLDED, 4 NODES

**TITLE:** PRE AND POST PROGRAMS FOR CONVENTIONAL AND ROUNDUP-READY SOYBEANS  
**CREATED:** 05-08-2006 **REVISED:** 12-11-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	06-14-06 P GLXMA 13 VAR 01 PHY % 1.00 PL ALL	06-14-06 P SETFA 13 CON % 1.00 PL ALL	06-22-06 P SETFA 14 CON % 1.00 PL ALL	06-28-06 P SETFA CON % 1.00 PL ALL	06-28-06 P IPOSS CON % 1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»VALOR SX (51WG) B»FIRSTRATE (84 WG)	0.05 0.016	LAA LAA	0 0	17	92	85	53	77	
3A»VALOR SX (51WG) B»FIRSTRATE (84 WG)	0.06 0.021	LAA LAA	0 0	27	98	93	73	100	
4A»VALOR SX (51WG) B»FIRSTRATE (84 WG)	0.08 0.026	LAA LAA	0 0	25	100	97	75	97	
5A»VALOR SX (51WG) B»FIRSTRATE (84 WG)	0.10 0.031	LAA LAA	0 0	23	100	95	82	90	
6A»VALOR SX (51WG) B»ROUNDUP WEATHER MAX (5.5 SL) C SURFACTANT - NON-IONIC (SL)	0.06 0.773 0.25	LAA LAA PMV	0 2 2	15	97	93	97	87	
7A»VALOR SX (51WG) B»FIRSTRATE (84 WG) C»ROUNDUP WEATHER MAX (5.5 SL) D SURFACTANT - NON-IONIC (SL)	0.05 0.016 0.773 0.25	LAA LAA LAA PMV	0 0 2 2	13	98	87	100	90	
8A»ROUNDUP WEATHER MAX (5.5 SL) B SURFACTANT - NON-IONIC (SL)	0.773 0.25	LAA PMV	2 2	0	0	0	100	83	
9A»SEQUENCE (5.25SL)	1.64	LAA	1	0	0	100	100	80	
10A»SEQUENCE (5.25SL)	2.30	LAA	1	0	0	100	97	93	
11A»PREFIX (5.32EC)	2.00	LAA	0	12	100	100	97	40	
12A»PREFIX (5.32EC) B LOROX DF (50WG)	2.00 0.50	LAA LAA	0 0	20	100	100	95	75	
13A»PREFIX (5.32EC) B»TOUCHDOWN TOTAL (5.1SL)	1.30 0.78	LAA LAA	0 2	17	100	98	100	87	
14A UNTREATED CHECK	0.00	NA	1	0	0	0	0	0	
				LSD (0.05)	6.52	4.56	7.80	9.47	29.63
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	3.17	2.22	3.79	4.61	14.41
				COEFFICIENT OF VARIANCE	32.28	4.30	6.20	7.39	24.75
				DAT APPLICATION # 01 TIMINGS (00)	20	20	28	34	34
				DAT APPLICATION # 02 TIMINGS (01)	0	0	8	14	14
				DAT APPLICATION # 03 TIMINGS (02)	NA	NA	0	6	6

**TITLE:** PRE AND POST PROGRAMS FOR CONVENTIONAL AND ROUNDUP-READY SOYBEANS  
**CREATED:** 05-08-2006 **REVISED:** 12-11-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	009 RAW	010 RAW	VAR 01
	RATE	UNIT	TM	07-06-06 P SETFA	07-06-06 P IPOSS	07-26-06 P SETFA	08-08-06 P SETFA	12-06-06 P GLXMA	YLD LB 1.00
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL		PL SD
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0		2.2
2A»VALOR SX (51WG)	0.05	LAA	0	40	77	33	25		4.0
B»FIRSTRATE (84 WG)	0.016	LAA	0						
3A»VALOR SX (51WG)	0.06	LAA	0	68	100	53	37		3.3
B»FIRSTRATE (84 WG)	0.021	LAA	0						
4A»VALOR SX (51WG)	0.08	LAA	0	72	97	63	57		4.0
B»FIRSTRATE (84 WG)	0.026	LAA	0						
5A»VALOR SX (51WG)	0.10	LAA	0	80	90	72	72		3.4
B»FIRSTRATE (84 WG)	0.031	LAA	0						
6A»VALOR SX (51WG)	0.06	LAA	0	98	90	100	100		3.1
B»ROUNDUP WEATHER MAX (5.5 SL)	0.773	LAA	2						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2						
7A»VALOR SX (51WG)	0.05	LAA	0	98	93	98	98		3.5
B»FIRSTRATE (84 WG)	0.016	LAA	0						
C»ROUNDUP WEATHER MAX (5.5 SL)	0.773	LAA	2						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	2						
8A»ROUNDUP WEATHER MAX (5.5 SL)	0.773	LAA	2	95	87	97	98		4.6
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2						
9A»SEQUENCE (5.25SL)	1.64	LAA	1	100	77	98	98		3.4
10A»SEQUENCE (5.25SL)	2.30	LAA	1	98	90	98	97		3.7
11A»PREFIX (5.32EC)	2.00	LAA	0	97	40	97	95		3.3
12A»PREFIX (5.32EC)	2.00	LAA	0	95	68	97	95		3.7
B LOROX DF (50WG)	0.50	LAA	0						
13A»PREFIX (5.32EC)	1.30	LAA	0	100	90	100	100		3.0
B»TOUCHDOWN TOTAL (5.1SL)	0.78	LAA	2						
14A UNTREATED CHECK	0.00	NA	1	0	0	0	0		3.7
				LSD (0.05)	9.63	29.94	12.36	23.07	1.34
				SIGNIFICANCE OF F	**	**	**	**	NS
				STANDARD DEVIATION	4.68	14.56	6.00	11.22	0.654
				COEFFICIENT OF VARIANCE	7.71	25.00	10.24	19.80	22.85
				DAT APPLICATION # 01 TIMINGS (00)	42	42	62	75	195
				DAT APPLICATION # 02 TIMINGS (01)	22	22	42	55	175
				DAT APPLICATION # 03 TIMINGS (02)	14	14	34	47	167

TITLE: PRE AND POST PROGRAMS FOR CONVENTIONAL AND ROUNDUP-READY SOYBEANS  
 CREATED: 05-08-2006 REVISED: 12-11-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: WYE RES. & ED. CNTR. RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			YLD BU 1.00 A SD
	RATE	UNIT	TM	
1A UNTREATED CHECK	0.00	NA	0	27.0
2A>>VALOR SX (51WG)	0.05	LAA	0	49.6
B>>FIRSTRATE (84 WG)	0.016	LAA	0	
3A>>VALOR SX (51WG)	0.06	LAA	0	40.2
B>>FIRSTRATE (84 WG)	0.021	LAA	0	
4A>>VALOR SX (51WG)	0.08	LAA	0	49.6
B>>FIRSTRATE (84 WG)	0.026	LAA	0	
5A>>VALOR SX (51WG)	0.10	LAA	0	41.4
B>>FIRSTRATE (84 WG)	0.031	LAA	0	
6A>>VALOR SX (51WG)	0.06	LAA	0	38.1
B>>ROUNDUP WEATHER MAX (5.5 SL)	0.773	LAA	2	
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2	
7A>>VALOR SX (51WG)	0.05	LAA	0	42.6
B>>FIRSTRATE (84 WG)	0.016	LAA	0	
C>>ROUNDUP WEATHER MAX (5.5 SL)	0.773	LAA	2	
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	2	
8A>>ROUNDUP WEATHER MAX (5.5 SL)	0.773	LAA	2	57.0
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2	
9A>>SEQUENCE (5.25SL)	1.64	LAA	1	42.2
10A>>SEQUENCE (5.25SL)	2.30	LAA	1	45.9
11A>>PREFIX (5.32EC)	2.00	LAA	0	41.0
12A>>PREFIX (5.32EC)	2.00	LAA	0	45.5
B LOROX DF (50WG)	0.50	LAA	0	
13A>>PREFIX (5.32EC)	1.30	LAA	0	37.3
B>>TOUCHDOWN TOTAL (5.1SL)	0.78	LAA	2	
14A UNTREATED CHECK	0.00	NA	1	45.5
		LSD (0.05)		16.52
		SIGNIFICANCE OF F		NS
		STANDARD DEVIATION		8.00
		COEFFICIENT OF VARIANCE		22.85
		DAT APPLICATION # 01 TIMINGS (00)		195
		DAT APPLICATION # 02 TIMINGS (01)		175
		DAT APPLICATION # 03 TIMINGS (02)		167

>> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 05-25-2006(1)  
 01 = POSPOS / EARLY POSTEMERGENCE - 2 TO 3 WAP 06-14-2006(2)  
 02 = MIDPOS / MID-POSTEMERGENCE - 4 TO 5 WAP 06-22-2006(3)

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRTR	SS	NOTE
001	GLXMA	% PHYTO	06-14-2006	01	P	GLXMA	13	RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	SETFA	CON %	06-14-2006	03	P	SETFA	13	RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N

## TITLE: PRE AND POST PROGRAMS FOR CONVENTIONAL AND ROUNDUP-READY SOYBEANS

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
003	SETFA	CON %	06-22-2006	03	P	SETFA	14	RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
004	SETFA	CON %	06-28-2006	03	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	IPOSS	CON %	06-28-2006	04	P	IPOSS		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	SETFA	CON %	07-06-2006	03	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
007	IPOSS	CON %	07-06-2006	04	P	IPOSS		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
008	SETFA	CON %	07-26-2006	03	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
009	SETFA	CON %	08-08-2006	03	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
010	GLXMA	YLD/PLOT	12-06-2006	01	P	GLXMA		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	GLXMA	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

## \* VARIETY/SPECIE INFO CODES

VAR 01 = DEKALB 44-51RR

## \* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = DEKALB 44-51RR

## \* STAGE CODE

13 = 3RD LEAF (1ST TRIFOLIATE LEAF) UNFOLDED, 2 NODES

13 = 3 LEAVES UNFOLDED

14 = 4 LEAVES UNFOLDED

## \* USER DEFINED CALCULATIONS

US 005/06/01 001 WN--- 010 -- {RAW} \* (12.3)

US 005/06/01 001 WN--- 010 -- {RAW} \* (12.3)



**TRIAL SUMMARY  
GENERAL SITE INFORMATION**

**TRIAL #:** US 005/06/01 001 WO      **ALTERNATE ID#:** WY 15 2006  
**PROTOCOL#:** US 005/06/01      **ALTERNATE ID#:** US 005/04/01  
**CREATED BY:** US RITTER R  
**CREATED:** 05-08-2006      **REVISED:** 12-11-2006      **COMPLETED:** Y  
**TITLE:** PRE AND POST CONTROL OF COMMON LAMBSQUARTERS IN CONVENTIONAL SOYBEANS  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. MARK SULTENFUSS      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** WYE RES. & ED. CNTR.      **TYPE:** FIELD TRIAL  
**CITY:** QUEENSTOWN      **SUBDIVISION:** MARYLAND  
**COUNTY:** QUEEN ANNE'S      **ZIP:** 21658  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** WREC -- WYE RESEARCH AND EDUCATION CEI **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 21      **TILLAGE:** COT  
**% SILT:** 59      **PH:** 5.8  
**% CLAY:** 20      **CEC:** 5.9  
**TEXTURE:** SIL      **% OM:** 2.0  
**SOIL GEN:** M  
**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** ---  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 16      **ACTUAL SUB-BLOCKS:** 16

**SUBMITTED BY:** \_\_\_\_\_

**REVIEWED BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted - 05/25/2006. Variety DeKalb DK 55-51.
2. Preemergence applications made 05/25/2005.
3. Select plus COC (8 oz. + 1 qt/acre) applied to entire study on 06/14/2006.
4. Early postemergence applications made 06/22/2006.
5. Mid-postemergence applications made 07/03/2006.
6. Study harvested 12/06/2006.

APPL. NUMBER	01	02	03	UNIT
TIMINGS	00	01	02	
TYPE	LIQMIX	LIQMIX	LIQMIX	
APPLICATION DATE	05-25-06	06-22-06	07-03-06	USA
TIME - BEGIN	18:30	17:00	13:00	24H
TIME - END	19:30	18:00	13:30	24H
AIR TEMPERATURE	65	92	86	F
% REL. HUMIDITY	40	80	80	
WIND DIRECTION	SOUTHWEST	SOUTHWEST	SOUTH	
WIND SPEED	5.0	2.0	3.0	M/H
CLOUD COVER	HAZY SUN	HAZY SUN	HAZY SUN	
DEW	NO	NO	NO	
SOIL MOISTURE	DRY/DRY	MOIST/MOI	MOIST/MOI	
SOIL CONDITION	FRIABLE	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	68/4.00	90/4.00	84/4.00	F /
METHOD	SPRAY	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	0.03	GPM
NOZZLE NUMBER	6	6	6	
NOZZLE SPACING	20.000	20.000	20.000	IN
SCREEN SIZE				
SCREEN SZ DESC	NA	NA	NA	
SWATH WIDTH	10.0	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	20.0	IN
SPEED	3.00	3.00	3.00	M/H
MIX SIZE	0.560	0.750	0.750	
MIX SIZE UNIT	GAL	GAL	GAL	
SPRAY VOLUME	18.00	26.00	26.00	
SCREEN SIZE	GPA	GPA	GPA	
PRESSURE	20.00	38.00	38.00	PSI
DILUENT	WATER	WATER	WATER	
INC. DATE				USA
INC. START				24H
INC. END				24H
INC. DEPTH				IN
INC. EQUIPMENT	---	---	---	

## \* TIMING CODES

00 = PREPRE / PREEMERGENCE  
01 = POSPOS / EARLY POSTEMERGENCE - 3" WEEDS  
02 = MIDPOS / MID-POSTEMERGENCE - 4-6" WEEDS

## \* NOZZLE DESCRIPTION

01 = SS-8003  
02 = SS-8003  
03 = SS-8003

01 P GLXMA - SOYBEAN                                 **VAR/SPC INFO:** DEKALB 44-51RR  
**TARGET:** CROP     **SITE:** FG                   **POPULATION:** 5.00 SFR           **PLANTED:** 05-25-2006  
**PLANTING DEPTH:** 1.0 IN                                 **ROW WIDTH:** 15.0 IN  
**INFESTATION DATE:** - - **METHOD:** NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-25-2006	00	MED	5.00 SFR	.	.	IN		NA	
06-22-2006	15	MED	5.00 SFR	6.00	6.00	6.00 IN		TUR	
07-03-2006	16	MED	5.00 SFR	10.00	10.00	10.00 IN		TUR	

02 P SETFA - FOXTAIL, GIANT  
**TARGET:** PEST     **SITE:** FG                                 **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-25-2006	00	NA	IND	.	.	IN		---	

03 P IPOSS - MORNINGGLORY  
**TARGET:** PEST     **SITE:** FG                                 **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-25-2006	00	NA	IND	.	.	IN		---	
06-22-2006	14	LOW	1.00 SQY	4.00	4.00	4.00 IN		TUR	

04 P DATST - JIMSONWEED  
**TARGET:** PEST     **SITE:** FG                                 **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-25-2006	00	NA	IND	.	.	IN		---	
06-22-2006	14	LOW	3.00 SQY	4.00	4.00	4.00 IN		TUR	
07-03-2006	16	LOW	3.00 SQY	8.00	10.00	8.00 IN		TUR	

05 P CHEAL - LAMBSQUARTERS, COMMON  
**TARGET:** PEST     **SITE:** FG                                 **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-25-2006	00	NA	IND	.	.	IN		---	
06-22-2006	14	LOW	3.00 SQY	1.00	1.00	1.00 IN		TUR	
07-03-2006	19	LOW	3.00 SQY	4.00	6.00	4.00 IN		TUR	

06 P ABUTH - VELVETLEAF  
**TARGET:** PEST     **SITE:** FG                                 **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-25-2006	00	NA	IND	.	.	IN		---	
06-22-2006	14	LOW	1.00 SQY	2.00	2.00	2.00 IN		TUR	

07 P XANST - COCKLEBUR, COMMON  
**TARGET:** PEST     **SITE:** FG                                 **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-25-2006	00	NA	IND	.	.	IN		---	
07-03-2006	16	LOW	1.00 SQY	8.00	10.00	8.00 IN		TUR	

## \* STAGE CODE -- GENERAL

00 = DRY SEED; DORMANCY  
14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED  
16 = 6TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED  
19 = >8 TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED

## \* STAGE CODE -- GENERAL GRASS

00 = DRY SEED (CARYOPSIS)

## \* STAGE CODE -- SOYBEAN

00 = DRY SEED  
15 = 5TH LEAF (3RD TRIFOLIATE LEAF) UNFOLDED, 4 NODES  
16 = 6TH LEAF (4TH TRIFOLIATE LEAF) UNFOLDED, 5 NODES

**TITLE:** PRE AND POST CONTROL OF COMMON LAMBSQUARTERS IN CONVENTIONAL SOYBEANS  
**CREATED:** 05-08-2006 **REVISED:** 12-11-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW
	RATE	UNIT	TM	06-28-06 P CHEAL	06-28-06 P DATST	07-11-06 P CHEAL	07-11-06 P DATST	07-26-06 P CHEAL
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
2A»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	2	0	0	87	97	100
3A»ROUNDUP WEATHER MAX (5.5 SL)	0.773	LAA	1	90	97	93	100	100
B»RAPTOR (1AS)	0.031	LAA	1					
4A»VALOR SX (51WG)	0.064	LAA	0	97	97	100	100	100
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	2					
5A»VALOR SX (51WG)	0.064	LAA	0	100	100	100	100	100
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	1					
C»RAPTOR (1AS)	0.031	LAA	1					
6A»VALOR SX (51WG)	0.064	LAA	0	100	100	100	100	100
B»RAPTOR (1AS)	0.031	LAA	1					
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1					
7A»VALOR SX (51WG)	0.064	LAA	0	97	97	100	100	100
B»PROWL H20 (3.8CS)	0.95	LAA	0					
C»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	2					
8A»PROWL H20 (3.8CS)	0.95	LAA	0	87	43	93	100	100
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	2					
9A»PROWL H20 (3.8CS)	0.95	LAA	0	93	97	97	100	100
B»RAPTOR (1AS)	0.031	LAA	1					
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1					
10A CANOPY (75WG)	0.188	LAA	0	100	100	100	100	100
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	1					
C»HARMONY GT (50SG)	0.083	LAA	1					
11A»BOUNDARY (6.5EC)	1.70	LAA	0	98	97	100	100	100
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	2					
12A»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	1	93	100	97	100	100
B»HARMONY GT (50SG)	0.083	LAA	1					
13A»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	1	93	100	97	100	100
B BASAGRAN (4SL)	1.00	LAA	1					
14A»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	1	98	97	100	100	100
B»RESOURCE (0.86EC)	0.054	LAA	1					
15A LOROX DF (50WG)	0.375	LAA	0	77	30	97	98	100
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	2					
16A SENCOR DF (75WG)	0.25	LAA	0	85	85	97	100	100
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	2					
LSD (0.05)				8.85	21.86	6.92	2.73	0.00
SIGNIFICANCE OF F				**	**	**	**	**
STANDARD DEVIATION				4.34	10.71	3.39	1.34	0.00
COEFFICIENT OF VARIANCE				6.49	16.94	4.56	1.75	0.00
DAT APPLICATION # 01 TIMINGS (00)				34	34	47	47	62
DAT APPLICATION # 02 TIMINGS (01)				6	6	19	19	34
DAT APPLICATION # 03 TIMINGS (02)				NA	NA	8	8	23

**TITLE:** PRE AND POST CONTROL OF COMMON LAMBSQUARTERS IN CONVENTIONAL SOYBEANS  
**CREATED:** 05-08-2006 **REVISED:** 12-11-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	007 CALC	
	RATE	UNIT	TM	07-26-06 P DATST	12-06-06 P GLXMA	12-06-06 P GLXMA	
				CON % 1.00	VAR 01 YLD LB 1.00	VAR 01 YLD BU 1.00	
				PL ALL	PL SD	PL SD	
1A UNTREATED CHECK	0.00	NA	0	0	1.1	13.9	
2A»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	2	100	3.3	41.0	
3A»ROUNDUP WEATHER MAX (5.5 SL)	0.773	LAA	1	100	3.2	39.0	
B»RAPTOR (1AS)	0.031	LAA	1				
4A»VALOR SX (51WG)	0.064	LAA	0	100	2.6	32.4	
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	2				
5A»VALOR SX (51WG)	0.064	LAA	0	100	2.8	34.5	
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	1				
C»RAPTOR (1AS)	0.031	LAA	1				
6A»VALOR SX (51WG)	0.064	LAA	0	100	2.4	29.9	
B»RAPTOR (1AS)	0.031	LAA	1				
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1				
7A»VALOR SX (51WG)	0.064	LAA	0	100	3.0	36.9	
B»PROWL H2O (3.8CS)	0.95	LAA	0				
C»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	2				
8A»PROWL H2O (3.8CS)	0.95	LAA	0	100	3.5	42.6	
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	2				
9A»PROWL H2O (3.8CS)	0.95	LAA	0	100	2.4	29.5	
B»RAPTOR (1AS)	0.031	LAA	1				
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1				
10A CANOPY (75WG)	0.188	LAA	0	100	2.1	25.8	
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	1				
C»HARMONY GT (50SG)	0.083	LAA	1				
11A»BOUNDARY (6.5EC)	1.70	LAA	0	100	2.9	35.7	
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	2				
12A»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	1	100	2.1	25.4	
B»HARMONY GT (50SG)	0.083	LAA	1				
13A»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	1	100	2.0	24.2	
B BASAGRAN (4SL)	1.00	LAA	1				
14A»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	1	100	3.1	38.1	
B»RESOURCE (0.86EC)	0.054	LAA	1				
15A LOROX DF (50WG)	0.375	LAA	0	100	3.0	36.5	
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	2				
16A SENCOR DF (75WG)	0.25	LAA	0	100	1.9	23.8	
B»ROUNDUP ORIGINAL MAX (4.5 AE)	0.773	LAA	2				
				LSD (0.05)	0.00	1.26	15.53
				SIGNIFICANCE OF F	**	*	*
				STANDARD DEVIATION	0.00	0.618	7.61
				COEFFICIENT OF VARIANCE	0.00	29.26	29.27
				DAT APPLICATION # 01 TIMINGS (00)	62	195	195
				DAT APPLICATION # 02 TIMINGS (01)	34	167	167
				DAT APPLICATION # 03 TIMINGS (02)	23	156	156

» = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

\*\*\* CONTINUE ON NEXT PAGE

00 = PREPRE / PREEMERGENCE  
 00 = PREPRE / PREEMERGENCE 05-25-2006(1)  
 01 = POSPOS / EARLY POSTEMERGENCE - 3" WEEDS 06-22-2006(2)  
 02 = MIDPOS / MID-POSTEMERGENCE - 4-6" WEEDS 07-03-2006(3)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR1	SS	NOTE
001	CHEAL	CON %	06-28-2006	05	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
002	DATST	CON %	06-28-2006	04	P	DATST		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
003	CHEAL	CON %	07-11-2006	05	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
004	DATST	CON %	07-11-2006	04	P	DATST		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
005	CHEAL	CON %	07-26-2006	05	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
006	DATST	CON %	07-26-2006	04	P	DATST		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
007	GLKMA	YLD/PLOT	12-06-2006	01	P	GLKMA		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	GLKMA	YLD/ACRE						CALC	SD	YLD	BU	H	1.00 PL				

\* VARIETY/SPECIE INFO CODES

VAR 01 = DEKALB 44-51RR

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = DEKALB 44-51RR

\* USER DEFINED CALCULATIONS

US 005/06/01 001 WO--- 007 -- {RAW} \* (12.3)

US 005/06/01 001 WO--- 007 -- {RAW} \* (12.3)

**TRIAL SUMMARY  
GENERAL SITE INFORMATION**

**TRIAL #:** US 005/06/01 001 WR      **ALTERNATE ID#:** WY 18 2006  
**PROTOCOL#:** US 005/06/01      **ALTERNATE ID#:** HAYDEN FARM-06  
**CREATED BY:** US RITTER R  
**CREATED:** 05-22-2006      **REVISED:** 12-11-2006      **COMPLETED:** N  
**TITLE:** USE OF LIBERTY ON LIBERTY-LINK SOYBEANS  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** TO BE SELECTED  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. MARK SULTENFUSS      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** WYE RES. & ED. CNTR.      **TYPE:** FIELD TRIAL  
**CITY:** QUEENSTOWN      **SUBDIVISION:** MARYLAND  
**COUNTY:** QUEEN ANNE'S      **ZIP:** 21658  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** WREC -- WYE RESEARCH AND EDUCATION CEI **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 21      **TILLAGE:** COT  
**% SILT:** 59      **PH:** 5.8  
**% CLAY:** 20      **CEC:** 5.9  
**TEXTURE:** SIL      **% OM:** 2.0

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** EFF  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 12      **ACTUAL SUB-BLOCKS:** 12

**SOIL GEN:** M  
**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_



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**ABSTRACT**

## A. Trial Initiation

1. Study planted - 05/25/2006. Variety - L37335L.
2. Preemergence applications made 05/25/2005.
3. Early postemergence applications made 06/14/2005.
4. Mid-postemergence applications made 06/22/2006.
5. Study not taken to yield.

APPL. NUMBER	01	02	03	UNIT
TIMINGS	00	01	02	
TYPE	LIQMIX	LIQMIX	LIQMIX	
APPLICATION DATE	05-25-05	06-14-06	06-22-06	USA
TIME - BEGIN	18:30	18:00	17:00	24H
TIME - END	19:30	19:00	18:00	24H
AIR TEMPERATURE	65	68	92	F
% REL. HUMIDITY	40	80	80	
WIND DIRECTION	SOUTHWEST	SOUTHWEST	SOUTHWEST	
WIND SPEED	5.0	1.0	2.0	M/H
CLOUD COVER	HAZY SUN	CLOUDY	HAZY SUN	
DEW	NO	NO	NO	
SOIL MOISTURE	DRY/DRY	MOIST/MOI	MOIST/MOI	
SOIL CONDITION	FRIABLE	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	68/4.00	68/4.00	90/4.00	F /
METHOD	SPRAY	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	0.03	GPM
NOZZLE NUMBER	6	6	6	
NOZZLE SPACING	20.000	20.000	20.000	IN
SCREEN SIZE				
SCREEN SZ DESC	NA	NA	NA	
SWATH WIDTH	10.0	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	20.0	IN
SPEED	3.00	3.00	3.00	M/H
MIX SIZE	0.560	0.750	0.750	
MIX SIZE UNIT	GAL	GAL	GAL	
SPRAY VOLUME	18.00	26.00	26.00	
SCREEN SIZE	GPA	GPA	GPA	
PRESSURE	20.00	38.00	38.00	PSI
DILUENT	WATER	WATER	WATER	
INC. DATE				USA
INC. START				24H
INC. END				24H
INC. DEPTH				IN
INC. EQUIPMENT	---	---	---	

## \* TIMING CODES

00 = PREPRE / PREEMERGENCE  
01 = POSPOS / EARLY POSTEMERGENCE  
02 = MIDPOS / MID-POSTEMERGENCE

## \* NOZZLE DESCRIPTION

01 = SS-8003  
02 = SS-8003  
03 = SS-8003

01 P GLXMA - SOYBEAN

VAR/SPC INFO: L37335L

TARGET: CROP SITE: FG POPULATION: 5.00 SFR PLANTED: 05-25-2006  
PLANTING DEPTH: 1.0 IN ROW WIDTH: 15.0 IN

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-25-2006	00	MED	5.00 SFR	.	.	. IN		NA	
06-14-2006	13	MED	5.00 SFR	3.00	3.00	3.00 IN		TUR	
06-22-2006	15	MED	5.00 SFR	6.00	6.00	6.00 IN		TUR	

02 P CHEAL - LAMBSQUARTERS, COMMON

TARGET: PEST SITE: FG PLANTED:

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-25-2006	00	NA	IND	.	.	. IN		---	

03 P SETFA - FOXTAIL, GIANT

TARGET: PEST SITE: FG PLANTED:

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-25-2006	00	NA	IND	.	.	. IN		---	
06-14-2006	13	HGH	10.00 IF2	1.00	1.00	1.00 IN		TUR	
06-22-2006	14	HGH	10.00 IF2	6.00	6.00	6.00 IN		TUR	

04 P IPOSS - MORNINGGLORY

TARGET: PEST SITE: FG PLANTED:

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-25-2006	00	NA	IND	.	.	. IN		---	
06-14-2006	13	LOW	1.00 SQY	2.00	2.00	2.00 IN		TUR	
06-22-2006	16	LOW	1.00 SQY	4.00	4.00	4.00 IN		TUR	

\* STAGE CODE -- GENERAL

- 00 = DRY SEED; DORMANCY
- 13 = 3RD TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- 16 = 6TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED

\* STAGE CODE -- GENERAL GRASS

- 00 = DRY SEED (CARYOPSIS)
- 13 = 3 LEAVES UNFOLDED
- 14 = 4 LEAVES UNFOLDED

\* STAGE CODE -- SOYBEAN

- 00 = DRY SEED
- 13 = 3RD LEAF (1ST TRIFOLIATE LEAF) UNFOLDED, 2 NODES
- 15 = 5TH LEAF (3RD TRIFOLIATE LEAF) UNFOLDED, 4 NODES

**TITLE:** USE OF LIBERTY ON LIBERTY-LINK SOYBEANS  
**CREATED:** 05-22-2006 **REVISED:** 12-11-2006 **COMPLETED:** N  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	06-22-06 P SETFA 14	06-28-06 P SETFA	06-28-06 P IPOSS	07-06-06 P SETFA	07-06-06 P IPOSS	
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	100	98	100	98	98	
B CANOPY (75WG)	0.188	LAA	0						
3A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	100	100	98	100	97	
B»LIBERTY (1.67 EC)	0.31	LAA	2						
C FERTILIZER-21% AMMONIUM SULFATE	3.00	LMA	2						
4A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	97	100	100	100	100	
B»LIBERTY (1.67 EC)	0.42	LAA	2						
C FERTILIZER-21% AMMONIUM SULFATE	3.00	LMA	2						
5A PURSUIT (2SL)	0.063	LAA	1	90	87	97	85	97	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1						
C FERTILIZER - 28%UAN	2.00	QMA	1						
6A»LIBERTY (1.67 EC)	0.42	LAA	1	100	93	100	87	98	
7A»LIBERTY (1.67 EC)	0.42	LAA	1	97	92	100	88	100	
B FERTILIZER-21% AMMONIUM SULFATE	3.00	LMA	1						
8A»LIBERTY (1.67 EC)	0.42	LAA	2	0	97	100	93	100	
9A»LIBERTY (1.67 EC)	0.42	LAA	2	0	95	100	88	98	
B FERTILIZER-21% AMMONIUM SULFATE	3.00	LMA	2						
10A»LIBERTY (1.67 EC)	0.31	LAA	1	100	100	100	93	100	
B FERTILIZER-21% AMMONIUM SULFATE	3.00	LMA	1						
C»LIBERTY (1.67 EC)	0.31	LAA	2						
D FERTILIZER-21% AMMONIUM SULFATE	3.00	LMA	2						
11A»LIBERTY (1.67 EC)	0.42	LAA	1	100	100	100	97	100	
B FERTILIZER-21% AMMONIUM SULFATE	3.00	LMA	1						
C»LIBERTY (1.67 EC)	0.42	LAA	2						
D FERTILIZER-21% AMMONIUM SULFATE	3.00	LMA	2						
12A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSL (0.05)	4.08	3.81	3.21	4.60	4.76
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	2.00	1.83	1.55	2.22	2.29
				COEFFICIENT OF VARIANCE	3.69	2.80	2.29	3.51	3.41
				DAT APPLICATION # 01 TIMINGS (00)	393	399	399	407	407
				DAT APPLICATION # 02 TIMINGS (01)	8	14	14	22	22
				DAT APPLICATION # 03 TIMINGS (02)	0	6	6	14	14

**TITLE:** USE OF LIBERTY ON LIBERTY-LINK SOYBEANS  
**CREATED:** 05-22-2006 **REVISED:** 12-11-2006 **COMPLETED:** N  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** WYE RES. & ED. CNTR. **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			CON %	CON %	CON %
	RATE	UNIT	TM	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL
006 RAW 07-11-06 P SETFA					007 RAW 07-11-06 P IPOSS	008 RAW 07-26-06 P SETFA
1A UNTREATED CHECK	0.00	NA	0	0	0	0
2A»DUAL II MAGNUM (7.64EC) B CANOPY (75WG)	1.59 0.188	LAA LAA	0 0	95	100	85
3A»DUAL II MAGNUM (7.64EC) B»LIBERTY (1.67 EC) C FERTILIZER-21% AMMONIUM SULFATE	1.59 0.31 3.00	LAA LAA LMA	0 2 2	100	97	100
4A»DUAL II MAGNUM (7.64EC) B»LIBERTY (1.67 EC) C FERTILIZER-21% AMMONIUM SULFATE	1.59 0.42 3.00	LAA LAA LMA	0 2 2	100	100	100
5A PURSUIT (2SL) B SURFACTANT - NON-IONIC (SL) C FERTILIZER - 28%UAN	0.063 0.25 2.00	LAA PMV QMA	1 1 1	77	97	80
6A»LIBERTY (1.67 EC)	0.42	LAA	1	75	100	73
7A»LIBERTY (1.67 EC) B FERTILIZER-21% AMMONIUM SULFATE	0.42 3.00	LAA LMA	1 1	73	100	68
8A»LIBERTY (1.67 EC)	0.42	LAA	2	87	100	90
9A»LIBERTY (1.67 EC) B FERTILIZER-21% AMMONIUM SULFATE	0.42 3.00	LAA LMA	2 2	77	97	82
10A»LIBERTY (1.67 EC) B FERTILIZER-21% AMMONIUM SULFATE C»LIBERTY (1.67 EC) D FERTILIZER-21% AMMONIUM SULFATE	0.31 3.00 0.31 3.00	LAA LMA LAA LMA	1 1 2 2	93	100	97
11A»LIBERTY (1.67 EC) B FERTILIZER-21% AMMONIUM SULFATE C»LIBERTY (1.67 EC) D FERTILIZER-21% AMMONIUM SULFATE	0.42 3.00 0.42 3.00	LAA LMA LAA LMA	1 1 2 2	95	100	97
12A UNTREATED CHECK	0.00	NA	0	0	0	0
	LSD (0.05)			9.00	4.89	14.36
	SIGNIFICANCE OF F			**	**	**
	STANDARD DEVIATION			4.35	2.36	6.92
	COEFFICIENT OF VARIANCE			7.33	3.50	11.67
	DAT APPLICATION # 01 TIMINGS (00)			412	412	427
	DAT APPLICATION # 02 TIMINGS (01)			27	27	42
	DAT APPLICATION # 03 TIMINGS (02)			19	19	34

» = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 05-25-2005(1)  
 01 = POSPOS / EARLY POSTEMERGENCE 06-14-2006(2)  
 02 = MIDPOS / MID-POSTEMERGENCE 06-22-2006(3)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	SETFA	CON %	06-22-2006	03	P	SETFA	14	RAW	ALL	CON %	---	---	1.00 PL	NO	0001	0	N
002	SETFA	CON %	06-28-2006	03	P	SETFA		RAW	ALL	CON %	---	---	1.00 PL	NO	0001	0	N
003	IPOSS	CON %	06-28-2006	04	P	IPOSS		RAW	ALL	CON %	---	---	1.00 PL	NO	0001	0	N

TITLE: USE OF LIBERTY ON LIBERTY-LINK SOYBEANS

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRTR	SS	NOTE
004	SETFA	CON %	07-06-2006	03	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	IPOSS	CON %	07-06-2006	04	P	IPOSS		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	SETFA	CON %	07-11-2006	03	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
007	IPOSS	CON %	07-11-2006	04	P	IPOSS		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
008	SETFA	CON %	07-26-2006	03	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N

\* STAGE CODE

14 = 4 LEAVES UNFOLDED



TRIAL SUMMARY  
GENERAL SITE INFORMATION

**TRIAL #:** US 003/06/01 001 HA      **ALTERNATE ID#:** HF 01 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** US 003/04/01  
**CREATED BY:** US RITTER R  
**CREATED:** 09-10-2005      **REVISED:** 10-12-2006      **COMPLETED:** Y  
**TITLE:** WINTER COVER CROPS - I - BURNDOWN CONTROL OF BARLEY IN THE SPRING  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 70      **TILLAGE:** COT  
**% SILT:** 20      **PH:** 6.3  
**% CLAY:** 10      **CEC:** 5.4  
**TEXTURE:** SL      **% OM:** 1.5

**SOIL GEN:** C**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD**% RESIDUE:** 0**PLOT WIDTH:** 10.00 FT**PLOT LENGTH:** 20.00 FT**PLOT AREA:** 200.00 SFT**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** EFF  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 28      **ACTUAL SUB-BLOCKS:** 28

**SUBMITTED BY:** \_\_\_\_\_**REVIEWED BY:** \_\_\_\_\_**DATE:** \_\_\_\_\_**DATE:** \_\_\_\_\_



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**ABSTRACT**

## A. Trial Initiation

1. Study planrtrted 11/04/2005. Variety - Nomini.
2. Applied 20 lb N/A on 11/04/2005.
3. March 15th application made on March 15th.
4. April 1st application made on March 31st.
5. April 15th application made on April 13th.
6. May 1st application made on April 27th.
7. Study planted 05/22/2006. Variety - Pioneer 33B54.
8. Seed protected with Yield Guard and Poncho 1250.
9. Kernal Guard added to the hopper box.
10. 5 gallons of 9-18-9-1S applied in row.
11. 10.8 gallons of 22-0-0-5S applied 2 inches to the side of the row.
12. A total of 30-10-5-6.2S applied at planting.
13. Roundup Weather Max at 24 oz/acre plus Bicep at 2 qt/acre applied to entire study on 05/23/2006.
14. Corn was sidedressed with additional nitrogen on 06/10/2006.
15. Study was harvested 10/04/2006.

APPL. NUMBER	01	02	03	04	UNIT
<b>TIMINGS</b>	01	02	03	04	
<b>TYPE</b>	LIQMIX	LIQMIX	LIQMIX	LIQMIX	
<b>APPLICATION DATE</b>	03-15-06	03-31-06	04-13-06	04-27-06	USA
<b>TIME - BEGIN</b>	09:00	17:00	16:00	16:30	24H
<b>TIME - END</b>	10:00	18:00	17:00	17:30	24H
<b>AIR TEMPERATURE</b>	50	60	72	65	F
<b>% REL. HUMIDITY</b>	20	20	45	40	
<b>WIND DIRECTION</b>	WEST	NORTHWEST	WEST	NORTHWEST	
<b>WIND SPEED</b>	3.0	1.0	5.0	3.0	M/H
<b>CLOUD COVER</b>	CLEAR	PARTCLDY	PARTCLDY	PARTCLDY	
<b>DEW</b>	NO	NO	NO	NO	
<b>SOIL MOISTURE</b>	DRY/DRY	DRY/DRY	DRY/DRY	DRY/MOIST	
<b>SOIL CONDITION</b>	FRIABLE	FRIABLE	FRIABLE	FRIABLE	
<b>SOIL TEMP/DEPTH</b>	45/4.00	55/4.00	65/4.00	66/4.00	F /
<b>METHOD</b>	SPRAY	SPRAY	SPRAY	SPRAY	
<b>EQUIPMENT</b>	SPRBAC	SPRBAC	SPRBAC	SPRBAC	
<b>PROPELLANT</b>	COMCO2	COMCO2	COMCO2	COMCO2	
<b>PLACEMENT</b>	BRFOSO	BRFOSO	BRFOSO	BRFOSO	
<b>NOZZLE</b>	FLATFAN	FLATFAN	FLATFAN	FLATFAN	
<b>NOZZLE VOLUME</b>	0.03	0.03	0.03	0.03	GPM
<b>NOZZLE NUMBER</b>	6	6	6	6	
<b>NOZZLE SPACING</b>	20.000	20.000	20.000	20.000	IN
<b>SCREEN SIZE</b>					
<b>SCREEN SZ DESC</b>	NA	NA	NA	NA	
<b>SWATH WIDTH</b>	10.0	10.0	10.0	10.0	FT
<b>BOOM HEIGHT</b>	20.0	20.0	20.0	20.0	IN
<b>SPEED</b>	3.00	3.00	3.00	3.00	M/H
<b>MIX SIZE</b>	0.560	0.560	0.560	0.560	
<b>MIX SIZE UNIT</b>	GAL	GAL	GAL	GAL	
<b>SPRAY VOLUME</b>	18.00	18.00	18.00	18.00	
<b>SCREEN SIZE</b>	GPA	GPA	GPA	GPA	
<b>PRESSURE</b>	20.00	20.00	20.00	20.00	PSI
<b>DILUENT</b>	WATER	WATER	WATER	WATER	
<b>INC. DATE</b>					USA
<b>INC. START</b>					24H
<b>INC. END</b>					24H
<b>INC. DEPTH</b>					IN
<b>INC. EQUIPMENT</b>	---	---	---	---	

**\* TIMING CODES**

- 01 = POSPOS / POSTEMERGENCE - MARCH 15
- 02 = POSPOS / POSTEMERGENCE - APRIL 1
- 03 = POSPOS / POSTEMERGENCE - APRIL 15
- 04 = POSPOS / POSTEMERGENCE - MAY 1

**\* NOZZLE DESCRIPTION**

- 01 = SS-8003
- 02 = SS-8003
- 03 = SS-8003
- 04 = SS-8003

01 P HORVW - BARLEY, WINTER

VAR/SPC INFO: NOMINI

TARGET: CROP SITE: FG POPULATION: 2.00 BPA PLANTED: 11-04-2005

PLANTING DEPTH: 0.5 IN ROW WIDTH: 6.0 IN

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
11-04-2005	00	MED	2.00 BPA	.	.	. IN		NA	
03-15-2006	14	MED	2.00 BPA	2.00	2.00	2.00 IN		WST	
03-31-2006	22	MED	2.00 BPA	3.00	3.00	3.00 IN		WST	
04-13-2006	25	MED	2.00 BPA	12.00	12.00	12.00 IN		DST	
04-27-2006	55	MED	2.00 BPA	26.00	26.00	26.00 IN		TUR	

02 P CHEAL - LAMBSQUARTERS, COMMON

VAR/SPC INFO: CHEAL

TARGET: PEST SITE: FG PLANTED:

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
- -	---	---	IND	.	.	. IN		---	

03 P ZEAMX - CORN, VOLUNTEER, FIELD

TARGET: PEST SITE: FG

PLANTED:

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
06-05-2006	00	---	IND	.	.	. IN		---	

## \* STAGE CODE -- CEREALS

00 = DRY SEED (CARYOPSIS)

14 = 4 LEAVES UNFOLDED

22 = 2 TILLERS DETECTABLE

25 = 5 TILLERS DETECTABLE

55 = MIDDLE OF HEADING: HALF OF INFLORESCENCE EMERGED

## \* STAGE CODE -- CORN

00 = DRY SEED (CARYOPSIS)

## \* STAGE CODE -- GENERAL

--- = TO BE SELECTED

**TITLE:** WINTER COVER CROPS - I - BURNDOWN CONTROL OF BARLEY IN THE SPRING  
**CREATED:** 09-10-2005 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW
	RATE	UNIT	TM	03-31-06 P HORVW 22 VAR 01 PHY % 1.00 PL ALL	04-13-06 P HORVW 25 VAR 01 PHY % 1.00 PL ALL	04-27-06 P HORVW 55 VAR 01 PHY % 1.00 PL ALL	05-11-06 P HORVW VAR 01 PHY % 1.00 PL ALL	05-11-06 P CHEAL VAR 02 CON % 1.00 PL ALL
1A»GRAMOXONE MAX (3L)	0.50	LAA	1	60	32	25	30	100
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1					
2A»GRAMOXONE MAX (3L)	0.50	LAA	2	0	88	90	90	10
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
3A»GRAMOXONE MAX (3L)	0.50	LAA	3	0	0	57	62	93
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3					
4A»GRAMOXONE MAX (3L)	0.50	LAA	4	0	0	0	92	100
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4					
5A»GRAMOXONE MAX (3L)	0.75	LAA	1	70	55	53	35	80
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1					
6A»GRAMOXONE MAX (3L)	0.75	LAA	2	0	93	97	98	0
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
7A»GRAMOXONE MAX (3L)	0.75	LAA	3	0	0	73	77	87
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3					
8A»GRAMOXONE MAX (3L)	0.75	LAA	4	0	0	0	88	100
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4					
9A»GRAMOXONE MAX (3L)	1.00	LAA	1	77	73	65	57	67
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1					
10A»GRAMOXONE MAX (3L)	1.00	LAA	2	0	92	97	98	27
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
11A»GRAMOXONE MAX (3L)	1.00	LAA	3	0	0	77	78	90
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3					
12A»GRAMOXONE MAX (3L)	1.00	LAA	4	0	0	0	98	100
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4					
13A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	1	87	90	90	88	10
14A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	2	0	78	85	85	10
15A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	3	0	0	78	97	83
16A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	4	0	0	0	85	93
17A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	95	95	97	98	0
18A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	2	0	97	98	100	12
19A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	3	0	0	97	100	87
20A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	4	0	0	0	100	100
21A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	1	98	100	100	100	0
22A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	2	0	93	98	100	12
23A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	3	0	0	100	100	77
24A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	4	0	0	0	100	100
25A UNTREATED CHECK	0.00	NA	1	0	0	0	0	100

## TITLE: WINTER COVER CROPS - I - BURNDOWN CONTROL OF BARLEY IN THE SPRING

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	
26A UNTREATED CHECK	0.00	NA	2	0	0	0	0	100	
27A UNTREATED CHECK	0.00	NA	3	0	0	0	0	100	
28A UNTREATED CHECK	0.00	NA	4	0	0	0	0	100	
				LSD (0.05)	3.12	8.00	10.10	15.17	15.45
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	1.56	4.00	5.00	7.59	7.73
				COEFFICIENT OF VARIANCE	11.00	13.95	11.73	12.65	14.42
				DAT APPLICATION # 01 TIMINGS (01)	16	29	43	57	57
				DAT APPLICATION # 02 TIMINGS (02)	0	13	27	41	41
				DAT APPLICATION # 03 TIMINGS (03)	NA	0	14	28	28
				DAT APPLICATION # 04 TIMINGS (04)	NA	NA	0	14	14

**TITLE:** WINTER COVER CROPS - I - BURNDOWN CONTROL OF BARLEY IN THE SPRING  
**CREATED:** 09-10-2005 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	006 CALC
	RATE	UNIT	TM	10-04-06 P ZEAMX	10-04-06 P ZEAMX
				YLD LB 1.00 PL SD	YLD BU 1.00 A SD
1A»GRAMOXONE MAX (3L)	0.50	LAA	1	13.3	99.6
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1		
2A»GRAMOXONE MAX (3L)	0.50	LAA	2	18.3	137.2
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2		
3A»GRAMOXONE MAX (3L)	0.50	LAA	3	15.7	117.9
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3		
4A»GRAMOXONE MAX (3L)	0.50	LAA	4	18.7	140.7
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4		
5A»GRAMOXONE MAX (3L)	0.75	LAA	1	13.5	101.4
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1		
6A»GRAMOXONE MAX (3L)	0.75	LAA	2	17.0	127.9
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2		
7A»GRAMOXONE MAX (3L)	0.75	LAA	3	13.2	99.4
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3		
8A»GRAMOXONE MAX (3L)	0.75	LAA	4	12.9	96.6
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4		
9A»GRAMOXONE MAX (3L)	1.00	LAA	1	9.0	67.6
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1		
10A»GRAMOXONE MAX (3L)	1.00	LAA	2	12.4	93.2
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2		
11A»GRAMOXONE MAX (3L)	1.00	LAA	3	20.3	152.7
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3		
12A»GRAMOXONE MAX (3L)	1.00	LAA	4	16.3	122.4
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4		
13A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	1	13.3	99.6
14A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	2	16.8	125.9
15A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	3	19.4	145.4
16A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	4	15.0	112.9
17A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	14.6	109.6
18A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	2	13.7	103.1
19A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	3	17.4	130.9
20A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	4	17.8	133.4
21A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	1	16.0	120.4
22A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	2	14.6	109.4
23A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	3	18.5	139.2
24A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	4	19.7	147.7
25A UNTREATED CHECK	0.00	NA	1	13.0	97.4

TITLE: WINTER COVER CROPS - I - BURNDOWN CONTROL OF BARLEY IN THE SPRING

TRT TREATMENT	DOSAGE	YLD LB	YLD BU
NUM COMPONENT	RATE UNIT TM	PL SD	A SD
26A UNTREATED CHECK	0.00 NA 2	11.9	89.1
27A UNTREATED CHECK	0.00 NA 3	15.4	115.7
28A UNTREATED CHECK	0.00 NA 4	20.8	156.2
	LSD (0.05)	7.44	55.85
	SIGNIFICANCE OF F	NS	NS
	STANDARD DEVIATION	3.72	27.92
	COEFFICIENT OF VARIANCE	29.08	29.08
	DAT APPLICATION # 01 TIMINGS (01)	203	203
	DAT APPLICATION # 02 TIMINGS (02)	187	187
	DAT APPLICATION # 03 TIMINGS (03)	174	174
	DAT APPLICATION # 04 TIMINGS (04)	160	160

> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

- 01 = POSPOS / POSTEMERGENCE - MARCH 15 03-15-2006(1)
- 02 = POSPOS / POSTEMERGENCE - APRIL 1 03-31-2006(2)
- 03 = POSPOS / POSTEMERGENCE - APRIL 15 04-13-2006(3)
- 04 = POSPOS / POSTEMERGENCE - MAY 1 04-27-2006(4)

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR	SS	NOTE
001	HORVW	PHYTO %	03-31-2006	01	P	HORVW	22	RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	HORVW	PHYTO %	04-13-2006	01	P	HORVW	25	RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
003	HORVW	PHYTO %	04-27-2006	01	P	HORVW	55	RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
004	HORVW	PHYTO %	05-11-2006	01	P	HORVW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
005	CHEAL	%CONTROL	05-11-2006	02	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	ZEAMX	YLD/PLOT	10-04-2006	03	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

- VAR 01 = NOMINI
- VAR 02 = CHEAL

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

- 01 = NOMINI
- 02 = CHEAL

\* STAGE CODE

- 22 = 2 TILLERS DETECTABLE
- 25 = 5 TILLERS DETECTABLE
- 55 = MIDDLE OF HEADING: HALF OF INFLORESCENCE EMERGED

\* USER DEFINED CALCULATIONS

- US 003/06/01 001 HA--- 006 -- {RAW}\*(7.51)
- US 003/06/01 001 HA--- 006 -- {RAW}\*(7.51)

**TRIAL SUMMARY**  
**GENERAL SITE INFORMATION**

**TRIAL #:** US 003/06/01 001 HB      **ALTERNATE ID#:** HF 02 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** US 003/04/01  
**CREATED BY:** US RITTER R  
**CREATED:** 09-10-2005      **REVISED:** 10-25-2006      **COMPLETED:** Y  
**TITLE:** WINTER COVER CROPS - II - BURNDOWN CONTROL OF RYE IN THE SPRING  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 70      **TILLAGE:** COT  
**% SILT:** 20      **PH:** 6.3  
**% CLAY:** 10      **CEC:** 5.4  
**TEXTURE:** SL      **% OM:** 1.5  
**SOIL GEN:** C  
**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** EFF  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 28      **ACTUAL SUB-BLOCKS:** 28

**SUBMITTED BY:** \_\_\_\_\_

**REVIEWED BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_



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**ABSTRACT**

## A. Trial Initiation

1. Study planted 11/03/2005. Variety - Wheeler.
2. Applied 20 lb N/A on 11/04/2005.
3. March 15th application made on March 15th.
4. April 1st application made on March 31st.
5. April 15th application made on April 13th.
6. May 1st application made on April 27th.
7. Study planted 05/22/2006. Variety - Pioneer 33B54.
8. Seed protected with Yield Guard and Poncho 1250.
9. Kernal Guard added to the hopper box.
10. 5 gallons of 9-18-9-1S applied in row.
11. 10.8 gallons of 22-0-0-5S applied 2 inches to the side of the row.
12. A total of 30-10-5-6.2S applied at planting.
13. Roundup Weather Max at 24 oz/acre plus Bicep at 2 qt/acre applied to entire study on 05/23/2006.
14. Corn was sidedressed with additional nitrogen on 06/10/2006.
15. Study harvested 10/05/2006.

APPL. NUMBER	01	02	03	04	UNIT
<b>TIMINGS</b>	01	02	03	04	
<b>TYPE</b>	LIQMIX	LIQMIX	LIQMIX	LIQMIX	
<b>APPLICATION DATE</b>	03-15-06	03-31-06	04-13-06	04-27-06	USA
<b>TIME - BEGIN</b>	09:00	17:00	16:00	16:30	24H
<b>TIME - END</b>	10:00	18:00	17:00	17:30	24H
<b>AIR TEMPERATURE</b>	50	60	72	65	F
<b>% REL. HUMIDITY</b>	20	20	45	40	
<b>WIND DIRECTION</b>	WEST	NORTHWEST	WEST	NORTHWEST	
<b>WIND SPEED</b>	3.0	1.0	5.0	3.0	M/H
<b>CLOUD COVER</b>	CLEAR	PARTCLDY	PARTCLDY	PARTCLDY	
<b>DEW</b>	NO	NO	NO	NO	
<b>SOIL MOISTURE</b>	DRY/DRY	DRY/DRY	DRY/DRY	DRY/MOIST	
<b>SOIL CONDITION</b>	FRIABLE	FRIABLE	FRIABLE	FRIABLE	
<b>SOIL TEMP/DEPTH</b>	45/4.00	55/4.00	65/4.00	66/4.00	F /
<b>METHOD</b>	SPRAY	SPRAY	SPRAY	SPRAY	
<b>EQUIPMENT</b>	SPRBAC	SPRBAC	SPRBAC	SPRBAC	
<b>PROPELLANT</b>	COMCO2	COMCO2	COMCO2	COMCO2	
<b>PLACEMENT</b>	BRFOSO	BRFOSO	BRFOSO	BRFOSO	
<b>NOZZLE</b>	FLATFAN	FLATFAN	FLATFAN	FLATFAN	
<b>NOZZLE VOLUME</b>	0.03	0.03	0.03	0.03	GPM
<b>NOZZLE NUMBER</b>	6	6	6	6	
<b>NOZZLE SPACING</b>	20.000	20.000	20.000	20.000	IN
<b>SCREEN SIZE</b>					
<b>SCREEN SZ DESC</b>	NA	NA	NA	NA	
<b>SWATH WIDTH</b>	10.0	10.0	10.0	10.0	FT
<b>BOOM HEIGHT</b>	20.0	20.0	20.0	20.0	IN
<b>SPEED</b>	3.00	3.00	3.00	3.00	M/H
<b>MIX SIZE</b>	0.560	0.560	0.560	0.560	
<b>MIX SIZE UNIT</b>	GAL	GAL	GAL	GAL	
<b>SPRAY VOLUME</b>	18.00	18.00	18.00	18.00	
<b>SCREEN SIZE</b>	GPA	GPA	GPA	GPA	
<b>PRESSURE</b>	20.00	20.00	20.00	20.00	PSI
<b>DILUENT</b>	WATER	WATER	WATER	WATER	
<b>INC. DATE</b>					USA
<b>INC. START</b>					24H
<b>INC. END</b>					24H
<b>INC. DEPTH</b>					IN
<b>INC. EQUIPMENT</b>	---	---	---	---	

## \* TIMING CODES

01 = POSPOS / POSTEMERGENCE - MARCH 15  
02 = POSPOS / POSTEMERGENCE - APRIL 1  
03 = POSPOS / POSTEMERGENCE - APRIL 15  
04 = POSPOS / POSTEMERGENCE - MAY 1

## \* NOZZLE DESCRIPTION

01 = SS-8003  
02 = SS-8003  
03 = SS-8003  
04 = SS-8003

01 P SECCW - RYE, WINTER VAR/SPC INFO: WHEELER  
 TARGET: CROP SITE: FG POPULATION: 2.00 BPA PLANTED: 11-03-2005  
 PLANTING DEPTH: 0.5 IN ROW WIDTH: 6.0 IN  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
11-03-2005	00	MED	2.00 BPA	.	.	. IN	NA	
03-15-2006	23	MED	2.00 BPA	3.00	3.00	3.00 IN	WST	
03-31-2006	23	MED	2.00 BPA	5.00	5.00	5.00 IN	WST	
04-17-2006	24	MED	2.00 BPA	15.00	15.00	15.00 IN	DST	
04-27-2006	47	MED	2.00 BPA	30.00	30.00	30.00 IN	TUR	

02 P HORVW - BARLEY, WINTER VAR/SPC INFO: NOMINI  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
- -	01	---	IND	.	.	. IN	---	

03 P CHEAL - LAMBSQUARTERS, COMMON VAR/SPC INFO: CHEAL  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
- -	00	---	IND	.	.	. IN	---	

04 P ZEAMX - CORN, VOLUNTEER, FIELD  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
- -	01	---	IND	.	.	. IN	---	

- \* STAGE CODE -- CEREALS
- 00 = DRY SEED (CARYOPSIS)
- 01 = BEGINNING OF IMBIBITION
- 23 = 3 TILLERS DETECTABLE
- 24 = 4 TILLERS DETECTABLE
- 47 = FLAG LEAF SHEATH OPENING
- \* STAGE CODE -- CORN
- 01 = BEGINNING OF IMBIBITION
- \* STAGE CODE -- GENERAL
- 00 = DRY SEED; DORMANCY

**TITLE:** WINTER COVER CROPS - II - BURNDOWN CONTROL OF RYE IN THE SPRING  
**CREATED:** 09-10-2005 **REVISED:** 10-25-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW
	RATE	UNIT	TM	03-31-06 P SECCW 23 VAR 01 PHY % 1.00 PL ALL	04-13-06 P SECCW 23 VAR 01 PHY % 1.00 PL ALL	04-27-06 P SECCW 47 VAR 01 PHY % 1.00 PL ALL	05-11-06 P SECCW 47 VAR 01 PHY % 1.00 PL ALL	05-11-06 P CHEAL 47 VAR 03 CON % 1.00 PL ALL
1A»GRAMOXONE MAX (3L)	0.50	LAA	1	63	57	43	20	100
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1					
2A»GRAMOXONE MAX (3L)	0.50	LAA	2	0	90	95	95	45
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
3A»GRAMOXONE MAX (3L)	0.50	LAA	3	0	0	73	78	97
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3					
4A»GRAMOXONE MAX (3L)	0.50	LAA	4	0	0	0	87	100
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4					
5A»GRAMOXONE MAX (3L)	0.75	LAA	1	78	83	77	68	73
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1					
6A»GRAMOXONE MAX (3L)	0.75	LAA	2	0	92	100	100	48
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
7A»GRAMOXONE MAX (3L)	0.75	LAA	3	0	0	82	85	100
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3					
8A»GRAMOXONE MAX (3L)	0.75	LAA	4	0	0	0	85	100
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4					
9A»GRAMOXONE MAX (3L)	1.00	LAA	1	82	83	82	78	50
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1					
10A»GRAMOXONE MAX (3L)	1.00	LAA	2	0	92	100	100	23
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
11A»GRAMOXONE MAX (3L)	1.00	LAA	3	0	0	82	92	98
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3					
12A»GRAMOXONE MAX (3L)	1.00	LAA	4	0	0	0	92	100
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4					
13A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	1	85	95	95	97	7
14A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	2	0	87	87	87	40
15A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	3	0	0	85	88	97
16A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	4	0	0	0	83	100
17A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	85	97	97	98	0
18A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	2	0	90	95	97	13
19A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	3	0	0	98	100	90
20A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	4	0	0	0	100	100
21A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	1	93	100	100	100	20
22A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	2	0	92	98	100	7
23A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	3	0	0	98	100	90
24A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	4	0	0	0	100	100
25A UNTREATED CHECK	0.00	NA	1	0	0	0	0	100

TITLE: WINTER COVER CROPS - II - BURNDOWN CONTROL OF RYE IN THE SPRING

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	03-31-06 P SECCW 23 VAR 01 PHY % 1.00 PL ALL	04-13-06 P SECCW 47 VAR 01 PHY % 1.00 PL ALL	04-27-06 P SECCW 47 VAR 01 PHY % 1.00 PL ALL	05-11-06 P SECCW 47 VAR 01 PHY % 1.00 PL ALL	05-11-06 P CHEAL 47 VAR 03 CON % 1.00 PL ALL	
26A UNTREATED CHECK	0.00	NA	2	0	0	0	0	100	
27A UNTREATED CHECK	0.00	NA	3	0	0	0	0	100	
28A UNTREATED CHECK	0.00	NA	4	0	0	0	0	100	
				LSD (0.05)	3.13	3.00	5.33	5.37	21.30
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	1.56	1.50	2.67	2.68	10.65
				COEFFICIENT OF VARIANCE	11.00	4.87	5.76	4.32	18.27
				DAT APPLICATION # 01 TIMINGS (01)	16	29	43	57	57
				DAT APPLICATION # 02 TIMINGS (02)	0	13	27	41	41
				DAT APPLICATION # 03 TIMINGS (03)	NA	0	14	28	28
				DAT APPLICATION # 04 TIMINGS (04)	NA	NA	0	14	14

**TITLE:** WINTER COVER CROPS - II - BURNDOWN CONTROL OF RYE IN THE SPRING  
**CREATED:** 09-10-2005 **REVISED:** 10-25-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW		006 CALC	
	RATE	UNIT	TM	10-04-06	10-04-06	10-04-06	10-04-06
				PL	SD	P	P
				YLD LB		YLD BU	
				1.00		1.00	
				A SD		A SD	
1A»GRAMOXONE MAX (3L)	0.50	LAA	1	19.0		138.0	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1				
2A»GRAMOXONE MAX (3L)	0.50	LAA	2	22.6		163.8	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2				
3A»GRAMOXONE MAX (3L)	0.50	LAA	3	20.3		147.4	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3				
4A»GRAMOXONE MAX (3L)	0.50	LAA	4	24.3		176.7	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4				
5A»GRAMOXONE MAX (3L)	0.75	LAA	1	20.9		152.0	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1				
6A»GRAMOXONE MAX (3L)	0.75	LAA	2	24.4		176.9	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2				
7A»GRAMOXONE MAX (3L)	0.75	LAA	3	23.7		172.1	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3				
8A»GRAMOXONE MAX (3L)	0.75	LAA	4	21.9		159.2	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4				
9A»GRAMOXONE MAX (3L)	1.00	LAA	1	23.7		171.8	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1				
10A»GRAMOXONE MAX (3L)	1.00	LAA	2	22.7		164.8	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2				
11A»GRAMOXONE MAX (3L)	1.00	LAA	3	22.4		162.6	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3				
12A»GRAMOXONE MAX (3L)	1.00	LAA	4	26.7		193.6	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4				
13A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	1	18.0		130.7	
14A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	2	18.5		134.5	
15A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	3	20.2		146.4	
16A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	4	21.8		158.0	
17A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	24.4		177.4	
18A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	2	18.6		135.0	
19A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	3	24.7		179.3	
20A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	4	27.4		198.9	
21A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	1	20.2		146.9	
22A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	2	22.6		164.3	
23A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	3	23.9		173.3	
24A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	4	21.2		154.1	
25A UNTREATED CHECK	0.00	NA	1	16.6		120.3	

TITLE: WINTER COVER CROPS - II - BURNDOWN CONTROL OF RYE IN THE SPRING

TRT TREATMENT NUM COMPONENT	DOSAGE RATE UNIT TM	YLD LB		YLD BU	
		PL	SD	A	SD
26A UNTREATED CHECK	0.00 NA 2	14.1		102.6	
27A UNTREATED CHECK	0.00 NA 3	20.0		145.0	
28A UNTREATED CHECK	0.00 NA 4	18.7		135.8	
	LSD (0.05)	6.25		45.40	
	SIGNIFICANCE OF F	*		*	
	STANDARD DEVIATION	3.13		22.70	
	COEFFICIENT OF VARIANCE	17.77		17.77	
	DAT APPLICATION # 01 TIMINGS (01)	203		203	
	DAT APPLICATION # 02 TIMINGS (02)	187		187	
	DAT APPLICATION # 03 TIMINGS (03)	174		174	
	DAT APPLICATION # 04 TIMINGS (04)	160		160	

> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

- 01 = POSPOS / POSTEMERGENCE - MARCH 15 03-15-2006(1)
- 02 = POSPOS / POSTEMERGENCE - APRIL 1 03-31-2006(2)
- 03 = POSPOS / POSTEMERGENCE - APRIL 15 04-13-2006(3)
- 04 = POSPOS / POSTEMERGENCE - MAY 1 04-27-2006(4)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	HORVW	PHYTO %	03-31-2006	01	P	SECCW	23	RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	HORVW	PHYTO %	04-13-2006	01	P	SECCW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
003	HORVW	PHYTO %	04-27-2006	01	P	SECCW	47	RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
004	HORVW	PHYTO %	05-11-2006	01	P	SECCW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
005	CHEAL	%CONTROL	05-11-2006	03	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	ZEAMX	YLD/PLOT	10-04-2006	04	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

- VAR 01 = WHEELER
- VAR 03 = CHEAL

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

- 01 = WHEELER
- 03 = CHEAL

\* STAGE CODE

- 23 = 3 TILLERS DETECTABLE
- 47 = FLAG LEAF SHEATH OPENING

\* USER DEFINED CALCULATIONS

- US 003/06/01 001 HB--- 006 -- {RAW}\*(7.26)
- US 003/06/01 001 HB--- 006 -- {RAW}\*(7.26)

**TRIAL SUMMARY**  
**GENERAL SITE INFORMATION**

**TRIAL #:** US 003/06/01 001 HC      **ALTERNATE ID#:** HF 03 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** US 003/04/01  
**CREATED BY:** US RITTER R  
**CREATED:** 09-10-2005      **REVISED:** 10-12-2006      **COMPLETED:** Y  
**TITLE:** WINTER COVER CROPS - III - BURNDOWN CONTROL OF TRITICALE IN THE SPRING  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**TRIAL INFORMATION**

<b>% SAND:</b> 70	<b>TILLAGE:</b> COT	<b>DESIGN:</b> RCB	<b>RESIDUE TRIAL:</b> EFF
<b>% SILT:</b> 20	<b>PH:</b> 6.3	<b>ACTUAL REPS:</b> 3	<b>ACTUAL BLOCKS:</b> 1
<b>% CLAY:</b> 10	<b>CEC:</b> 5.4	<b>ACTUAL TRTS:</b> 28	<b>ACTUAL SUB-BLOCKS:</b> 28
<b>TEXTURE:</b> SL	<b>% OM:</b> 1.5		

**SOIL GEN:** C  
**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**SUBMITTED BY:** \_\_\_\_\_

**REVIEWED BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_



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**ABSTRACT**

## A. Trial Initiation

1. Study planrted 11/03/2005. Variety - Trical 498.
2. Applied 20 lb N/A on 11/04/2005.
3. March 15th application made on March 15th.
4. April 1st application made on March 31st.
5. April 15th application made on April 13th.
6. May 1st application made on April 27th.
7. Study planted 05/22/2006. Variety - Pioneer 33B54.
8. Seed protected with Yield Guard and Poncho 1250.
9. Kernal Guard added to the hopper box.
10. 5 gallons of 9-18-9-1S applied in row.
11. 10.8 gallons of 22-0-0-5S applied 2 inches to the side of the row.
12. A total of 30-10-5-6.2S applied at planting.
13. Roundup Weather Max at 24 oz/acre plus Bicep at 2 qt/acre applied to entire study on 05/23/2006.
14. Corn was sidedressed with additional nitrogen on 06/10/2006.
15. Study was harvested 10/05/2006.

APPL. NUMBER	01	02	03	04	UNIT
<b>TIMINGS</b>	01	02	03	04	
<b>TYPE</b>	LIQMIX	LIQMIX	LIQMIX	LIQMIX	
<b>APPLICATION DATE</b>	03-15-06	03-31-06	04-13-06	04-27-06	USA
<b>TIME - BEGIN</b>	09:00	17:00	16:00	16:30	24H
<b>TIME - END</b>	10:00	18:00	17:00	17:30	24H
<b>AIR TEMPERATURE</b>	50	60	72	65	F
<b>% REL. HUMIDITY</b>	20	20	45	40	
<b>WIND DIRECTION</b>	WEST	NORTHWEST	WEST	NORTHWEST	
<b>WIND SPEED</b>	3.0	1.0	5.0	3.0	M/H
<b>CLOUD COVER</b>	CLEAR	PARTCLDY	PARTCLDY	PARTCLDY	
<b>DEW</b>	NO	NO	NO	NO	
<b>SOIL MOISTURE</b>	DRY/DRY	DRY/DRY	DRY/DRY	DRY/MOIST	
<b>SOIL CONDITION</b>	FRIABLE	FRIABLE	FRIABLE	FRIABLE	
<b>SOIL TEMP/DEPTH</b>	45/4.00	55/4.00	65/4.00	66/4.00	F /
<b>METHOD</b>	SPRAY	SPRAY	SPRAY	SPRAY	
<b>EQUIPMENT</b>	SPRBAC	SPRBAC	SPRBAC	SPRBAC	
<b>PROPELLANT</b>	COMCO2	COMCO2	COMCO2	COMCO2	
<b>PLACEMENT</b>	BRFOSO	BRFOSO	BRFOSO	BRFOSO	
<b>NOZZLE</b>	FLATFAN	FLATFAN	FLATFAN	FLATFAN	
<b>NOZZLE VOLUME</b>	0.03	0.03	0.03	0.03	GPM
<b>NOZZLE NUMBER</b>	6	6	6	6	
<b>NOZZLE SPACING</b>	20.000	20.000	20.000	20.000	IN
<b>SCREEN SIZE</b>					
<b>SCREEN SZ DESC</b>	NA	NA	NA	NA	
<b>SWATH WIDTH</b>	10.0	10.0	10.0	10.0	FT
<b>BOOM HEIGHT</b>	20.0	20.0	20.0	20.0	IN
<b>SPEED</b>	3.00	3.00	3.00	3.00	M/H
<b>MIX SIZE</b>	0.560	0.560	0.560	0.560	
<b>MIX SIZE UNIT</b>	GAL	GAL	GAL	GAL	
<b>SPRAY VOLUME</b>	18.00	18.00	18.00	18.00	
<b>SCREEN SIZE</b>	GPA	GPA	GPA	GPA	
<b>PRESSURE</b>	20.00	20.00	20.00	20.00	PSI
<b>DILUENT</b>	WATER	WATER	WATER	WATER	
<b>INC. DATE</b>					USA
<b>INC. START</b>					24H
<b>INC. END</b>					24H
<b>INC. DEPTH</b>					IN
<b>INC. EQUIPMENT</b>	---	---	---	---	

## \* TIMING CODES

01 = POSPOS / POSTEMERGENCE - MARCH 15  
02 = POSPOS / POSTEMERGENCE - APRIL 1  
03 = POSPOS / POSTEMERGENCE - APRIL 15  
04 = POSPOS / POSTEMERGENCE - MAY 1

## \* NOZZLE DESCRIPTION

01 = SS-8003  
02 = SS-8003  
03 = SS-8003  
04 = SS-8003

01 P TTLWI - TRITICALE, WINTER                      VAR/SPC INFO: TRICAL 498  
 TARGET: CROP    SITE: FG                      POPULATION: 2.00 BPA                      PLANTED: 11-03-2005  
 PLANTING DEPTH: 0.5 IN                      ROW WIDTH: 6.0 IN  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
11-03-2005	00	MED	2.00 BPA	.	.	. IN	NA	
03-15-2006	23	MED	2.00 BPA	3.00	3.00	3.00 IN	WST	
03-31-2006	24	MED	2.00 BPA	7.00	7.00	7.00 IN	WST	
04-13-2006	14	MED	2.00 BPA	12.00	12.00	12.00 IN	DST	
04-27-2006	55	MED	2.00 BPA	20.00	20.00	20.00 IN	TUR	

02 P HORVW - BARLEY, WINTER                      VAR/SPC INFO: NOMINI  
 TARGET: PEST    SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
- -	01	---	IND	.	.	. IN	---	

03 P CHEAL - LAMBSQUARTERS, COMMON                      VAR/SPC INFO: CHEAL  
 TARGET: PEST    SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
- -	00	---	IND	.	.	. IN	---	

04 P ZEAMX - CORN, VOLUNTEER, FIELD  
 TARGET: PEST    SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
- -	01	---	IND	.	.	. IN	---	

## \* STAGE CODE -- CEREALS

01 = BEGINNING OF IMBIBITION

## \* STAGE CODE -- CORN

01 = BEGINNING OF IMBIBITION

## \* STAGE CODE -- GENERAL

00 = DRY SEED; DORMANCY

14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED

23 = 3 SIDE SHOOTS/TILLERS VISIBLE

24 = 4 SIDE SHOOTS/TILLERS VISIBLE

55 = FIRST FLOWERS VISIBLE (STILL CLOSED); MID-HEADING (50% EMERGED)

**TITLE:** WINTER COVER CROPS - III - BURNDOWN CONTROL OF TRITICALE IN THE SPRING  
**CREATED:** 09-10-2005 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW
	RATE	UNIT	TM	03-31-06 P TTLWI 24 VAR 01 PHY % 1.00 PL ALL	04-13-06 P TTLWI 14 VAR 01 PHY % 1.00 PL ALL	04-27-06 P TTLWI 55 VAR 01 PHY % 1.00 PL ALL	05-11-06 P TTLWI VAR 01 PHY % 1.00 PL ALL	05-11-06 P CHEAL VAR 03 CON % 1.00 PL ALL
1A»GRAMOXONE MAX (3L)	0.50	LAA	1	68	68	58	37	50
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1					
2A»GRAMOXONE MAX (3L)	0.50	LAA	2	0	93	100	100	13
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
3A»GRAMOXONE MAX (3L)	0.50	LAA	3	0	0	83	83	100
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3					
4A»GRAMOXONE MAX (3L)	0.50	LAA	4	0	0	0	73	100
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4					
5A»GRAMOXONE MAX (3L)	0.75	LAA	1	82	85	83	82	32
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1					
6A»GRAMOXONE MAX (3L)	0.75	LAA	2	0	95	100	100	27
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
7A»GRAMOXONE MAX (3L)	0.75	LAA	3	0	0	90	97	87
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3					
8A»GRAMOXONE MAX (3L)	0.75	LAA	4	0	0	0	73	100
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4					
9A»GRAMOXONE MAX (3L)	1.00	LAA	1	87	88	92	92	30
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1					
10A»GRAMOXONE MAX (3L)	1.00	LAA	2	0	97	100	100	60
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
11A»GRAMOXONE MAX (3L)	1.00	LAA	3	0	0	93	100	87
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3					
12A»GRAMOXONE MAX (3L)	1.00	LAA	4	0	0	0	83	100
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4					
13A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	1	85	93	98	100	27
14A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	2	0	90	98	98	20
15A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	3	0	0	90	93	70
16A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	4	0	0	0	90	100
17A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	88	100	100	100	0
18A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	2	0	97	100	100	20
19A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	3	0	0	98	100	78
20A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	4	0	0	0	100	100
21A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	1	93	100	100	100	27
22A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	2	0	97	100	100	27
23A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	3	0	0	100	100	73
24A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	4	0	0	0	100	100
25A UNTREATED CHECK	0.00	NA	1	0	0	0	0	100

## TITLE: WINTER COVER CROPS - III - BURNDOWN CONTROL OF TRITICALE IN THE SPRING

TRT TREATMENT NUM COMPONENT	DOSAGE RATE UNIT TM	001 RAW	002 RAW	003 RAW	004 RAW	005 RAW
		03-31-06 P TTLWI 24 VAR 01 PHY % 1.00 PL ALL	04-13-06 P TTLWI 14 VAR 01 PHY % 1.00 PL ALL	04-27-06 P TTLWI 55 VAR 01 PHY % 1.00 PL ALL	05-11-06 P TTLWI VAR 01 PHY % 1.00 PL ALL	05-11-06 P CHEAL VAR 03 CON % 1.00 PL ALL
26A UNTREATED CHECK	0.00 NA 2	0	0	0	0	100
27A UNTREATED CHECK	0.00 NA 3	0	0	0	0	100
28A UNTREATED CHECK	0.00 NA 4	0	0	0	0	67
	LSD (0.05)	3.26	2.86	3.48	5.67	34.74
	SIGNIFICANCE OF F	**	**	**	**	**
	STANDARD DEVIATION	1.63	1.43	1.74	2.83	17.37
	COEFFICIENT OF VARIANCE	11.10	4.45	3.55	4.41	33.21
	DAT APPLICATION # 01 TIMINGS (01)	16	29	43	57	57
	DAT APPLICATION # 02 TIMINGS (02)	0	13	27	41	41
	DAT APPLICATION # 03 TIMINGS (03)	NA	0	14	28	28
	DAT APPLICATION # 04 TIMINGS (04)	NA	NA	0	14	14

TITLE: WINTER COVER CROPS - III - BURNDOWN CONTROL OF TRITICALE IN THE SPRING

CREATED: 09-10-2005 REVISED: 10-12-2006

COMPLETED: Y

PROJECT TYPE: HERBICIDE

LOCATION: HAYDEN FARM

RESEARCHED BY: RITTER AND MENBERE

DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN

PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG

PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			YLD LB	YLD BU
	RATE	UNIT	TM	1.00 PL SD	1.00 A SD
1A»GRAMOXONE MAX (3L)	0.50	LAA	1	12.1	87.6
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1		
2A»GRAMOXONE MAX (3L)	0.50	LAA	2	17.0	123.7
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2		
3A»GRAMOXONE MAX (3L)	0.50	LAA	3	16.0	115.9
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3		
4A»GRAMOXONE MAX (3L)	0.50	LAA	4	15.6	113.0
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4		
5A»GRAMOXONE MAX (3L)	0.75	LAA	1	9.6	70.0
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1		
6A»GRAMOXONE MAX (3L)	0.75	LAA	2	15.1	109.9
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2		
7A»GRAMOXONE MAX (3L)	0.75	LAA	3	11.8	85.7
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3		
8A»GRAMOXONE MAX (3L)	0.75	LAA	4	14.0	101.7
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4		
9A»GRAMOXONE MAX (3L)	1.00	LAA	1	11.2	81.3
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1		
10A»GRAMOXONE MAX (3L)	1.00	LAA	2	11.9	86.2
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2		
11A»GRAMOXONE MAX (3L)	1.00	LAA	3	7.4	53.5
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3		
12A»GRAMOXONE MAX (3L)	1.00	LAA	4	15.0	108.9
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4		
13A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	1	8.3	60.0
14A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	2	16.7	121.0
15A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	3	13.0	94.4
16A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	4	14.4	104.8
17A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	17.5	127.3
18A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	2	12.5	90.5
19A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	3	10.1	73.1
20A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	4	14.9	107.9
21A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	1	10.3	74.8
22A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	2	15.9	115.2
23A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	3	13.5	97.8
24A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	4	13.0	94.2
25A UNTREATED CHECK	0.00	NA	1	14.2	103.1

TITLE: WINTER COVER CROPS - III - BURNDOWN CONTROL OF TRITICALE IN THE SPRING

TRT TREATMENT NUM COMPONENT	DOSAGE RATE UNIT TM	YLD LB		YLD BU	
		PL SD	A SD	PL SD	A SD
26A UNTREATED CHECK	0.00 NA 2	14.0	101.9		
27A UNTREATED CHECK	0.00 NA 3	14.9	107.9		
28A UNTREATED CHECK	0.00 NA 4	8.8	63.9		
	LSD (0.05)	8.00	58.15		
	SIGNIFICANCE OF F	NS	NS		
	STANDARD DEVIATION	4.00	29.08		
	COEFFICIENT OF VARIANCE	37.28	37.28		
	DAT APPLICATION # 01 TIMINGS (01)	204	204		
	DAT APPLICATION # 02 TIMINGS (02)	188	188		
	DAT APPLICATION # 03 TIMINGS (03)	175	175		
	DAT APPLICATION # 04 TIMINGS (04)	161	161		

> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

- 01 = POSPOS / POSTEMERGENCE - MARCH 15 03-15-2006(1)
- 02 = POSPOS / POSTEMERGENCE - APRIL 1 03-31-2006(2)
- 03 = POSPOS / POSTEMERGENCE - APRIL 15 04-13-2006(3)
- 04 = POSPOS / POSTEMERGENCE - MAY 1 04-27-2006(4)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR	SS	NOTE
001	HORVW	PHYTO %	03-31-2006	01	P	TTLWI	24	RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	HORVW	PHYTO %	04-13-2006	01	P	TTLWI	14	RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
003	HORVW	PHYTO %	04-27-2006	01	P	TTLWI	55	RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
004	HORVW	PHYTO %	05-11-2006	01	P	TTLWI		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
005	CHEAL	%CONTROL	05-11-2006	03	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	ZEAMX	YLD/PLOT	10-05-2006	04	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

- VAR 01 = TRICAL 498
- VAR 03 = CHEAL

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

- 01 = TRICAL 498
- 03 = CHEAL

\* STAGE CODE

- 14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- 24 = 4 SIDE SHOOTS/TILLERS VISIBLE
- 55 = FIRST FLOWERS VISIBLE (STILL CLOSED); MID-HEADING (50% EMERGED)

\* USER DEFINED CALCULATIONS

- US 003/06/01 001 HC--- 006 -- {RAW}\*(7.26)
- US 003/06/01 001 HC--- 006 -- {RAW}\*(7.26)

**TRIAL SUMMARY**  
**GENERAL SITE INFORMATION**

**TRIAL #:** US 003/06/01 001 HD      **ALTERNATE ID#:** HF 04 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** US 003/04/01  
**CREATED BY:** US RITTER R  
**CREATED:** 09-10-2005      **REVISED:** 10-12-2006      **COMPLETED:** Y  
**TITLE:** WINTER COVER CROPS - IV - BURNDOWN CONTROL OF WHEAT IN THE SPRING  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTRY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

<b>SOIL INFORMATION</b>		<b>TRIAL INFORMATION</b>	
% SAND: 70	TILLAGE: COT	DESIGN: RCB	RESIDUE TRIAL: EFF
% SILT: 20	PH: 6.3	ACTUAL REPS: 3	ACTUAL BLOCKS: 1
% CLAY: 10	CEC: 5.4	ACTUAL TRTS: 28	ACTUAL SUB-BLOCKS: 28
TEXTURE: SL	% OM: 1.5		
SOIL GEN: C			
PREVIOUS CROP: ZEAMX - CORN, VOLUNTEER, FIELD			
% RESIDUE: 0			
PLOT WIDTH: 10.00 FT			
PLOT LENGTH: 20.00 FT			
PLOT AREA: 200.00 SFT			

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_



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**ABSTRACT**

## A. Trial Initiation

1. Study planrtrted 11/04/2005. Variety - SS 520.
2. Applied 20 lb N/A on 11/04/2005.
3. March 15th application made on March 15th.
4. April 1st application made on March 31st.
5. April 15th application made on April 13th.
6. May 1st application made on April 27th.
7. Study planted 05/22/2006. Variety - Pioneer 33B54.
8. Seed protected with Yield Guard and Poncho 1250.
9. Kernal Guard added to the hopper box.
10. 5 gallons of 9-18-9-1S applied in row.
11. 10.8 gallons of 22-0-0-5S applied 2 inches to the side of the row.
12. A total of 30-10-5-6.2S applied at planting.
13. Roundup Weather Max at 24 oz/acre plus Bicep at 2 qt/acre applied to entire study on 05/23/2006.
14. Corn was sidedressed with additional nitrogen on 06/10/2006.
15. Study harvested 10/10/2006.

APPL. NUMBER	01	02	03	04	UNIT
TIMINGS	01	02	03	04	
TYPE	LIQMIX	LIQMIX	LIQMIX	LIQMIX	
APPLICATION DATE	03-15-06	03-31-06	04-13-06	04-27-06	USA
TIME - BEGIN	09:00	17:00	16:00	16:30	24H
TIME - END	10:00	18:00	17:00	17:30	24H
AIR TEMPERATURE	50	60	72	65	F
% REL. HUMIDITY	20	20	45	40	
WIND DIRECTION	WEST	NORTHWEST	WEST	NORTHWEST	
WIND SPEED	3.0	1.0	5.0	3.0	M/H
CLOUD COVER	CLEAR	PARTCLDY	PARTCLDY	PARTCLDY	
DEW	NO	NO	NO	NO	
SOIL MOISTURE	DRY/DRY	DRY/DRY	DRY/DRY	DRY/MOIST	
SOIL CONDITION	FRIABLE	FRIABLE	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	45/4.00	55/4.00	65/4.00	66/4.00	F /
METHOD	SPRAY	SPRAY	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	0.03	0.03	GPM
NOZZLE NUMBER	6	6	6	6	
NOZZLE SPACING	20.000	20.000	20.000	20.000	IN
SCREEN SIZE					
SCREEN SZ DESC	NA	NA	NA	NA	
SWATH WIDTH	10.0	10.0	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	20.0	20.0	IN
SPEED	3.00	3.00	3.00	3.00	M/H
MIX SIZE	0.560	0.560	0.560	0.560	
MIX SIZE UNIT	GAL	GAL	GAL	GAL	
SPRAY VOLUME	18.00	18.00	18.00	18.00	
SCREEN SIZE	GPA	GPA	GPA	GPA	
PRESSURE	20.00	20.00	20.00	20.00	PSI
DILUENT	WATER	WATER	WATER	WATER	
INC. DATE					USA
INC. START					24H
INC. END					24H
INC. DEPTH					IN
INC. EQUIPMENT	---	---	---	---	

\* TIMING CODES

01 = POSPOS / POSTEMERGENCE - MARCH 15  
 02 = POSPOS / POSTEMERGENCE - APRIL 1  
 03 = POSPOS / POSTEMERGENCE - APRIL 15  
 04 = POSPOS / POSTEMERGENCE - MAY 1

\* NOZZLE DESCRIPTION

01 = SS-8003  
 02 = SS-8003  
 03 = SS-8003  
 04 = SS-8003

01 P TRZAW - WHEAT, WINTER VAR/SPC INFO: SS 520  
 TARGET: CROP SITE: FG POPULATION: 2.00 BPA PLANTED: 11-04-2005  
 PLANTING DEPTH: 0.5 IN ROW WIDTH: 6.0 IN  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
11-04-2005	00	MED	2.00 BPA	.	.	. IN	NA	
03-15-2006	22	MED	2.00 BPA	3.00	3.00	3.00 IN	WST	
03-31-2006	23	MED	2.00 BPA	6.00	6.00	6.00 IN	WST	
04-13-2006	13	MED	2.00 BPA	12.00	12.00	12.00 IN	DST	
04-27-2006	33	MED	2.00 BPA	18.00	18.00	18.00 IN	TUR	

02 P HORVW - BARLEY, WINTER VAR/SPC INFO: NOMINI  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
- -	01	---	IND	.	.	. IN	---	

03 P CHEAL - LAMBSQUARTERS, COMMON VAR/SPC INFO: CHEAL  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
- -	00	---	IND	.	.	. IN	---	

04 P ZEAMX - CORN, VOLUNTEER, FIELD  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
- -	01	---	IND	.	.	. IN	---	

- \* STAGE CODE -- CEREALS
- 00 = DRY SEED (CARYOPSIS)
- 01 = BEGINNING OF IMBIBITION
- 13 = 3 LEAVES UNFOLDED
- 22 = 2 TILLERS DETECTABLE
- 23 = 3 TILLERS DETECTABLE
- 33 = NODE 3 AT LEAST 2 CM ABOVE NODE 2
- \* STAGE CODE -- CORN
- 01 = BEGINNING OF IMBIBITION
- \* STAGE CODE -- GENERAL
- 00 = DRY SEED; DORMANCY

**TITLE:** WINTER COVER CROPS - IV - BURNDOWN CONTROL OF WHEAT IN THE SPRING  
**CREATED:** 09-10-2005 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW
	RATE	UNIT	TM	03-13-06 P TRZAW	04-13-06 P TRZAW 13	04-27-06 P TRZAW 33	05-11-06 P TRZAW	05-11-06 P CHEAL
				VAR 01 PHY % 1.00 PL ALL	VAR 01 PHY % 1.00 PL ALL	VAR 01 PHY % 1.00 PL ALL	VAR 01 PHY % 1.00 PL ALL	VAR 03 CON % 1.00 PL ALL
1A»GRAMOXONE MAX (3L)	0.50	LAA	1	60	45	27	7	58
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1					
2A»GRAMOXONE MAX (3L)	0.50	LAA	2	0	92	95	97	10
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
3A»GRAMOXONE MAX (3L)	0.50	LAA	3	0	0	70	82	90
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3					
4A»GRAMOXONE MAX (3L)	0.50	LAA	4	0	0	0	78	100
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4					
5A»GRAMOXONE MAX (3L)	0.75	LAA	1	72	67	53	27	57
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1					
6A»GRAMOXONE MAX (3L)	0.75	LAA	2	0	93	98	100	40
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
7A»GRAMOXONE MAX (3L)	0.75	LAA	3	0	0	78	85	83
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3					
8A»GRAMOXONE MAX (3L)	0.75	LAA	4	0	0	0	83	100
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4					
9A»GRAMOXONE MAX (3L)	1.00	LAA	1	77	78	70	68	40
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1					
10A»GRAMOXONE MAX (3L)	1.00	LAA	2	0	97	100	100	17
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
11A»GRAMOXONE MAX (3L)	1.00	LAA	3	0	0	83	88	100
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3					
12A»GRAMOXONE MAX (3L)	1.00	LAA	4	0	0	0	85	100
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4					
13A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	1	87	95	95	97	23
14A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	2	0	90	92	93	10
15A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	3	0	0	73	83	97
16A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	4	0	0	0	87	97
17A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	88	97	98	100	20
18A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	2	0	93	100	100	22
19A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	3	0	0	95	100	87
20A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	4	0	0	0	98	100
21A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	1	92	100	100	100	20
22A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	2	0	95	100	100	30
23A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	3	0	0	100	100	72
24A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	4	0	0	0	100	100
25A UNTREATED CHECK	0.00	NA	1	0	0	0	0	100

TITLE: WINTER COVER CROPS - IV - BURNDOWN CONTROL OF WHEAT IN THE SPRING

TRT TREATMENT NUM COMPONENT	DOSAGE RATE UNIT TM	001 RAW	002 RAW	003 RAW	004 RAW	005 RAW
		03-13-06 P TRZAW	04-13-06 P TRZAW	04-27-06 P TRZAW	05-11-06 P TRZAW	05-11-06 P CHEAL
		VAR 01 PHY % 1.00	VAR 01 PHY % 1.00	VAR 01 PHY % 1.00	VAR 01 PHY % 1.00	VAR 03 CON % 1.00
		PL ALL	PL ALL	PL ALL	PL ALL	PL ALL
26A UNTREATED CHECK	0.00 NA 2	0	0	0	0	100
27A UNTREATED CHECK	0.00 NA 3	0	0	0	0	100
28A UNTREATED CHECK	0.00 NA 4	0	0	0	0	100
	LSD (0.05)	3.71	4.47	6.15	5.82	20.63
	SIGNIFICANCE OF F	**	**	**	**	**
	STANDARD DEVIATION	1.85	2.24	3.07	2.91	10.32
	COEFFICIENT OF VARIANCE	13.37	7.36	6.90	4.85	18.90
	DAT APPLICATION # 01 TIMINGS (01)	NA	29	43	57	57
	DAT APPLICATION # 02 TIMINGS (02)	NA	13	27	41	41
	DAT APPLICATION # 03 TIMINGS (03)	NA	0	14	28	28
	DAT APPLICATION # 04 TIMINGS (04)	NA	NA	0	14	14

**TITLE:** WINTER COVER CROPS - IV - BURNDOWN CONTROL OF WHEAT IN THE SPRING  
**CREATED:** 09-10-2005 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE		TM	006 RAW	006 CALC
	RATE	UNIT		10-10-06	10-10-06
				P ZEAMX	P ZEAMX
				YLD LB	YLD BU
				1.00	1.00
				PL SD	A SD
1A»GRAMOXONE MAX (3L)	0.50	LAA	1	21.7	160.1
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1		
2A»GRAMOXONE MAX (3L)	0.50	LAA	2	24.7	182.0
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2		
3A»GRAMOXONE MAX (3L)	0.50	LAA	3	16.9	124.5
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3		
4A»GRAMOXONE MAX (3L)	0.50	LAA	4	20.1	148.3
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4		
5A»GRAMOXONE MAX (3L)	0.75	LAA	1	19.7	145.4
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1		
6A»GRAMOXONE MAX (3L)	0.75	LAA	2	17.2	126.7
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2		
7A»GRAMOXONE MAX (3L)	0.75	LAA	3	19.3	142.4
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3		
8A»GRAMOXONE MAX (3L)	0.75	LAA	4	17.6	130.1
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4		
9A»GRAMOXONE MAX (3L)	1.00	LAA	1	14.8	109.5
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1		
10A»GRAMOXONE MAX (3L)	1.00	LAA	2	20.3	149.8
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	2		
11A»GRAMOXONE MAX (3L)	1.00	LAA	3	17.8	131.4
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	3		
12A»GRAMOXONE MAX (3L)	1.00	LAA	4	14.4	106.0
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	4		
13A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	1	16.1	118.8
14A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	2	23.1	170.7
15A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	3	19.3	142.4
16A»ROUNDUP WEATHER MAX (5.5 SL)	0.50	LAA	4	23.6	173.9
17A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	1	23.6	174.2
18A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	2	22.7	167.5
19A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	3	17.1	126.4
20A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	4	21.3	157.2
21A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	1	19.5	143.9
22A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	2	20.3	149.8
23A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	3	13.1	96.4
24A»ROUNDUP WEATHER MAX (5.5 SL)	1.50	LAA	4	16.3	120.3
25A UNTREATED CHECK	0.00	NA	1	12.8	94.7

TITLE: WINTER COVER CROPS - IV - BURNDOWN CONTROL OF WHEAT IN THE SPRING

TRT TREATMENT NUM COMPONENT	DOSAGE			YLD LB	YLD BU
	RATE	UNIT	TM	PL SD	A SD
26A UNTREATED CHECK	0.00	NA	2	18.8	139.0
27A UNTREATED CHECK	0.00	NA	3	12.4	91.5
28A UNTREATED CHECK	0.00	NA	4	11.3	83.4
				LSD (0.05)	9.60 70.87
				SIGNIFICANCE OF F	NS NS
				STANDARD DEVIATION	4.80 35.43
				COEFFICIENT OF VARIANCE	31.92 31.92
				DAT APPLICATION # 01 TIMINGS (01)	209 209
				DAT APPLICATION # 02 TIMINGS (02)	193 193
				DAT APPLICATION # 03 TIMINGS (03)	180 180
				DAT APPLICATION # 04 TIMINGS (04)	166 166

> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

- 01 = POSPOS / POSTEMERGENCE - MARCH 15 03-15-2006(1)
- 02 = POSPOS / POSTEMERGENCE - APRIL 1 03-31-2006(2)
- 03 = POSPOS / POSTEMERGENCE - APRIL 15 04-13-2006(3)
- 04 = POSPOS / POSTEMERGENCE - MAY 1 04-27-2006(4)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	HORVW	PHYTO %	03-13-2006	01	P	TRZAW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	HORVW	PHYTO %	04-13-2006	01	P	TRZAW	13	RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
003	HORVW	PHYTO %	04-27-2006	01	P	TRZAW	33	RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
004	HORVW	PHYTO %	05-11-2006	01	P	TRZAW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
005	CHEAL	%CONTROL	05-11-2006	03	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	ZEAMX	YLD/PLOT	10-10-2006	04	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

- VAR 01 = SS 520
- VAR 03 = CHEAL

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

- 01 = SS 520
- 03 = CHEAL

\* STAGE CODE

- 13 = 3 LEAVES UNFOLDED
- 33 = NODE 3 AT LEAST 2 CM ABOVE NODE 2

\* USER DEFINED CALCULATIONS

- US 003/06/01 001 HD--- 006 -- {RAW}\*(7.38)
- US 003/06/01 001 HD--- 006 -- {RAW}\*(7.38)

TRIAL SUMMARY  
GENERAL SITE INFORMATION

TRIAL #: US 003/06/01 001 HE      ALTERNATE ID#: HF 05 2006  
 PROTOCOL#: US 003/06/01      ALTERNATE ID#: HAYDEN FARM-06  
 CREATED BY: US RITTER R  
 CREATED: 09-10-2005      REVISED: 08-01-2006      COMPLETED: Y  
 TITLE: USE OF KIH-485 FOR PREEMERGENCE CONTROL OF ITALIAN RYEGRASS IN WHEAT  
 COORDINATOR: US 001 Ron Ritter  
 TRIAL TYPE: HERBICIDE  
 PROJECT#2:  
 RESEARCHER: RITTER AND MENBERE      CONFIDENCE: HIGH CONFIDENCE IN TRIAL DATA  
 REPORTED BY: US Ron Ritter And Ron Ritter  
 COOPERATOR: MR. KEVIN CONOVER      DATA SOURCE: UNIVERSITY  
 LOCATION: HAYDEN FARM      TYPE: FIELD TRIAL  
 CITY: LAUREL      SUBDIVISION: MARYLAND  
 COUNTY: PRINCE GEORGE'S      ZIP: 20708  
 COUNTRY: UNITED STATES  
 WEATHER SITE: HF -- HAYDEN FARM      DISTANCE TO TRIAL: 5280.0 FT  
 WEEKS PRIOR TO FIRST APPLICATION: 4      WEEKS AFTER LAST APPLICATION: 4  
 EARLY WEATHER: NA      MID WEATHER: NA      LATE WEATHER: NA

SOIL INFORMATION

% SAND: 70      TILLAGE: COT  
 % SILT: 20      PH: 6.3  
 % CLAY: 10      CEC: 8.0  
 TEXTURE: SL      % OM: 2.3  
 SOIL GEN: C  
 PREVIOUS CROP: TRZAW - WHEAT, WINTER  
 % RESIDUE: 0  
 PLOT WIDTH: 10.00 FT  
 PLOT LENGTH: 20.00 FT  
 PLOT AREA: 200.00 SFT

TRIAL INFORMATION

DESIGN: RCB      RESIDUE TRIAL: EFF  
 ACTUAL REPS: 3      ACTUAL BLOCKS: 1  
 ACTUAL TRTS: 14      ACTUAL SUB-BLOCKS: 14

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_



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**ABSTRACT**

## A. Trial Initiation

1. Study planted 11/08/2005. Variety - Pioneer 26R15.
2. Italian ryegrass planted 11/08/2005. Variety - Marshall.
3. Last three passes of ryegrass were variety Zorro.
4. 30 lb N/acre applied 11/04/2005.
5. Preemergence applications made 11/08/2005.
6. Spike stage applications made 12/01/2005.
7. Study harvested 07/12/2006.

APPL. NUMBER	01	02	UNIT
TIMINGS	00	01	
TYPE	LIQMIX	LIQMIX	
APPLICATION DATE	11-08-05	12-01-05	USA
TIME - BEGIN	16:00	15:00	24H
TIME - END	17:00	16:00	24H
AIR TEMPERATURE	68	50	F
% REL. HUMIDITY	35	60	
WIND DIRECTION	SOUTHWEST	NORTHEAST	
WIND SPEED	2.0	3.0	M/H
CLOUD COVER	PARTCLDY	CLOUDY	
DEW	NO	NO	
SOIL MOISTURE	MOIST/MOI	MOIST/MOI	
SOIL CONDITION	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	68/4.00	46/4.00	F /
METHOD	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	GPM
NOZZLE NUMBER	6	6	
NOZZLE SPACING	20.000	20.000	IN
SCREEN SIZE			
SCREEN SZ DESC	NA	NA	
SWATH WIDTH	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	IN
SPEED	3.00	3.00	M/H
MIX SIZE	0.560	0.560	
MIX SIZE UNIT	GAL	GAL	
SPRAY VOLUME	18.00	18.00	
SCREEN SIZE	GPA	GPA	
PRESSURE	20.00	20.00	PSI
DILUENT	WATER	WATER	
INC. DATE			USA
INC. START			24H
INC. END			24H
INC. DEPTH			IN
INC. EQUIPMENT	---	---	

## \* TIMING CODES

00 = PREPRE / PREEMERGENCE  
01 = POSPOS / SPIKE STAGE TO 2-LEAF

## \* NOZZLE DESCRIPTION

01 = SS-8003  
02 = SS-8003

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01 P TRZAW - WHEAT, WINTER                      **VAR/SPC INFO:** PIONEER 26R15  
**TARGET:** CROP    **SITE:** FG            **POPULATION:** 140.00 LPA    **PLANTED:** 11-08-2005  
**PLANTING DEPTH:** 0.5 IN                      **ROW WIDTH:** 6.0 IN  
**INFESTATION DATE:** - - **METHOD:** NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
11-08-2005	00	MED	140.00 LPA	.	.	. IN	NA	
12-01-2005	11	MED	140.00 LPA	3.00	3.00	3.00 IN	TUR	

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02 P LOLMU - RYEGRASS, ITALIAN                      **VAR/SPC INFO:** MARSHALL  
**TARGET:** PEST    **SITE:** FG            **POPULATION:** 20.00 LPA    **PLANTED:** 11-08-2005  
**PLANTING DEPTH:** 0.5 IN                      **ROW WIDTH:** 6.0 IN  
**INFESTATION DATE:** - - **METHOD:** NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
11-08-2005	00	MED	20.00 LPA	.	.	. IN	NA	
12-01-2005	11	MED	20.00 LPA	1.00	1.00	1.00 IN	TUR	

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## \* STAGE CODE -- CEREALS

00 = DRY SEED (CARYOPSIS)

11 = FIRST LEAF UNFOLDED

## \* STAGE CODE -- GENERAL GRASS

00 = DRY SEED (CARYOPSIS)

11 = FIRST LEAF UNFOLDED

**TITLE:** USE OF KIH-485 FOR PREEMERGENCE CONTROL OF ITALIAN RYEGRASS IN WHEAT  
**CREATED:** 09-10-2005 **REVISED:** 08-01-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	04-06-06 P TRZAW	04-06-06 P LOLMU	04-13-06 P TRZAW	04-13-06 P LOLMU	04-27-06 P LOLMU	
				VAR 01 PHY % 1.00	VAR 02 CON % 1.00	VAR 01 PHY % 1.00	VAR 02 CON % 1.00	VAR 02 CON % 1.00	
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»KIH-485 (60WG)	0.022	LAA	0	7	100	7	97	95	
3A»KIH-485 (60WG)	0.022	LAA	1	7	97	7	90	83	
4A»KIH-485 (60WG)	0.043	LAA	0	7	100	3	100	98	
5A»KIH-485 (60WG)	0.043	LAA	1	13	97	10	97	95	
6A»KIH-485 (60WG)	0.065	LAA	0	12	100	7	100	100	
7A»KIH-485 (60WG)	0.065	LAA	1	10	100	3	100	100	
8A»KIH-485 (60WG)	0.087	LAA	0	10	100	3	100	98	
9A»KIH-485 (60WG)	0.087	LAA	1	7	100	7	98	98	
10A»KIH-485 (60WG)	0.108	LAA	0	15	97	10	97	98	
11A»KIH-485 (60WG)	0.108	LAA	1	13	100	8	100	98	
12A»DUAL II MAGNUM (7.64EC)	0.96	LAA	1	10	100	7	100	100	
13A»DUAL II MAGNUM (7.64EC)	0.96	LAA	0	15	100	10	100	100	
14A UNTREATED CHECK	0.00	NA	1	0	0	0	0	0	
				LSL (0.05)	9.59	4.13	11.36	8.17	13.27
				SIGNIFICANCE OF F	*	**	NS	**	**
				STANDARD DEVIATION	4.67	2.00	5.53	4.00	6.45
				COEFFICIENT OF VARIANCE	64.00	2.89	116.06	5.78	9.50
				DAT APPLICATION # 01 TIMINGS (00)	149	149	156	156	170
				DAT APPLICATION # 02 TIMINGS (01)	126	126	133	133	147

TITLE: USE OF KIH-485 FOR PREEMERGENCE CONTROL OF ITALIAN RYEGRASS IN WHEAT  
 CREATED: 09-10-2005 REVISED: 08-01-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	008 CALC	
	RATE	UNIT	TM	05-12-06 P LOLMU	05-29-06 P LOLMU	07-12-06 P TRZAW	07-12-06 P TRZAW	
				VAR 02 CON % 1.00	VAR 02 CON % 1.00	VAR 01 YLD LB 1.00	VAR 01 YLD BU 1.00	
				PL ALL	PL ALL	PL SD	A SD	
1A UNTREATED CHECK	0.00	NA	0	0	0	17.7	64.0	
2A»KIH-485 (60WG)	0.022	LAA	0	93	93	23.2	84.0	
3A»KIH-485 (60WG)	0.022	LAA	1	80	73	21.0	76.0	
4A»KIH-485 (60WG)	0.043	LAA	0	97	95	25.0	91.0	
5A»KIH-485 (60WG)	0.043	LAA	1	93	92	20.8	75.0	
6A»KIH-485 (60WG)	0.065	LAA	0	98	95	24.1	88.0	
7A»KIH-485 (60WG)	0.065	LAA	1	97	97	25.9	94.0	
8A»KIH-485 (60WG)	0.087	LAA	0	97	95	24.0	87.0	
9A»KIH-485 (60WG)	0.087	LAA	1	97	97	23.6	86.0	
10A»KIH-485 (60WG)	0.108	LAA	0	98	97	21.8	79.0	
11A»KIH-485 (60WG)	0.108	LAA	1	93	92	22.8	83.0	
12A»DUAL II MAGNUM (7.64EC)	0.96	LAA	1	97	95	23.2	84.0	
13A»DUAL II MAGNUM (7.64EC)	0.96	LAA	0	98	98	24.9	90.0	
14A UNTREATED CHECK	0.00	NA	1	0	0	21.3	77.0	
				LSD (0.05)	12.19	15.40	4.54	16.59
				SIGNIFICANCE OF F	**	**	NS	NS
				STANDARD DEVIATION	5.93	7.49	2.21	8.07
				COEFFICIENT OF VARIANCE	8.93	11.49	11.87	11.94
				DAT APPLICATION # 01 TIMINGS (00)	185	202	246	246
				DAT APPLICATION # 02 TIMINGS (01)	162	179	223	223

» = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 11-08-2005(1)  
 01 = POSPOS / SPIKE STAGE TO 2-LEAF 12-01-2005(2)

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR	SS	NOTE
001	TRZAW	PHYTO %	04-06-2006	01	P	TRZAW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	LOLMU	CON %	04-06-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
003	TRZAW	PHYTO %	04-13-2006	01	P	TRZAW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
004	LOLMU	CON %	04-13-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	LOLMU	CON %	04-27-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	LOLMU	CON %	05-12-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
007	LOLMU	CON %	05-29-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
008	TRZAW	YLD/PLOT	07-12-2006	01	P	TRZAW		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	TRZAW	YLD/A						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

VAR 01 = PIONEER 26R15  
 VAR 02 = MARSHALL

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = PIONEER 26R15  
 02 = MARSHALL

**\* USER DEFINED CALCULATIONS**

US 003/06/01 001 HE--- 008 -- {RAW}\*(3.63)

US 003/06/01 001 HE--- 008 -- {RAW}\*(3.63)

TRIAL SUMMARY  
GENERAL SITE INFORMATION

TRIAL #: US 003/06/01 001 HF      ALTERNATE ID#: HF 06 2006  
 PROTOCOL#: US 003/06/01      ALTERNATE ID#: HF 2005  
 CREATED BY: US RITTER R  
 CREATED: 09-10-2005      REVISED: 08-01-2006      COMPLETED: Y  
 TITLE: ITALIAN RYEGRASS CONTROL IN WHEAT  
 COORDINATOR: US 001 Ron Ritter  
 TRIAL TYPE: HERBICIDE  
 PROJECT#2:  
 RESEARCHER: RITTER AND MENBERE      CONFIDENCE: HIGH CONFIDENCE IN TRIAL DATA  
 REPORTED BY: US Ron Ritter And Ron Ritter  
 COOPERATOR: MR. KEVIN CONOVER      DATA SOURCE: UNIVERSITY  
 LOCATION: HAYDEN FARM      TYPE: FIELD TRIAL  
 CITY: LAUREL      SUBDIVISION: MARYLAND  
 COUNTY: PRINCE GEORGE'S      ZIP: 20708  
 COUNTRY: UNITED STATES  
 WEATHER SITE: HF -- HAYDEN FARM      DISTANCE TO TRIAL: 5280.0 FT  
 WEEKS PRIOR TO FIRST APPLICATION: 4      WEEKS AFTER LAST APPLICATION: 4  
 EARLY WEATHER: NA      MID WEATHER: NA      LATE WEATHER: NA

SOIL INFORMATION

% SAND: 66      TILLAGE: COT  
 % SILT: 18      PH: 5.2  
 % CLAY: 16      CEC: 6.1  
 TEXTURE: SL      % OM: 3.4  
 SOIL GEN: C  
 PREVIOUS CROP: NA - NONE  
 % RESIDUE: 0  
 PLOT WIDTH: 10.00 FT  
 PLOT LENGTH: 20.00 FT  
 PLOT AREA: 200.00 SFT

TRIAL INFORMATION

DESIGN: RCB      RESIDUE TRIAL: EFF  
 ACTUAL REPS: 3      ACTUAL BLOCKS: 1  
 ACTUAL TRTS: 14      ACTUAL SUB-BLOCKS: 14

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 11/08/2005. Variety - Pioneer 26R15.
2. Italian ryegrass planted 11/08/2005. Variety - Marshall.
3. 30 lb N/acre applied 11/04/2005.
4. Preemergence applications made 11/08/2005.
5. Spike stage applications made 12/01/2005.
6. Mid-postemergence application made 03/30/2006.
7. Study harvested 07/12/2006.

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**SPECIFIC TRIAL NOTES**

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APPL. NUMBER	01	02	03	UNIT
TIMINGS	00	01	02	
TYPE	LIQMIX	LIQMIX	LIQMIX	
APPLICATION DATE	11-08-05	12-01-05	03-30-06	USA
TIME - BEGIN	16:00	15:00	16:00	24H
TIME - END	17:00	16:00	16:30	24H
AIR TEMPERATURE	68	50	62	F
% REL. HUMIDITY	35	60	20	
WIND DIRECTION	SOUTHWEST	NORTHEAST	SOUTHWEST	
WIND SPEED	1.0	3.0	2.0	M/H
CLOUD COVER	PARTCLDY	CLOUDY	CLEAR	
DEW	NO	NO	NO	
SOIL MOISTURE	MOIST/MOI	MOIST/MOI	DRY/DRY	
SOIL CONDITION	FRIABLE	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	68/4.00	46/4.00	55/4.00	F /
METHOD	SPRAY	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	0.03	GPM
NOZZLE NUMBER	6	6	6	
NOZZLE SPACING	20.000	20.000	20.000	IN
SCREEN SIZE				
SCREEN SZ DESC	NA	NA	NA	
SWATH WIDTH	10.0	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	20.0	IN
SPEED	3.00	3.00	3.00	M/H
MIX SIZE	0.560	0.560	0.560	
MIX SIZE UNIT	GAL	GAL	GAL	
SPRAY VOLUME	18.00	18.00	18.00	
SCREEN SIZE	GPA	GPA	GPA	
PRESSURE	20.00	20.00	20.00	PSI
DILUENT	WATER	WATER	WATER	
INC. DATE				USA
INC. START				24H
INC. END				24H
INC. DEPTH				IN
INC. EQUIPMENT	---	---	---	

## \* TIMING CODES

00 = PREPRE / PREEMERGENCE  
01 = POSPOS / SPIKE STAGE OF WHEAT  
02 = MIDPOS / 1 TO 2-TILLER RYEGRASS

## \* NOZZLE DESCRIPTION

01 = SS-8003  
02 = SS-8003  
03 = SS-8003

01 P TRZAW - WHEAT, WINTER VAR/SPC INFO: PIONEER 26R15  
**TARGET:** CROP **SITE:** FG **POPULATION:** 140.00 LPA **PLANTED:** 11-08-2005  
**PLANTING DEPTH:** 0.5 IN **ROW WIDTH:** 6.0 IN  
**INFESTATION DATE:** - - **METHOD:** NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
11-08-2005	00	MED	140.00 LPA	.	.	. IN		NA	
12-01-2005	11	MED	140.00 LPA	3.00	3.00	3.00 IN		TUR	
03-30-2006	23	MED	140.00 LPA	5.00	5.00	5.00 IN		WST	

02 P LOLMU - RYEGRASS, ITALIAN VAR/SPC INFO: MARSHALL  
**TARGET:** PEST **SITE:** FG **POPULATION:** 20.00 LPA **PLANTED:** 11-08-2005  
**PLANTING DEPTH:** 0.5 IN **ROW WIDTH:** 6.0 IN  
**INFESTATION DATE:** - - **METHOD:** NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
11-08-2005	00	MED	20.00 LPA	.	.	. IN		NA	
12-01-2005	11	MED	20.00 LPA	1.00	1.00	1.00 IN		TUR	
03-30-2006	22	MED	20.00 LPA	2.00	2.00	2.00 IN		WST	

- \* **STAGE CODE -- CEREALS**
- 00 = DRY SEED (CARYOPSIS)
- 11 = FIRST LEAF UNFOLDED
- 23 = 3 TILLERS DETECTABLE
- \* **STAGE CODE -- GENERAL GRASS**
- 00 = DRY SEED (CARYOPSIS)
- 11 = FIRST LEAF UNFOLDED
- 22 = 2 TILLERS DETECTABLE

TITLE: ITALIAN RYEGRASS CONTROL IN WHEAT  
 CREATED: 09-10-2005 REVISED: 08-01-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	04-06-06 P TRZAW	04-06-06 P LOLMU	04-13-06 P TRZAW	04-13-06 P LOLMU	04-27-06 P LOLMU	
				VAR 01 PHY % 1.00	VAR 02 CON % 1.00	VAR 01 PHY % 1.00	VAR 02 CON % 1.00	VAR 02 CON % 1.00	
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»PROWL H20 (3.8CS)	0.75	LAA	0	13	87	10	88	80	
3A»PROWL H20 (3.8CS)	0.75	LAA	1	10	80	3	78	65	
4A»PROWL H20 (3.8CS)	1.50	LAA	0	7	80	0	78	70	
5A»PROWL H20 (3.8CS)	1.50	LAA	1	7	87	0	88	73	
6A»DUAL II MAGNUM (7.64EC)	0.48	LAA	0	7	97	3	97	90	
7A»DUAL II MAGNUM (7.64EC)	0.96	LAA	0	13	97	10	97	95	
8A»AXIOM (68 DF)	0.255	LAA	0	17	93	13	93	90	
9A»OSPREY (4.5G)	0.013	LAA	2	7	33	7	38	80	
B ADJUVANT - VEGETABLE OIL	1.30	PMA	2						
10A»AXIOM (68 DF)	0.255	LAA	0	17	100	13	100	100	
B»OSPREY (4.5G)	0.013	LAA	2						
C ADJUVANT - VEGETABLE OIL	1.30	PMA	2						
11A»OSPREY (4.5G)	0.013	LAA	2	7	32	3	40	83	
B SURFACTANT - NON-IONIC (SL)	0.50	PMV	2						
C FERTILIZER - 28%UAN	2.00	QMA	2						
12A»OLYMPUS FLEX (11.25 DF)	0.021	LAA	2	0	50	0	53	80	
B ADJUVANT - VEGETABLE OIL	1.30	PMA	2						
13A»OLYMPUS FLEX (11.25 DF)	0.021	LAA	2	3	32	0	45	82	
B SURFACTANT - NON-IONIC (SL)	0.50	PMV	2						
C FERTILIZER - 28%UAN	2.00	QMA	2						
14A UNTREATED CHECK	0.00	NA	2	0	0	0	0	0	
				LSD (0.05)	12.34	14.09	14.60	19.87	19.69
				SIGNIFICANCE OF F	NS	**	NS	**	**
				STANDARD DEVIATION	6.00	6.85	7.10	9.66	9.58
				COEFFICIENT OF VARIANCE	96.47	13.56	192.25	18.48	16.62
				DAT APPLICATION # 01 TIMINGS (00)	149	149	156	156	170
				DAT APPLICATION # 02 TIMINGS (01)	126	126	133	133	147
				DAT APPLICATION # 03 TIMINGS (02)	7	7	14	14	28

TITLE: ITALIAN RYEGRASS CONTROL IN WHEAT  
 CREATED: 09-10-2005 REVISD: 08-01-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	008 CALC	
	RATE	UNIT	TM	05-12-06 P LOLMU	05-29-06 P LOLMU	07-12-06 P TRZAW	07-12-06 P TRZAW	
				VAR 02 CON % 1.00	VAR 02 CON % 1.00	VAR 01 YLD LB 1.00	VAR 01 YLD BU 1.00	
				PL ALL	PL ALL	PL SD	A SD	
1A UNTREATED CHECK	0.00	NA	0	0	0	15.2	55.1	
2A»PROWL H20 (3.8CS)	0.75	LAA	0	67	63	16.6	60.2	
3A»PROWL H20 (3.8CS)	0.75	LAA	1	60	40	17.1	61.9	
4A»PROWL H20 (3.8CS)	1.50	LAA	0	57	52	18.4	66.9	
5A»PROWL H20 (3.8CS)	1.50	LAA	1	67	57	17.7	64.1	
6A»DUAL II MAGNUM (7.64EC)	0.48	LAA	0	87	83	20.2	73.5	
7A»DUAL II MAGNUM (7.64EC)	0.96	LAA	0	93	92	18.6	67.4	
8A»AXIOM (68 DF)	0.255	LAA	0	85	82	21.5	77.9	
9A»OSPREY (4.5G)	0.013	LAA	2	95	100	20.2	73.2	
B ADJUVANT - VEGETABLE OIL	1.30	PMA	2					
10A»AXIOM (68 DF)	0.255	LAA	0	100	100	19.8	71.9	
B»OSPREY (4.5G)	0.013	LAA	2					
C ADJUVANT - VEGETABLE OIL	1.30	PMA	2					
11A»OSPREY (4.5G)	0.013	LAA	2	95	98	20.8	75.4	
B SURFACTANT - NON-IONIC (SL)	0.50	PMV	2					
C FERTILIZER - 28%UAN	2.00	QMA	2					
12A»OLYMPUS FLEX (11.25 DF)	0.021	LAA	2	100	100	22.9	83.1	
B ADJUVANT - VEGETABLE OIL	1.30	PMA	2					
13A»OLYMPUS FLEX (11.25 DF)	0.021	LAA	2	97	98	17.5	63.4	
B SURFACTANT - NON-IONIC (SL)	0.50	PMV	2					
C FERTILIZER - 28%UAN	2.00	QMA	2					
14A UNTREATED CHECK	0.00	NA	2	0	0	17.0	61.7	
				LSD (0.05)	35.00	30.42	5.00	18.33
				SIGNIFICANCE OF F	**	**	NS	NS
				STANDARD DEVIATION	17.00	14.80	2.46	8.91
				COEFFICIENT OF VARIANCE	29.15	26.29	16.00	16.00
				DAT APPLICATION # 01 TIMINGS (00)	185	202	246	246
				DAT APPLICATION # 02 TIMINGS (01)	162	179	223	223
				DAT APPLICATION # 03 TIMINGS (02)	43	60	104	104

» = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 11-08-2005(1)  
 01 = POSPOS / SPIKE STAGE OF WHEAT 12-01-2005(2)  
 02 = MIDPOS / 1 TO 2-TILLER RYEGRASS 03-30-2006(3)

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRTR	SS	NOTE
001	TRZAW	PHYTO %	04-06-2006	01	P	TRZAW		RAW	ALL	PHY %		---	1.00 PL	NO	0001	0	N
002	LOLMU	CON %	04-06-2006	02	P	LOLMU		RAW	ALL	CON %		---	1.00 PL	NO	0001	0	N
003	TRZAW	PHYTO %	04-13-2006	01	P	TRZAW		RAW	ALL	PHY %		---	1.00 PL	NO	0001	0	N
004	LOLMU	CON %	04-13-2006	02	P	LOLMU		RAW	ALL	CON %		---	1.00 PL	NO	0001	0	N
005	LOLMU	CON %	04-27-2006	02	P	LOLMU		RAW	ALL	CON %		---	1.00 PL	NO	0001	0	N
006	LOLMU	CON %	05-12-2006	02	P	LOLMU		RAW	ALL	CON %		---	1.00 PL	NO	0001	0	N

TITLE: ITALIAN RYEGRASS CONTROL IN WHEAT

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR	SS	NOTE
007	LOLMU	CON %	05-29-2006	02	P	LOLMU		RAW	ALL	CON %		---	1.00 PL	NO	0001	0	N
008	TRZAW	YLD/PLOT	07-12-2006	01	P	TRZAW		RAW	SD	YLD LB	H		1.00 PL	UDC	0001	0	Y
	TRZAW	YLD/A						CALC	SD	YLD BU	H		1.00 A				

\* SEE INDIVIDUAL EVALUATION COMMENTS UNDER SPECIFIC TRIAL NOTES

\* VARIETY/SPECIE INFO CODES

VAR 01 = PIONEER 26R15

VAR 02 = MARSHALL

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = PIONEER 26R15

02 = MARSHALL

\* USER DEFINED CALCULATIONS

US 003/06/01 001 HF--- 008 -- {RAW}\*(3.63)

US 003/06/01 001 HF--- 008 -- {RAW}\*(3.63)

**TRIAL SUMMARY  
GENERAL SITE INFORMATION**

**TRIAL #:** US 003/06/01 001 HG      **ALTERNATE ID#:** HF 07 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** HAYDEN FARM-06  
**CREATED BY:** US RITTER R  
**CREATED:** 09-10-2005      **REVISED:** 08-01-2006      **COMPLETED:** Y  
**TITLE:** BARLEY TOLERANCE TO WHEAT HERBICIDES

**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 70      **TILLAGE:** COT  
**% SILT:** 20      **PH:** 6.3  
**% CLAY:** 10      **CEC:** 8.0  
**TEXTURE:** SL      **% OM:** 2.3  
**SOIL GEN:** C  
**PREVIOUS CROP:** TRZAW - WHEAT, WINTER  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** EFF  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 14      **ACTUAL SUB-BLOCKS:** 14

**SUBMITTED BY:** \_\_\_\_\_

**REVIEWED BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 11/05/2005. Variety - Nomini.
2. 30 lb N/acre applied 11/02/2005.
3. Preemergence applications made 11/07/2005.
4. Spike stage applications made 12/01/2005.
5. Late winter/early spring applications made 03/30/2006.
6. Study harvested 06/26/2006.

APPL. NUMBER	01	02	03	UNIT
TIMINGS	00	01	02	
TYPE	LIQMIX	LIQMIX	LIQMIX	
APPLICATION DATE	11-07-05	12-01-05	03-30-06	USA
TIME - BEGIN	16:00	15:00	15:30	24H
TIME - END	16:30	16:00	16:00	24H
AIR TEMPERATURE	60	50	66	F
% REL. HUMIDITY	30	60	20	
WIND DIRECTION	SOUTHWEST	NORTHEAST	SOUTHWEST	
WIND SPEED	3.0	3.0	1.0	M/H
CLOUD COVER	PARTCLDY	CLOUDY	CLEAR	
DEW	NO	NO	NO	
SOIL MOISTURE	MOIST/MOI	MOIST/MOI	DRY/DRY	
SOIL CONDITION	FRIABLE	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	60/4.00	46/4.00	55/4.00	F /
METHOD	SPRAY	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	0.03	GPM
NOZZLE NUMBER	6	6	6	
NOZZLE SPACING	20.000	20.000	20.000	IN
SCREEN SIZE				
SCREEN SZ DESC	NA	NA	NA	
SWATH WIDTH	10.0	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	20.0	IN
SPEED	3.00	3.00	3.00	M/H
MIX SIZE	0.560	0.560	0.560	
MIX SIZE UNIT	GAL	GAL	GAL	
SPRAY VOLUME	18.00	18.00	18.00	
SCREEN SIZE	GPA	GPA	GPA	
PRESSURE	20.00	20.00	20.00	PSI
DILUENT	WATER	WATER	WATER	
INC. DATE				USA
INC. START				24H
INC. END				24H
INC. DEPTH				IN
INC. EQUIPMENT	---	---	---	

\* TIMING CODES

00 = PREPRE / PREEMERGENCE  
 01 = POSPOS / SPIKE STAGE TO 2-LEAF  
 02 = MIDPOS / LATE WINTER/EARLY SPRING

\* NOZZLE DESCRIPTION

01 = SS-8003  
 02 = SS-8003  
 03 = SS-8003



01 P HORVW - BARLEY, WINTER

VAR/SPC INFO: NOMINI

TARGET: CROP SITE: FG POPULATION: 2.00 BPA PLANTED: 11-05-2005

PLANTING DEPTH: 0.5 IN ROW WIDTH: 6.0 IN

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
11-05-2005	00	MED	2.00 BPA	.	.	. IN	NA	
11-07-2005	00	MED	2.00 BPA	.	.	. IN	NA	
12-01-2005	11	MED	2.00 BPA	3.00	3.00	3.00 IN	TUR	
03-30-2006	21	MED	2.00 BPA	3.00	3.00	3.00 IN	WST	

## \* STAGE CODE -- CEREALS

00 = DRY SEED (CARYOPSIS)

11 = FIRST LEAF UNFOLDED

21 = BEGINNING OF TILLERING: FIRST TILLER DETECTABLE

TITLE: BARLEY TOLERANCE TO WHEAT HERBICIDES

CREATED: 09-10-2005 REVISIED: 08-01-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			002 RAW	003 RAW	004 RAW	005 RAW	006 RAW	
	RATE	UNIT	TM	04-06-06 P HORVW	04-13-06 P HORVW	04-27-06 P HORVW	05-12-06 P HORVW	05-29-06 P HORVW	
				VAR 01 PHY % 1.00 PL ALL	VAR 01 PHY % 1.00 PL ALL	VAR 01 PHY % 1.00 PL ALL	VAR 01 PHY % 1.00 PL ALL	VAR 01 PHY % 1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»KIH-485 (60WG)	0.043	LAA	0	13	20	30	17	13	
3A»KIH-485 (60WG)	0.043	LAA	1	15	28	30	13	13	
4A»DUAL II MAGNUM (7.64EC)	0.96	LAA	0	17	25	25	13	3	
5A»DUAL II MAGNUM (7.64EC)	0.96	LAA	1	17	27	23	7	10	
6A»PROWL H20 (3.8CS)	1.50	LAA	0	7	13	12	7	7	
7A»PROWL H20 (3.8CS)	1.50	LAA	1	3	7	3	0	0	
8A»AXIOM (68 DF)	0.34	LAA	0	7	13	17	3	0	
9A»AXIOM (68 DF)	0.34	LAA	1	10	13	12	8	7	
10A HOELON 3EC	0.75	LAA	0	7	8	27	7	3	
11A HOELON 3EC B ADJUVANT - COC (EC)	0.75 1.00	LAA QMA	2 2	3	10	10	0	0	
12A»CGA-185072 (0.83EC) B»A12127 (4SL) - ADJUVANT	0.052 0.60	LAA PMA	2 2	0	0	0	0	0	
13A»OSPREY (4.5G) B ADJUVANT - VEGETABLE OIL	0.013 1.30	LAA PMA	2 2	8	50	53	32	20	
14A»OLYMPUS FLEX (11.25 DF) B ADJUVANT - VEGETABLE OIL	0.021 1.30	LAA PMA	2 2	3	50	63	45	17	
				LSD (0.05)	9.20	10.40	18.36	10.29	10.00
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	4.47	5.06	8.93	5.00	4.85
				COEFFICIENT OF VARIANCE	69.75	32.74	50.19	56.60	89.18
				DAT APPLICATION # 01 TIMINGS (00)	150	157	171	186	203
				DAT APPLICATION # 02 TIMINGS (01)	126	133	147	162	179
				DAT APPLICATION # 03 TIMINGS (02)	7	14	28	43	60

TITLE: BARLEY TOLERANCE TO WHEAT HERBICIDES

CREATED: 09-10-2005 REVISED: 08-01-2006 COMPLETED: Y  
PROJECT TYPE: HERBICIDE  
LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			YLD BU	
	RATE	UNIT	TM	A	SD
1A UNTREATED CHECK	0.00	NA	0	40.4	
2A»KIH-485 (60WG)	0.043	LAA	0	29.0	
3A»KIH-485 (60WG)	0.043	LAA	1	29.6	
4A»DUAL II MAGNUM (7.64EC)	0.96	LAA	0	27.0	
5A»DUAL II MAGNUM (7.64EC)	0.96	LAA	1	28.4	
6A»PROWL H20 (3.8CS)	1.50	LAA	0	30.4	
7A»PROWL H20 (3.8CS)	1.50	LAA	1	36.9	
8A»AXIOM (68 DF)	0.34	LAA	0	34.2	
9A»AXIOM (68 DF)	0.34	LAA	1	33.5	
10A HOELON 3EC	0.75	LAA	0	30.5	
11A HOELON 3EC B ADJUVANT - COC (EC)	0.75 1.00	LAA QMA	2 2	27.7	
12A»CGA-185072 (0.83EC) B»A12127 (4SL) - ADJUVANT	0.052 0.60	LAA PMA	2 2	28.3	
13A»OSPREY (4.5G) B ADJUVANT - VEGETABLE OIL	0.013 1.30	LAA PMA	2 2	24.3	
14A»OLYMPUS FLEX (11.25 DF) B ADJUVANT - VEGETABLE OIL	0.021 1.30	LAA PMA	2 2	22.5	
				LSD (0.05)	8.29
				SIGNIFICANCE OF F	*
				STANDARD DEVIATION	4.00
				COEFFICIENT OF VARIANCE	16.35
				DAT APPLICATION # 01 TIMINGS (00)	231
				DAT APPLICATION # 02 TIMINGS (01)	207
				DAT APPLICATION # 03 TIMINGS (02)	88

> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 11-07-2005(1)  
01 = POSPOS / SPIKE STAGE TO 2-LEAF 12-01-2005(2)  
02 = MIDPOS / LATE WINTER/EARLY SPRING 03-30-2006(3)

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR	SS	NOTE
002	HORVW	PHYTO %	04-06-2006	01	P	HORVW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
003	HORVW	PHYTO %	04-13-2006	01	P	HORVW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
004	HORVW	PHYTO %	04-27-2006	01	P	HORVW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
005	HORVW	PHYTO %	05-12-2006	01	P	HORVW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
006	HORVW	PHYTO %	05-29-2006	01	P	HORVW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
001	HORVW	YLD/A	06-26-2006	01	P	HORVW		CALC	SD	YLD	BU	H	1.00 A	UDC	0001	0	N

\* VARIETY/SPECIE INFO CODES

VAR 01 = NOMINI

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = NOMINI

\* USER DEFINED CALCULATIONS

US 003/06/01 001 HG--- 001 -- {RAW}\*(3.63)

**TRIAL SUMMARY**  
**GENERAL SITE INFORMATION**

TRIAL #: US 003/06/01 001 HH      ALTERNATE ID#: HF 08 2006  
 PROTOCOL#: US 003/06/01      ALTERNATE ID#: HAYDEN FARM-06  
 CREATED BY: US RITTER R  
 CREATED: 09-10-2005      REVISED: 08-08-2006      COMPLETED: Y  
 TITLE: USE OF OSPREY FOR ITALIAN RYEGRASS CONTROL IN WHEAT  
 COORDINATOR: US 001 Ron Ritter  
 TRIAL TYPE: HERBICIDE  
 PROJECT#2:  
 RESEARCHER: RITTER AND MENBERE      CONFIDENCE: HIGH CONFIDENCE IN TRIAL DATA  
 REPORTED BY: US Ron Ritter And Ron Ritter  
 COOPERATOR: MR. KEVIN CONOVER      DATA SOURCE: UNIVERSITY  
 LOCATION: HAYDEN FARM      TYPE: FIELD TRIAL  
 CITY: LAUREL      SUBDIVISION: MARYLAND  
 COUNTY: PRINCE GEORGE'S      ZIP: 20708  
 COUNTRY: UNITED STATES  
 WEATHER SITE: HF -- HAYDEN FARM      DISTANCE TO TRIAL: 5280.0 FT  
 WEEKS PRIOR TO FIRST APPLICATION: 4      WEEKS AFTER LAST APPLICATION: 4  
 EARLY WEATHER: NA      MID WEATHER: NA      LATE WEATHER: NA

**SOIL INFORMATION**

% SAND: 70      TILLAGE: COT  
 % SILT: 20      PH: 6.3  
 % CLAY: 10      CEC: 8.0  
 TEXTURE: SL      % OM: 2.3  
 SOIL GEN: C  
 PREVIOUS CROP: NA - NONE  
 % RESIDUE: 0  
 PLOT WIDTH: 10.00 FT  
 PLOT LENGTH: 20.00 FT  
 PLOT AREA: 200.00 SFT

**TRIAL INFORMATION**

DESIGN: RCB      RESIDUE TRIAL: EFF  
 ACTUAL REPS: 3      ACTUAL BLOCKS: 1  
 ACTUAL TRTS: 12      ACTUAL SUB-BLOCKS: 12

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 11/08/2005. Variety - Pioneer 26R15.
2. Italian ryegrass planted 11/08/2005. Variety - Marshall.
3. 30 lb N/acre applied 11/04/2005.
4. Early winter applications made 12/01/2005.
5. Late winter applications made 03/30/2006.
6. Study harvested 07/12/2006.

APPL. NUMBER	01	02	UNIT
TIMINGS	00	01	
TYPE	LIQMIX	LIQMIX	
APPLICATION DATE	12-01-05	03-30-06	USA
TIME - BEGIN	15:00	16:00	24H
TIME - END	16:00	16:30	24H
AIR TEMPERATURE	50	62	F
% REL. HUMIDITY	60	20	
WIND DIRECTION	NORTHEAST	SOUTHWEST	
WIND SPEED	3.0	2.0	M/H
CLOUD COVER	CLOUDY	CLEAR	
DEW	NO	NO	
SOIL MOISTURE	MOIST/MOI	DRY/DRY	
SOIL CONDITION	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	46/4.00	55/4.00	F /
METHOD	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	GPM
NOZZLE NUMBER	6	6	
NOZZLE SPACING	20.000	20.000	IN
SCREEN SIZE			
SCREEN SZ DESC	NA	NA	
SWATH WIDTH	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	IN
SPEED	3.00	3.00	M/H
MIX SIZE	0.560	0.560	
MIX SIZE UNIT	GAL	GAL	
SPRAY VOLUME	18.00	18.00	
SCREEN SIZE	GPA	GPA	
PRESSURE	20.00	20.00	PSI
DILUENT	WATER	WATER	
INC. DATE			USA
INC. START			24H
INC. END			24H
INC. DEPTH			IN
INC. EQUIPMENT	---	---	

## \* TIMING CODES

00 = POSPOS / EARLY POSTEMERGENCE - EARLY WINTER  
01 = MIDPOS / MID POSTEMERGENCE - LATE WINTER

## \* NOZZLE DESCRIPTION

01 = SS-8003  
02 = SS-8003

01 P TRZAW - WHEAT, WINTER                      VAR/SPC INFO: PIONEER 26R15  
**TARGET:** CROP      **SITE:** FG                      **POPULATION:** 140.00 LPA                      **PLANTED:** 11-08-2005  
**PLANTING DEPTH:** 0.5 IN                                      **ROW WIDTH:** 6.0 IN  
**INFESTATION DATE:** - - **METHOD:** NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MK SIZE	AV SIZE	CROP	VIGOR	NOTES
11-08-2005	00	MED	140.00 LPA	.	.	. IN		NA	
12-01-2005	11	MED	140.00 LPA	3.00	3.00	3.00 IN		TUR	
03-30-2006	23	MED	140.00 LPA	5.00	5.00	5.00 IN		WST	

02 P LOLMU - RYEGRASS, ITALIAN                      VAR/SPC INFO: MARSHALL  
**TARGET:** PEST      **SITE:** FG                      **POPULATION:** 20.00 LPA                      **PLANTED:** 11-08-2005  
**PLANTING DEPTH:** 0.5 IN                                      **ROW WIDTH:** 6.0 IN  
**INFESTATION DATE:** - - **METHOD:** NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MK SIZE	AV SIZE	CROP	VIGOR	NOTES
11-08-2005	00	MED	20.00 LPA	.	.	. IN		NA	
12-01-2005	11	MED	20.00 LPA	1.00	1.00	1.00 IN		TUR	
03-30-2006	22	MED	20.00 LPA	2.00	2.00	2.00 IN		WST	

\* **STAGE CODE -- CEREALS**  
00 = DRY SEED (CARYOPSIS)  
11 = FIRST LEAF UNFOLDED  
23 = 3 TILLERS DETECTABLE  
\* **STAGE CODE -- GENERAL GRASS**  
00 = DRY SEED (CARYOPSIS)  
11 = FIRST LEAF UNFOLDED  
22 = 2 TILLERS DETECTABLE



**TITLE:** USE OF OSPREY FOR ITALIAN RYEGRASS CONTROL IN WHEAT  
**CREATED:** 09-10-2005 **REVISED:** 08-08-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	04-06-06 P TRZAW	04-06-06 P LOLMU	04-13-06 P TRZAW	04-13-06 P LOLMU	04-27-06 P LOLMU	
				VAR 01 PHY % 1.00	VAR 02 CON % 1.00	VAR 01 PHY % 1.00	VAR 02 CON % 1.00	VAR 02 CON % 1.00	
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»OSPREY (4.5G)	0.013	LAA	0	3	100	0	100	97	
B ADJUVANT - VEGETABLE OIL	0.50	PMV	0						
3A»OSPREY (4.5G)	0.013	LAA	0	0	93	0	93	88	
B SURFACTANT - NON-IONIC (SL)	0.50	PMV	0						
C FERTILIZER - 28%UAN	2.00	QMA	0						
4A»OSPREY (4.5G)	0.013	LAA	0	0	93	0	93	93	
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0						
5A»DEFINE (4SC)	0.225	LAA	0	10	100	7	100	97	
6A»DEFINE (4SC)	0.45	LAA	0	25	97	13	97	95	
7A»OSPREY (4.5G)	0.013	LAA	1	3	23	0	30	73	
B ADJUVANT - VEGETABLE OIL	0.50	PMV	1						
8A»OSPREY (4.5G)	0.013	LAA	1	0	20	0	32	73	
B SURFACTANT - NON-IONIC (SL)	0.50	PMV	1						
C FERTILIZER - 28%UAN	2.00	QMA	1						
9A»OSPREY (4.5G)	0.013	LAA	1	3	20	0	33	82	
B»A12127 (4SL) - ADJUVANT	0.60	PMA	1						
10A»CGA-185072 (0.83EC)	0.052	LAA	0	0	100	0	100	97	
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0						
11A»CGA-185072 (0.83EC)	0.052	LAA	1	0	30	0	48	95	
B»A12127 (4SL) - ADJUVANT	0.60	PMA	1						
12A UNTREATED CHECK	0.00	NA	1	0	0	0	0	0	
				LSD (0.05)	6.71	10.49	3.90	8.20	10.10
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	3.24	5.06	1.88	4.00	4.87
				COEFFICIENT OF VARIANCE	105.73	11.00	138.17	8.00	8.00
				DAT APPLICATION # 01 TIMINGS (00)	126	126	133	133	147
				DAT APPLICATION # 02 TIMINGS (01)	7	7	14	14	28

TITLE: USE OF OSPREY FOR ITALIAN RYEGRASS CONTROL IN WHEAT  
 CREATED: 09-10-2005 REVISED: 08-08-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	008 CALC
	RATE	UNIT	TM	05-13-06 P LOLMU	05-29-06 P LOLMU	07-12-06 P TRZAW	07-12-06 P TRZAW
1A UNTREATED CHECK	0.00	NA	0	0	0	14.9	54.2
2A»OSPREY (4.5G)	0.013	LAA	0	92	85	25.3	91.8
B ADJUVANT - VEGETABLE OIL	0.50	PMV	0				
3A»OSPREY (4.5G)	0.013	LAA	0	70	67	21.2	77.0
B SURFACTANT - NON-IONIC (SL)	0.50	PMV	0				
C FERTILIZER - 28%UAN	2.00	QMA	0				
4A»OSPREY (4.5G)	0.013	LAA	0	87	83	24.9	90.5
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0				
5A»DEFINE (4SC)	0.225	LAA	0	95	88	22.5	81.8
6A»DEFINE (4SC)	0.45	LAA	0	90	87	20.6	74.7
7A»OSPREY (4.5G)	0.013	LAA	1	97	97	19.0	68.8
B ADJUVANT - VEGETABLE OIL	0.50	PMV	1				
8A»OSPREY (4.5G)	0.013	LAA	1	100	100	20.0	72.6
B SURFACTANT - NON-IONIC (SL)	0.50	PMV	1				
C FERTILIZER - 28%UAN	2.00	QMA	1				
9A»OSPREY (4.5G)	0.013	LAA	1	100	97	19.5	70.8
B»A12127 (4SL) - ADJUVANT	0.60	PMA	1				
10A»CGA-185072 (0.83EC)	0.052	LAA	0	100	97	23.4	85.0
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0				
11A»CGA-185072 (0.83EC)	0.052	LAA	1	100	97	22.3	80.8
B»A12127 (4SL) - ADJUVANT	0.60	PMA	1				
12A UNTREATED CHECK	0.00	NA	1	0	0	16.1	58.5
				12.87	11.22	5.56	20.18
				**	**	*	*
				6.21	5.41	2.68	9.73
				9.81	8.86	15.79	15.78
				163	179	223	223
				44	60	104	104

>> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = POSPOS / EARLY POSTEMERGENCE - EARLY WINTER 12-01-2005(1)  
 01 = MIDPOS / MID POSTEMERGENCE - LATE WINTER 03-30-2006(2)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	TRZAW	PHYTO %	04-06-2006	01	P	TRZAW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	O	N
002	LOLMU	CON %	04-06-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	O	N
003	TRZAW	PHYTO %	04-13-2006	01	P	TRZAW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	O	N
004	LOLMU	CON %	04-13-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	O	N
005	LOLMU	CON %	04-27-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	O	N
006	LOLMU	CON %	05-13-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	O	N
007	LOLMU	CON %	05-29-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	O	N
008	TRZAW	YLD/PLOT	07-12-2006	01	P	TRZAW		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	O	N
	TRZAW	YLD/A						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES  
 VAR 01 = PIONEER 26R15

**\* VARIETY/SPECIE INFO CODES**

VAR 02 = MARSHALL

**\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)**

01 = PIONEER 26R15

02 = MARSHALL

**\* USER DEFINED CALCULATIONS**

US 003/06/01 001 HH--- 008 -- {RAW}\*(3.63)

US 003/06/01 001 HH--- 008 -- {RAW}\*(3.63)

TRIAL SUMMARY  
GENERAL SITE INFORMATION

TRIAL #: US 003/06/01 001 HJ                   ALTERNATE ID#: HF 10 2006  
 PROTOCOL#: US 003/06/01                   ALTERNATE ID#: HAYDEN FARM-06  
 CREATED BY: US RITTER R  
 CREATED: 09-10-2005                   REVISED: 11-13-2006                   COMPLETED: Y  
 TITLE: CANADA THISTLE CONTROL IN GRASS PASTURE  
 COORDINATOR: US 001 Ron Ritter  
 TRIAL TYPE: HERBICIDE  
 PROJECT#2:  
 RESEARCHER: RITTER AND MENBERE                   CONFIDENCE: HIGH CONFIDENCE IN TRIAL DATA  
 REPORTED BY: US Ron Ritter And Ron Ritter  
 COOPERATOR: MR. KEVIN CONOVER                   DATA SOURCE: UNIVERSITY  
 LOCATION: HAYDEN FARM                   TYPE: FIELD TRIAL  
 CITY: BELTSVILLE                   SUBDIVISION: MARYLAND  
 COUNTY: PRINCE GEORGE'S                   ZIP: 20705  
 COUNTRY: UNITED STATES  
 WEATHER SITE: HF -- HAYDEN FARM                   DISTANCE TO TRIAL: 5280.0 FT  
 WEEKS PRIOR TO FIRST APPLICATION: 4   WEEKS AFTER LAST APPLICATION: 4  
 EARLY WEATHER: NA           MID WEATHER: NA           LATE WEATHER: NA

SOIL INFORMATION

% SAND: 70           TILLAGE: COT  
 % SILT: 20           PH: 6.3  
 % CLAY: 10           CEC: 8.0  
 TEXTURE: SL           % OM: 2.3  
 SOIL GEN: C  
 PREVIOUS CROP: NA - NONE  
 % RESIDUE: 0  
 PLOT WIDTH: 10.00 FT  
 PLOT LENGTH: 20.00 FT  
 PLOT AREA: 200.00 SFT

TRIAL INFORMATION

DESIGN: RCB           RESIDUE TRIAL: EFF  
 ACTUAL REPS: 3           ACTUAL BLOCKS: 1  
 ACTUAL TRTS: 14           ACTUAL SUB-BLOCKS: 14

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

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**ABSTRACT**

A. Trial Initiation

1. Study sprayed 09/23/2005.
2. Study evaluated for regrowth in 2006 and then abandoned.

APPL. NUMBER	01	UNIT
TIMINGS	00	
TYPE	LIQMIX	
APPLICATION DATE	09-23-05	USA
TIME - BEGIN	15:00	24H
TIME - END	16:00	24H
AIR TEMPERATURE	90	F
% REL. HUMIDITY	70	
WIND DIRECTION	NORTHWEST	
WIND SPEED	5.0	M/H
CLOUD COVER	HAZY SUN	
DEW	NO	
SOIL MOISTURE	DRY/DRY	
SOIL CONDITION	FRIABLE	
SOIL TEMP/DEPTH	88/4.00	F /
METHOD	SPRAY	
EQUIPMENT	SPRBAC	
PROPELLANT	COMCO2	
PLACEMENT	BRFOSO	
NOZZLE	FLATFAN	
NOZZLE VOLUME	0.03	GPM
NOZZLE NUMBER	6	
NOZZLE SPACING	20.000	IN
SCREEN SIZE		
SCREEN SZ DESC	NA	
SWATH WIDTH	10.0	FT
BOOM HEIGHT	20.0	IN
SPEED	3.00	M/H
MIX SIZE	0.560	
MIX SIZE UNIT	GAL	
SPRAY VOLUME	18.00	
SCREEN SIZE	GPA	
PRESSURE	20.00	PSI
DILUENT	WATER	
INC. DATE		USA
INC. START		24H
INC. END		24H
INC. DEPTH		IN
INC. EQUIPMENT	---	

\* TIMING CODES

00 = POSPOS / POSTEMERGENCE - EARLY FALL

\* NOZZLE DESCRIPTION

01 = SS-8003

01 P CIRAR - THISTLE, CANADA

TARGET: PEST SITE: FG

PLANTED:

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
09-23-2005	19	HGH	1.00 IF2	18.00	24.00	20.00 IN		TUR	

\* STAGE CODE -- GENERAL

19 = >8 TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED

TITLE: CANADA THISTLE CONTROL IN GRASS PASTURE  
 CREATED: 09-10-2005 REVISD: 11-13-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			CON %	CON %	CON %	CON %
	RATE	UNIT	TM	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL
001 RAW							
002 RAW							
003 RAW							
004 RAW							
09-30-05							
10-12-05							
11-04-05							
06-21-06							
P CIRAR							
P CIRAR							
P CIRAR							
P CIRAR							
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0
2A BANVEL (4SL)	2.00	LAA	0	90	98	100	50
3A BANVEL (4SL)	1.00	LAA	0	70	92	98	28
B (G) 2,4-D-ESTER (4EC)	1.00	LAA	0				
4A>>DISTINCT (70WG)	0.35	LAA	0	73	82	93	40
5A STINGER (3SL)	0.188	LAA	0	78	92	97	47
6A STINGER (3SL)	0.248	LAA	0	85	93	98	48
7A>>REDEEM (3L)	1.50	LAA	0	60	73	80	47
8A CROSSBOW (3EC)	3.00	LAA	0	53	70	100	17
9A ALLY (60WG)	0.019	LAA	0	30	30	35	0
10A ALLY (60WG)	0.019	LAA	0	88	98	100	53
B BANVEL (4SL)	1.00	LAA	0				
11A ALLY (60WG)	0.019	LAA	0	57	87	100	25
B (G) 2,4-D-ESTER (4EC)	1.00	LAA	0				
12A ALLY (60WG)	0.019	LAA	0	53	65	87	28
B>>DISTINCT (70WG)	0.175	LAA	0				
13A ALLY (60WG)	0.019	LAA	0	85	98	100	45
B STINGER (3SL)	0.188	LAA	0				
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0
				22.32	22.33	10.11	29.37
				**	**	**	**
				10.85	10.86	4.92	14.28
				22.61	19.00	7.75	57.18
				7	19	42	271

>> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = POSPOS / POSTEMERGENCE - EARLY FALL 09-23-2005(1)

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	CIRAR	CON %	09-30-2005	01	P	CIRAR		RAW	ALL	CON %	H		1.00 PL	NO	0001	O	N
002	CIRAR	CON %	10-12-2005	01	P	CIRAR		RAW	ALL	CON %	H		1.00 PL	NO	0001	O	N
003	CIRAR	CON %	11-04-2005	01	P	CIRAR		RAW	ALL	CON %	H		1.00 PL	NO	0001	O	N
004	CIRAR	CON %	06-21-2006	01	P	CIRAR		RAW	ALL	CON %	H		1.00 PL	NO	0001	O	N



TRIAL SUMMARY  
GENERAL SITE INFORMATION

TRIAL #: US 003/06/01 001 HK      ALTERNATE ID#: HF 11 2006  
 PROTOCOL#: US 003/06/01      ALTERNATE ID#: HF 2005  
 CREATED BY: US RITTER R  
 CREATED: 09-10-2005      REVISED: 08-01-2006      COMPLETED: Y  
 TITLE: AXIAL BROADLEAF TANK-MIXES FOR ANNUAL GRASS CONTROL IN WHEAT  
 COORDINATOR: US 001 Ron Ritter  
 TRIAL TYPE: HERBICIDE  
 PROJECT#2:  
 RESEARCHER: RITTER AND MENBERE      CONFIDENCE: HIGH CONFIDENCE IN TRIAL DATA  
 REPORTED BY: US Ron Ritter And Ron Ritter      DATA SOURCE: UNIVERSITY  
 COOPERATOR: MR. KEVIN CONOVER      TYPE: FIELD TRIAL  
 LOCATION: HAYDEN FARM      SUBDIVISION: MARYLAND  
 CITY: LAUREL      ZIP: 20708  
 COUNTY: PRINCE GEORGE'S  
 COUNTRY: UNITED STATES  
 WEATHER SITE: HF -- HAYDEN FARM      DISTANCE TO TRIAL: 5280.0 FT  
 WEEKS PRIOR TO FIRST APPLICATION: 4      WEEKS AFTER LAST APPLICATION: 4  
 EARLY WEATHER: NA      MID WEATHER: NA      LATE WEATHER: NA

SOIL INFORMATION

% SAND: 70      TILLAGE: COT  
 % SILT: 20      PH: 6.3  
 % CLAY: 10      CEC: 8.0  
 TEXTURE: SL      % OM: 2.3  
 SOIL GEN: C  
 PREVIOUS CROP: NA - NONE  
 % RESIDUE: 0  
 PLOT WIDTH: 10.00 FT  
 PLOT LENGTH: 15.00 FT  
 PLOT AREA: 150.00 SFT

TRIAL INFORMATION

DESIGN: RCB      RESIDUE TRIAL: EFF  
 ACTUAL REPS: 3      ACTUAL BLOCKS: 1  
 ACTUAL TRTS: 22      ACTUAL SUB-BLOCKS: 22

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

---

**ABSTRACT**

## A. Trial Initiation

1. Study planted 11/08/2005. Variety - Pioneer 26R15.
2. Italian ryegrass planted 11/08/2005. Variety - Marshall.
3. 30 lb N/acre applied 11/04/2005.
4. Postemergence applications made 04/01/2006.
5. Studuy harvested 07/12/2006.

APPL. NUMBER	01	UNIT
TIMINGS	00	
TYPE	LIQMIX	
APPLICATION DATE	04-01-06	USA
TIME - BEGIN	14:00	24H
TIME - END	15:00	24H
AIR TEMPERATURE	65	F
% REL. HUMIDITY	25	
WIND DIRECTION	WEST	
WIND SPEED	5.0	M/H
CLOUD COVER	CLEAR	
DEW	NO	
SOIL MOISTURE	DRY/DRY	
SOIL CONDITION	FRIABLE	
SOIL TEMP/DEPTH	55/4.00	F /
METHOD	SPRAY	
EQUIPMENT	SPRBAC	
PROPELLANT	COMCO2	
PLACEMENT	BRFOSO	
NOZZLE	FLATFAN	
NOZZLE VOLUME	0.03	GPM
NOZZLE NUMBER	6	
NOZZLE SPACING	20.000	IN
SCREEN SIZE		
SCREEN SZ DESC	NA	
SWATH WIDTH	10.0	FT
BOOM HEIGHT	20.0	IN
SPEED	3.00	M/H
MIX SIZE	0.560	
MIX SIZE UNIT	GAL	
SPRAY VOLUME	18.00	
SCREEN SIZE	GPA	
PRESSURE	20.00	PSI
DILUENT	WATER	
INC. DATE		USA
INC. START		24H
INC. END		24H
INC. DEPTH		IN
INC. EQUIPMENT	---	

## \* TIMING CODES

00 = POSPOS / POSTEMERGENCE

## \* NOZZLE DESCRIPTION

01 = SS-8003

01 P TRZAW - WHEAT, WINTER

VAR/SPC INFO: PIONEER 26R15

TARGET: CROP SITE: FG POPULATION: 140.00 LPA PLANTED: 11-08-2005

PLANTING DEPTH: 0.5 IN ROW WIDTH: 6.0 IN

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
11-08-2005	00	MED	140.00 LPA	.	.	. IN	NA	
04-01-2006	23	MED	140.00 LPA	5.00	5.00	5.00 IN	WST	

02 P LOLMU - RYEGRASS, ITALIAN

VAR/SPC INFO: MARSHALL

TARGET: PEST SITE: FG POPULATION: 20.00 LPA PLANTED: 11-08-2005

PLANTING DEPTH: 0.5 IN ROW WIDTH: 6.0 IN

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
11-08-2005	00	MED	20.00 LPA	.	.	. IN	NA	
04-01-2006	23	MED	20.00 LPA	2.00	4.00	3.00 IN	WST	

## \* STAGE CODE -- CEREALS

00 = DRY SEED (CARYOPSIS)

23 = 3 TILLERS DETECTABLE

## \* STAGE CODE -- GENERAL GRASS

00 = DRY SEED (CARYOPSIS)

23 = 3 TILLERS DETECTABLE

**TITLE:** AXIAL BROADLEAF TANK-MIXES FOR ANNUAL GRASS CONTROL IN WHEAT  
**CREATED:** 09-10-2005 **REVISED:** 08-01-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 15.00 FT LONG  
**PLOT AREA:** 150.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE RATE UNIT TM			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW
				04-06-06	04-06-06	04-13-06	04-13-06	04-27-06
				P TRZAW	P LOLMU	P TRZAW	P LOLMU	P LOLMU
				VAR 01	VAR 02	VAR 01	VAR 02	VAR 02
				PHY %	CON %	PHY %	CON %	CON %
				1.00	1.00	1.00	1.00	1.00
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
2A»CGA-185072 (0.83EC)	0.043	LAA	0	0	20	0	32	87
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
3A»CGA-185072 (0.83EC)	0.052	LAA	0	0	13	0	23	90
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
4A»CGA-185072 (0.83EC)	0.043	LAA	0	3	20	0	27	88
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C»BRONATE (5EC)	0.75	LAA	0					
5A»CGA-185072 (0.83EC)	0.052	LAA	0	3	13	0	32	92
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C»BRONATE (5EC)	0.75	LAA	0					
6A»CGA-185072 (0.83EC)	0.043	LAA	0	0	7	0	32	88
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C (G) 2,4-D-DMASALT (4SL)	0.375	LAA	0					
7A»CGA-185072 (0.83EC)	0.052	LAA	0	0	20	0	45	92
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C (G) 2,4-D-DMASALT (4SL)	0.375	LAA	0					
8A»CGA-185072 (0.83EC)	0.043	LAA	0	0	13	0	32	87
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C HARMONY EXTRA (75WG)	0.027	LAA	0					
9A»CGA-185072 (0.83EC)	0.052	LAA	0	0	20	0	33	88
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C HARMONY EXTRA (75WG)	0.027	LAA	0					
10A»CGA-185072 (0.83EC)	0.043	LAA	0	0	7	0	27	88
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C»HARMONY GT (75WG)	0.027	LAA	0					
11A»CGA-185072 (0.83EC)	0.052	LAA	0	0	13	0	33	90
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C»HARMONY GT (75WG)	0.027	LAA	0					
12A»CGA-185072 (0.83EC)	0.043	LAA	0	0	20	0	25	83
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C BANVEL (4SL)	0.09	LAA	0					
13A»CGA-185072 (0.83EC)	0.052	LAA	0	0	20	0	25	90
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C BANVEL (4SL)	0.09	LAA	0					
14A»CGA-185072 (0.83EC)	0.043	LAA	0	0	20	0	37	83
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C (G) 2,4-D-ESTER (4EC)	0.375	LAA	0					
15A»CGA-185072 (0.83EC)	0.052	LAA	0	0	20	0	35	92
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C (G) 2,4-D-ESTER (4EC)	0.375	LAA	0					
16A»CGA-185072 (0.83EC)	0.043	LAA	0	0	20	0	30	95
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C»MCPA ESTER (3.7L)	0.375	LAA	0					

TITLE: AXIAL BROADLEAF TANK-MIXES FOR ANNUAL GRASS CONTROL IN WHEAT

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	04-06-06 P TRZAW	04-06-06 P LOLMU	04-13-06 P TRZAW	04-13-06 P LOLMU	04-27-06 P LOLMU	
				VAR 01 PHY % 1.00	VAR 02 CON % 1.00	VAR 01 PHY % 1.00	VAR 02 CON % 1.00	VAR 02 CON % 1.00	
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	
17A»CGA-185072 (0.83EC)	0.052	LAA	0	0	7	0	28	95	
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0						
C»MCPA ESTER (3.7L)	0.375	LAA	0						
18A»CGA-185072 (0.83EC)	0.043	LAA	0	0	7	0	23	85	
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0						
C AMBER (75WG)	0.021	LAA	0						
19A»CGA-185072 (0.83EC)	0.052	LAA	0	0	17	0	28	87	
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0						
C AMBER (75WG)	0.021	LAA	0						
20A HOELON 3EC	1.00	LAA	0	0	13	0	25	57	
B ADJUVANT - COC (EC)	1.00	PMA	0						
21A»OSPREY (4.5G)	0.013	LAA	0	0	17	0	28	70	
B ADJUVANT - VEGETABLE OIL	1.00	PMV	0						
22A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSL (0.05)	2.77	15.24	0.00	12.51	8.60
				SIGNIFICANCE OF F	NS	NS	NS	**	**
				STANDARD DEVIATION	1.39	7.62	0.00	6.26	4.30
				COEFFICIENT OF VARIANCE	560.61	66.95	0.00	28.09	6.71
				DAT APPLICATION # 01 TIMINGS (00)	5	5	12	12	26

**TITLE:** AXIAL BROADLEAF TANK-MIXES FOR ANNUAL GRASS CONTROL IN WHEAT  
**CREATED:** 09-10-2005 **REVISED:** 08-01-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 15.00 FT LONG  
**PLOT AREA:** 150.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	008 CALC
	RATE	UNIT	TM	05-12-06 P LOLMU	05-29-06 P LOLMU	07-12-06 P TRZAW	07-12-06 P TRZAW
				VAR 02 CON % 1.00	VAR 02 CON % 1.00	VAR 01 YLD LB 1.00	VAR 01 YLD BU 1.00
				PL ALL	PL ALL	PL SD	A SD
1A UNTREATED CHECK	0.00	NA	0	0	0	8.1	39.2
2A»CGA-185072 (0.83EC)	0.043	LAA	0	95	100	13.0	62.8
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0				
3A»CGA-185072 (0.83EC)	0.052	LAA	0	98	100	12.4	60.0
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0				
4A»CGA-185072 (0.83EC)	0.043	LAA	0	98	98	9.8	47.4
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0				
C»BRONATE (5EC)	0.75	LAA	0				
5A»CGA-185072 (0.83EC)	0.052	LAA	0	100	100	9.1	44.2
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0				
C»BRONATE (5EC)	0.75	LAA	0				
6A»CGA-185072 (0.83EC)	0.043	LAA	0	100	97	11.4	55.0
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0				
C (G) 2,4-D-DMASALT (4SL)	0.375	LAA	0				
7A»CGA-185072 (0.83EC)	0.052	LAA	0	100	97	11.0	53.3
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0				
C (G) 2,4-D-DMASALT (4SL)	0.375	LAA	0				
8A»CGA-185072 (0.83EC)	0.043	LAA	0	97	97	13.0	63.1
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0				
C HARMONY EXTRA (75WG)	0.027	LAA	0				
9A»CGA-185072 (0.83EC)	0.052	LAA	0	95	98	10.5	50.7
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0				
C HARMONY EXTRA (75WG)	0.027	LAA	0				
10A»CGA-185072 (0.83EC)	0.043	LAA	0	92	97	11.4	55.3
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0				
C»HARMONY GT (75WG)	0.027	LAA	0				
11A»CGA-185072 (0.83EC)	0.052	LAA	0	95	98	12.5	60.5
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0				
C»HARMONY GT (75WG)	0.027	LAA	0				
12A»CGA-185072 (0.83EC)	0.043	LAA	0	95	90	9.3	45.2
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0				
C BANVEL (4SL)	0.09	LAA	0				
13A»CGA-185072 (0.83EC)	0.052	LAA	0	95	98	9.3	44.9
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0				
C BANVEL (4SL)	0.09	LAA	0				
14A»CGA-185072 (0.83EC)	0.043	LAA	0	93	95	9.7	47.1
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0				
C (G) 2,4-D-ESTER (4EC)	0.375	LAA	0				
15A»CGA-185072 (0.83EC)	0.052	LAA	0	98	100	10.2	49.2
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0				
C (G) 2,4-D-ESTER (4EC)	0.375	LAA	0				
16A»CGA-185072 (0.83EC)	0.043	LAA	0	100	97	9.8	47.6
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0				
C»MCPA ESTER (3.7L)	0.375	LAA	0				

TITLE: AXIAL BROADLEAF TANK-MIXES FOR ANNUAL GRASS CONTROL IN WHEAT

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	008 CALC	
	RATE	UNIT	TM	05-12-06 P LOLMU	05-29-06 P LOLMU	07-12-06 P TRZAW	07-12-06 P TRZAW	
17A»CGA-185072 (0.83EC)	0.052	LAA	0	97	97	9.4	45.5	
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C»MCPA ESTER (3.7L)	0.375	LAA	0					
18A»CGA-185072 (0.83EC)	0.043	LAA	0	85	88	10.0	48.4	
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C AMBER (75WG)	0.021	LAA	0					
19A»CGA-185072 (0.83EC)	0.052	LAA	0	92	98	10.4	50.3	
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C AMBER (75WG)	0.021	LAA	0					
20A HOELON 3EC	1.00	LAA	0	62	58	12.2	58.9	
B ADJUVANT - COC (EC)	1.00	PMA	0					
21A»OSPREY (4.5G)	0.013	LAA	0	83	95	9.4	45.5	
B ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
22A UNTREATED CHECK	0.00	NA	0	0	0	7.2	35.0	
				LSD (0.05)	10.29	10.71	3.23	15.67
				SIGNIFICANCE OF F	**	**	*	*
				STANDARD DEVIATION	5.15	5.36	1.62	7.84
				COEFFICIENT OF VARIANCE	7.42	7.60	19.00	19.00
				DAT APPLICATION # 01 TIMINGS (00)	41	58	102	102

> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = POSPOS / POSTEMERGENCE 04-01-2006(1)

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRPT	SS	NOTE
001	TRZAW	PHYTO %	04-06-2006	01	P	TRZAW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	O	N
002	LOLMU	CON %	04-06-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	O	N
003	TRZAW	PHYTO %	04-13-2006	01	P	TRZAW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	O	N
004	LOLMU	CON %	04-13-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	O	N
005	LOLMU	CON %	04-27-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	O	N
006	LOLMU	CON %	05-12-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	O	N
007	LOLMU	CON %	05-29-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	O	N
008	TRZAW	YLD/PLOT	07-12-2006	01	P	TRZAW		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	O	N
	TRZAW	YLD/A						CALC	SD	YLD	BU	---	1.00 A				

\* VARIETY/SPECIE INFO CODES

VAR 01 = PIONEER 26R15

VAR 02 = MARSHALL

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = PIONEER 26R15

02 = MARSHALL

\* USER DEFINED CALCULATIONS

US 003/06/01 001 HK--- 008 -- {RAW}\*(4.84)

US 003/06/01 001 HK--- 008 -- {RAW}\*(4.84)



TRIAL SUMMARY  
GENERAL SITE INFORMATION

**TRIAL #:** US 003/06/01 001 HL      **ALTERNATE ID#:** HF 12 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** HF 2005  
**CREATED BY:** US RITTER R  
**CREATED:** 09-10-2005      **REVISED:** 08-01-2006      **COMPLETED:** Y  
**TITLE:** AXIAL COMPARISONS IN WHEAT  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

## SOIL INFORMATION

**% SAND:** 70      **TILLAGE:** COT  
**% SILT:** 20      **PH:** 6.3  
**% CLAY:** 10      **CEC:** 8.0  
**TEXTURE:** SL      **% OM:** 2.3  
**SOIL GEN:** C  
**PREVIOUS CROP:** NA - NONE  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

## TRIAL INFORMATION

**DESIGN:** RCB      **RESIDUE TRIAL:** EFF  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 12      **ACTUAL SUB-BLOCKS:** 12

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 11/08/2005. Variety - Pioneer 26R15.
2. Italian ryegrass planted 11/08/2005. Variety - Marshall.
3. 30 lb N/acre applied 11/04/2005.
4. Postemergence applications made 03/30/2006.
5. Study harvested 07/12/2006.

APPL. NUMBER	01	UNIT
TIMINGS	00	
TYPE	LIQMIX	
APPLICATION DATE	03-30-06	USA
TIME - BEGIN	16:00	24H
TIME - END	16:30	24H
AIR TEMPERATURE	62	F
% REL. HUMIDITY	20	
WIND DIRECTION	SOUTHWEST	
WIND SPEED	2.0	M/H
CLOUD COVER	CLEAR	
DEW	NO	
SOIL MOISTURE	DRY/DRY	
SOIL CONDITION	FRIABLE	
SOIL TEMP/DEPTH	55/4.00	F /
METHOD	SPRAY	
EQUIPMENT	SPRBAC	
PROPELLANT	COMCO2	
PLACEMENT	BRFOSO	
NOZZLE	FLATFAN	
NOZZLE VOLUME	0.03	GPM
NOZZLE NUMBER	6	
NOZZLE SPACING	20.000	IN
SCREEN SIZE		
SCREEN SZ DESC	NA	
SWATH WIDTH	10.0	FT
BOOM HEIGHT	20.0	IN
SPEED	3.00	M/H
MIX SIZE	0.560	
MIX SIZE UNIT	GAL	
SPRAY VOLUME	18.00	
SCREEN SIZE	GPA	
PRESSURE	20.00	PSI
DILUENT	WATER	
INC. DATE		USA
INC. START		24H
INC. END		24H
INC. DEPTH		IN
INC. EQUIPMENT	---	

\* TIMING CODES  
00 = POSPOS / POSTEMERGENCE

\* NOZZLE DESCRIPTION  
01 = SS-8003

01 P TRZAW - WHEAT, WINTER

VAR/SPC INFO: PIONEER 26R15

TARGET: CROP SITE: FG POPULATION: 140.00 LPA PLANTED: 11-08-2005

PLANTING DEPTH: 0.5 IN ROW WIDTH: 6.0 IN

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
11-08-2005	00	MED	140.00 LPA	.	.	. IN	NA	
03-30-2006	23	MED	140.00 LPA	5.00	5.00	5.00 IN	WST	

02 P LOLMU - RYEGRASS, ITALIAN

VAR/SPC INFO: MARSHALL

TARGET: PEST SITE: FG POPULATION: 20.00 LPA PLANTED: 11-08-2005

PLANTING DEPTH: 0.5 IN ROW WIDTH: 6.0 IN

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
11-08-2005	00	MED	20.00 LPA	.	.	. IN	NA	
03-30-2006	22	MED	20.00 LPA	2.00	2.00	2.00 IN	WST	

\* STAGE CODE -- CEREALS

- 00 = DRY SEED (CARYOPSIS)
- 23 = 3 TILLERS DETECTABLE

\* STAGE CODE -- GENERAL GRASS

- 00 = DRY SEED (CARYOPSIS)
- 22 = 2 TILLERS DETECTABLE

TITLE: AXIAL COMPARISONS IN WHEAT  
 CREATED: 09-10-2005 REVISED: 08-01-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	04-06-06 P TRZAW	04-06-06 P LOLMU	04-13-06 P TRZAW	04-13-06 P LOLMU	04-27-06 P LOLMU	
				VAR 01 PHY % 1.00	VAR 02 CON % 1.00	VAR 01 PHY % 1.00	VAR 02 CON % 1.00	VAR 02 CON % 1.00	
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»CGA-185072 (0.83EC)	0.052	LAA	0	0	33	0	40	88	
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0						
3A»CGA-185072 (0.83EC)	0.052	LAA	0	0	27	0	53	93	
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0						
C (G) 2,4-D-ESTER (4EC)	0.375	LAA	0						
4A»CGA-185072 (0.83EC)	0.052	LAA	0	0	22	0	50	95	
B»A12127 (4SL) - ADJUVANT	0.60	PMA	0						
C HARMONY EXTRA (75WG)	0.018	LAA	0						
5A»ACHIEVE 3.34SC	0.234	LAA	0	0	20	0	45	83	
B»SUPERCHARGE SURFACTANT	0.50	NA	0						
C FERTILIZER-21% AMMONIUM SULFATE	10.00	PMG	0						
6A HOELON 3EC	1.00	LAA	0	0	20	0	35	88	
B ADJUVANT - COC (EC)	1.00	PMV	0						
7A»PUMA (1EC)	0.08	LAA	0	0	0	0	20	23	
8A»OSPREY (4.5G)	0.013	LAA	0	3	23	7	30	80	
B ADJUVANT - VEGETABLE OIL	1.00	PMV	0						
9A FINESSE (75WG)	0.033	LAA	0	0	22	0	30	58	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
10A»OSPREY (4.5G)	0.013	LAA	0	3	20	0	28	73	
B»OLYMPUS (70DF)	0.025	LAA	0						
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0						
11A»OLYMPUS FLEX (11.25 DF)	0.021	LAA	0	13	20	7	35	80	
B ADJUVANT - VEGETABLE OIL	1.30	PMA	0						
12A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	4.89	20.77	6.54	9.63	7.06
				SIGNIFICANCE OF F	**	*	NS	**	**
				STANDARD DEVIATION	2.36	10.00	3.15	4.64	3.40
				COEFFICIENT OF VARIANCE	173.21	71.23	347.39	18.61	6.55
				DAT APPLICATION # 01 TIMINGS (00)	7	7	14	14	28

TITLE: AXIAL COMPARISONS IN WHEAT  
 CREATED: 09-10-2005 REVISED: 08-01-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	008 CALC	
	RATE	UNIT	TM	05-12-06 P LOLMU	05-29-06 P LOLMU	07-12-06 P TRZAW	07-12-06 P TRZAW	
				VAR 02 CON % 1.00	VAR 02 CON % 1.00	VAR 01 YLD LB 1.00	VAR 01 YLD BU 1.00	
				PL ALL	PL ALL	PL SD	A SD	
1A UNTREATED CHECK	0.00	NA	0	0	0	13.2	48.0	
2A>>CGA-185072 (0.83EC)	0.052	LAA	0	100	97	16.5	60.0	
B>>A12127 (4SL) - ADJUVANT	0.60	PMA	0					
3A>>CGA-185072 (0.83EC)	0.052	LAA	0	100	100	14.2	51.6	
B>>A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C (G) 2,4-D-ESTER (4EC)	0.375	LAA	0					
4A>>CGA-185072 (0.83EC)	0.052	LAA	0	100	100	15.6	56.8	
B>>A12127 (4SL) - ADJUVANT	0.60	PMA	0					
C HARMONY EXTRA (75WG)	0.018	LAA	0					
5A>>ACHIEVE 3.34SC	0.234	LAA	0	90	85	13.6	49.2	
B>>SUPERCHARGE SURFACTANT	0.50	NA	0					
C FERTILIZER-21% AMMONIUM SULFATE	10.00	PMG	0					
6A HOELON 3EC	1.00	LAA	0	100	98	18.4	66.9	
B ADJUVANT - COC (EC)	1.00	PMV	0					
7A>>PUMA (1EC)	0.08	LAA	0	13	7	15.2	55.1	
8A>>OSPREY (4.5G)	0.013	LAA	0	93	100	18.8	68.4	
B ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
9A FINESSE (75WG)	0.033	LAA	0	67	48	17.1	62.2	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
10A>>OSPREY (4.5G)	0.013	LAA	0	88	97	15.0	54.4	
B>>OLYMPUS (70DF)	0.025	LAA	0					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
11A>>OLYMPUS FLEX (11.25 DF)	0.021	LAA	0	93	100	14.2	51.6	
B ADJUVANT - VEGETABLE OIL	1.30	PMA	0					
12A UNTREATED CHECK	0.00	NA	0	0	0	12.2	44.1	
				LSD (0.05)	9.23	13.54	4.85	17.60
				SIGNIFICANCE OF F	**	**	NS	NS
				STANDARD DEVIATION	4.45	6.53	2.34	8.49
				COEFFICIENT OF VARIANCE	7.74	11.54	18.65	18.66
				DAT APPLICATION # 01 TIMINGS (00)	43	60	104	104

>> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = POSPOS / POSTEMERGENCE 03-30-2006(1)

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRTR	SS	NOTE
001	TRZAW	PHYTO %	04-06-2006	01	P	TRZAW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	LOLMU	CON %	04-06-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
003	TRZAW	PHYTO %	04-13-2006	01	P	TRZAW		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
004	LOLMU	CON %	04-13-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	LOLMU	CON %	04-27-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	LOLMU	CON %	05-12-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
007	LOLMU	CON %	05-29-2006	02	P	LOLMU		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
008	TRZAW	YLD/PLOT	07-12-2006	01	P	TRZAW		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	TRZAW	YLD/A						CALC	SD	YLD	BU	H	1.00 A				

**\* VARIETY/SPECIE INFO CODES**

VAR 01 = PIONEER 26R15

VAR 02 = MARSHALL

**\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)**

01 = PIONEER 26R15

02 = MARSHALL

**\* USER DEFINED CALCULATIONS**

US 003/06/01 001 HL--- 008 -- {RAW} \* (3.63)

US 003/06/01 001 HL--- 008 -- {RAW} \* (3.63)

**TRIAL SUMMARY**  
**GENERAL SITE INFORMATION**

**TRIAL #:** US 003/06/01 001 HM      **ALTERNATE ID#:** HF 13 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** HAYDEN FARM-06  
**CREATED BY:** US RITTER R  
**CREATED:** 04-03-2006      **REVISED:** 10-12-2006      **COMPLETED:** Y  
**TITLE:** EARLY PREPLANT APPLICATIONS OF VALOR IN NO-TILL CORN  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 73      **TILLAGE:** NOT  
**% SILT:** 18      **PH:** 6.3  
**% CLAY:** 9      **CEC:** 4.8  
**TEXTURE:** SL      **% OM:** 1.3  
**SOIL GEN:** C  
**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD  
**% RESIDUE:** 50  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** EFF  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 14      **ACTUAL SUB-BLOCKS:** 14

**SUBMITTED BY:** \_\_\_\_\_

**REVIEWED BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_



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**ABSTRACT**

## A. Trial Initiation

1. Early preplant applications made 04/06/2006.
2. Study planted 05/01/2006. Variety - Pioneer 33B54.
3. Seed protected with Yield Guard and Poncho 1250.
4. Kernal Guard added to the hopper box.
5. 5 gallons of 9-18-9-1S applied in row.
6. 10.8 gallons of 22-0-0-5S applied 2 inches to the side of the row.
7. A total of 30-10-5-6.2S applied at planting.
8. Study sidedressed with additional nitrogen on 06/02/2006.
9. Study harvested 10/03/2006.

APPL. NUMBER	01	UNIT
TIMINGS	00	
TYPE	LIQMIX	
APPLICATION DATE	04-06-06	USA
TIME - BEGIN	16:00	24H
TIME - END	17:00	24H
AIR TEMPERATURE	68	F
% REL. HUMIDITY	20	
WIND DIRECTION	WEST	
WIND SPEED	3.0	M/H
CLOUD COVER	PARTCLDY	
DEW	NO	
SOIL MOISTURE	MOIST/DRY	
SOIL CONDITION	FRIABLE	
SOIL TEMP/DEPTH	56/4.00	F /
METHOD	SPRAY	
EQUIPMENT	SPRBAC	
PROPELLANT	COMCO2	
PLACEMENT	BRFOSO	
NOZZLE	FLATFAN	
NOZZLE VOLUME	0.03	GPM
NOZZLE NUMBER	6	
NOZZLE SPACING	20.000	IN
SCREEN SIZE		
SCREEN SZ DESC	NA	
SWATH WIDTH	10.0	FT
BOOM HEIGHT	20.0	IN
SPEED	3.00	M/H
MIX SIZE	0.560	
MIX SIZE UNIT	GAL	
SPRAY VOLUME	18.00	
SCREEN SIZE	GPA	
PRESSURE	20.00	PSI
DILUENT	WATER	
INC. DATE		USA
INC. START		24H
INC. END		24H
INC. DEPTH		IN
INC. EQUIPMENT	---	

## \* TIMING CODES

00 = PREPLA / EARLY PREPLANT

## \* NOZZLE DESCRIPTION

01 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD      VAR/SPC INFO: PIONEER 33B54  
 TARGET: CROP      SITE: FG      POPULATION: 28500.00 IPA      PLANTED: 05-01-2006  
 PLANTING DEPTH: 1.7 IN      ROW WIDTH: 30.0 IN  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MK SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-01-2006      00      MED      28500.00 IPA      .      .      . IN      NA

02 P CHEAL - LAMBSQUARTERS, COMMON  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MK SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-01-2006      00      NA      IND      .      .      . IN      ---

03 P DIGSA - CRABGRASS, LARGE, SOUTHERN  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MK SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-01-2006      00      NA      IND      .      .      . IN      ---

04 P SETFA - FOXTAIL, GIANT  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MK SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-01-2006      00      NA      IND      .      .      . IN      ---

05 P ERICA - HORSEWEED / MARESTAIL  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MK SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-01-2006      00      NA      IND      .      .      . IN      ---

\* STAGE CODE -- CORN  
 00 = DRY SEED (CARYOPSIS)  
 \* STAGE CODE -- GENERAL  
 00 = DRY SEED; DORMANCY  
 \* STAGE CODE -- GENERAL GRASS  
 00 = DRY SEED (CARYOPSIS)

**TITLE:** EARLY PREPLANT APPLICATIONS OF VALOR IN NO-TILL CORN  
**CREATED:** 04-03-2006 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	05-16-06 P ZEAMX	05-16-06 P ERICA	05-29-06 P ERICA	06-12-06 P ERICA	06-12-06 P CHEAL	
				VAR 01 PHY % 1.00	CON % 1.00	CON % 1.00	CON % 1.00	CON % 1.00	
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	0	77	35	35	57	
3A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	0	87	62	52	63	
B»VALOR SX (51WG)	0.063	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
4A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	0	100	100	100	83	
B ATRAZINE 4L (SC)	1.25	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
5A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	0	100	100	100	80	
B»VALOR SX (51WG)	0.063	LAA	0						
C ATRAZINE 4L (SC)	1.25	LAA	0						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
6A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	0	95	95	95	50	
B PRINCEP 4L (SC)	1.25	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
7A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	0	100	98	98	80	
B»VALOR SX (51WG)	0.063	LAA	0						
C PRINCEP 4L (SC)	1.25	LAA	0						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
8A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	0	90	67	60	55	
B»DUAL II MAGNUM (7.64EC)	1.59	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
9A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	0	93	77	55	92	
B»VALOR SX (51WG)	0.063	LAA	0						
C»DUAL II MAGNUM (7.64EC)	1.59	LAA	0						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
10A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	0	100	100	100	53	
B»BICEP II MAGNUM (5.5SC)	2.89	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
11A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	0	100	100	100	90	
B»BICEP II MAGNUM (5.5SC)	2.89	LAA	0						
C»VALOR SX (51WG)	0.063	LAA	0						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
12A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	0	100	100	100	28	
B ATRAZINE 4L (SC)	1.25	LAA	0						
C PRINCEP 4L (SC)	1.25	LAA	0						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
13A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	0	100	100	100	88	
B ATRAZINE 4L (SC)	1.25	LAA	0						
C PRINCEP 4L (SC)	1.25	LAA	0						
D»VALOR SX (51WG)	0.063	LAA	0						
E SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	0.00	8.61	19.15	21.10	49.00
				SIGNIFICANCE OF F	NS	**	**	**	**
				STANDARD DEVIATION	0.00	4.19	9.31	10.26	23.82
				COEFFICIENT OF VARIANCE	0.00	6.29	15.46	17.69	49.81
				DAT APPLICATION # 01 TIMINGS (00)	40	40	53	67	67

**TITLE:** EARLY PREPLANT APPLICATIONS OF VALOR IN NO-TILL CORN  
**CREATED:** 04-03-2006 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	009 RAW	010 RAW	
	RATE	UNIT	TM	06-12-06 P DIGSA	06-26-06 P ERICA	06-26-06 P CHEAL	06-26-06 P DIGSA	07-10-06 P ERICA	
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	40	33	57	40	10	
3A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	82	33	60	73	10	
B»VALOR SX (51WG)	0.063	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
4A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	17	100	72	13	100	
B ATRAZINE 4L (SC)	1.25	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
5A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	57	100	80	48	97	
B»VALOR SX (51WG)	0.063	LAA	0						
C ATRAZINE 4L (SC)	1.25	LAA	0						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
6A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	43	93	37	33	93	
B PRINCEP 4L (SC)	1.25	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
7A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	55	98	77	35	98	
B»VALOR SX (51WG)	0.063	LAA	0						
C PRINCEP 4L (SC)	1.25	LAA	0						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
8A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	90	40	52	88	27	
B»DUAL II MAGNUM (7.64EC)	1.59	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
9A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	88	47	87	85	37	
B»VALOR SX (51WG)	0.063	LAA	0						
C»DUAL II MAGNUM (7.64EC)	1.59	LAA	0						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
10A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	87	100	40	78	100	
B»BICEP II MAGNUM (5.5SC)	2.89	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
11A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	68	100	72	60	100	
B»BICEP II MAGNUM (5.5SC)	2.89	LAA	0						
C»VALOR SX (51WG)	0.063	LAA	0						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
12A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	50	100	27	40	100	
B ATRAZINE 4L (SC)	1.25	LAA	0						
C PRINCEP 4L (SC)	1.25	LAA	0						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
13A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	78	100	85	70	100	
B ATRAZINE 4L (SC)	1.25	LAA	0						
C PRINCEP 4L (SC)	1.25	LAA	0						
D»VALOR SX (51WG)	0.063	LAA	0						
E SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSL (0.05)	32.27	19.89	48.38	29.54	17.12
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	15.70	9.68	23.53	14.37	8.33
				COEFFICIENT OF VARIANCE	35.65	17.56	54.28	37.00	16.38
				DAT APPLICATION # 01 TIMINGS (00)	67	81	81	81	95

TITLE: EARLY PREPLANT APPLICATIONS OF VALOR IN NO-TILL CORN  
 CREATED: 04-03-2006 REVISED: 10-12-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			011 RAW	012 RAW	013 RAW	014 RAW	015 RAW
	RATE	UNIT	TM	07-10-06 P CHEAL	07-10-06 P DIGSA	08-07-06 P ERICA	08-07-06 P CHEAL	08-07-06 P DIGSA
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
2A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	30	30	10	30	17
3A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	60	50	10	57	27
B»VALOR SX (51WG)	0.063	LAA	0					
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
4A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	38	7	100	10	0
B ATRAZINE 4L (SC)	1.25	LAA	0					
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
5A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	63	10	97	50	10
B»VALOR SX (51WG)	0.063	LAA	0					
C ATRAZINE 4L (SC)	1.25	LAA	0					
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
6A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	27	0	93	17	0
B PRINCEP 4L (SC)	1.25	LAA	0					
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
7A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	63	23	98	47	17
B»VALOR SX (51WG)	0.063	LAA	0					
C PRINCEP 4L (SC)	1.25	LAA	0					
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
8A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	40	82	17	33	73
B»DUAL II MAGNUM (7.64EC)	1.59	LAA	0					
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
9A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	87	67	20	87	57
B»VALOR SX (51WG)	0.063	LAA	0					
C»DUAL II MAGNUM (7.64EC)	1.59	LAA	0					
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
10A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	23	55	100	20	30
B»BICEP II MAGNUM (5.5SC)	2.89	LAA	0					
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
11A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	70	43	100	67	10
B»BICEP II MAGNUM (5.5SC)	2.89	LAA	0					
C»VALOR SX (51WG)	0.063	LAA	0					
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
12A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	27	23	100	20	12
B ATRAZINE 4L (SC)	1.25	LAA	0					
C PRINCEP 4L (SC)	1.25	LAA	0					
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
13A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	83	37	100	73	10
B ATRAZINE 4L (SC)	1.25	LAA	0					
C PRINCEP 4L (SC)	1.25	LAA	0					
D»VALOR SX (51WG)	0.063	LAA	0					
E SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
		LSLSD (0.05)		52.52	23.00	18.50	47.87	20.86
		SIGNIFICANCE OF F		*	**	**	*	**
		STANDARD DEVIATION		25.54	11.19	9.00	23.28	10.14
		COEFFICIENT OF VARIANCE		71.60	45.00	18.25	78.27	66.47
		DAT APPLICATION # 01 TIMINGS (00)		95	95	123	123	123

TITLE: EARLY PREPLANT APPLICATIONS OF VALOR IN NO-TILL CORN  
 CREATED: 04-03-2006 REVISED: 10-12-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			016 RAW	016 CALC
	RATE	UNIT	TM	10-03-06 P ZEAMX	10-03-06 P ZEAMX
				VAR 01 YLD LB	VAR 01 YLD BU
				1.00 PL SD	1.00 A SD
1A UNTREATED CHECK	0.00	NA	0	0.7	5.4
2A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	1.4	11.0
3A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	5.8	44.6
B»VALOR SX (51WG)	0.063	LAA	0		
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
4A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	5.2	39.7
B ATRAZINE 4L (SC)	1.25	LAA	0		
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
5A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	9.5	72.3
B»VALOR SX (51WG)	0.063	LAA	0		
C ATRAZINE 4L (SC)	1.25	LAA	0		
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
6A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	5.4	41.3
B PRINCEP 4L (SC)	1.25	LAA	0		
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
7A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	8.3	63.4
B»VALOR SX (51WG)	0.063	LAA	0		
C PRINCEP 4L (SC)	1.25	LAA	0		
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
8A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	6.7	51.5
B»DUAL II MAGNUM (7.64EC)	1.59	LAA	0		
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
9A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	7.8	59.3
B»VALOR SX (51WG)	0.063	LAA	0		
C»DUAL II MAGNUM (7.64EC)	1.59	LAA	0		
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
10A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	6.0	46.1
B»BICEP II MAGNUM (5.5SC)	2.89	LAA	0		
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
11A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	8.3	63.7
B»BICEP II MAGNUM (5.5SC)	2.89	LAA	0		
C»VALOR SX (51WG)	0.063	LAA	0		
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
12A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	4.4	33.8
B ATRAZINE 4L (SC)	1.25	LAA	0		
C PRINCEP 4L (SC)	1.25	LAA	0		
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
13A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	9.7	74.1
B ATRAZINE 4L (SC)	1.25	LAA	0		
C PRINCEP 4L (SC)	1.25	LAA	0		
D»VALOR SX (51WG)	0.063	LAA	0		
E SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
14A UNTREATED CHECK	0.00	NA	0	0.4	3.3
				LSD (0.05)	3.18
				SIGNIFICANCE OF F	**
				STANDARD DEVIATION	1.55
				COEFFICIENT OF VARIANCE	33.27
				DAT APPLICATION # 01 TIMINGS (00)	180
					24.32
					**
					11.83
					33.27
					180

» = SUPPLEMENTAL CHEMICAL

**\* TIMING CODES**

00 = PREPLA / EARLY PREPLANT 04-06-2006(1)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRTR	SS	NOTE
001	ZEAMX	% PHYTO	05-16-2006	01	P	ZEAMX		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	ERICA	CON %	05-16-2006	05	P	ERICA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
003	ERICA	CON %	05-29-2006	05	P	ERICA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
004	ERICA	CON %	06-12-2006	05	P	ERICA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	CHEAL	CON %	06-12-2006	02	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	DIGSA	CON %	06-12-2006	03	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
007	ERICA	CON %	06-26-2006	05	P	ERICA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
008	CHEAL	CON %	06-26-2006	02	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
009	DIGSA	CON %	06-26-2006	03	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
010	ERICA	CON %	07-10-2006	05	P	ERICA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
011	CHEAL	CON %	07-10-2006	02	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
012	DIGSA	CON %	07-10-2006	03	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
013	ERICA	CON %	08-07-2006	05	P	ERICA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
014	CHEAL	CON %	08-07-2006	02	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
015	DIGSA	CON %	08-07-2006	03	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
016	ZEAMX	LB/PLOT	10-03-2006	01	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

**\* VARIETY/SPECIE INFO CODES**

VAR 01 = PIONEER 33B54

**\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)**

01 = PIONEER 33B54

**\* USER DEFINED CALCULATIONS**

US 003/06/01 001 HM--- 016 -- {RAW}\*(7.64)

US 003/06/01 001 HM--- 016 -- {RAW}\*(7.64)



**TRIAL SUMMARY**  
**GENERAL SITE INFORMATION**

**TRIAL #:** US 003/06/01 001 HN      **ALTERNATE ID#:** HF 14 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** HAYDEN FARM-06  
**CREATED BY:** US RITTER R  
**CREATED:** 04-03-2006      **REVISED:** 10-12-2006      **COMPLETED:** Y  
**TITLE:** WEED CONTROL PROGRAMS IN NO-TILL CORN  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**TRIAL INFORMATION**

<b>% SAND:</b> 73	<b>TILLAGE:</b> NOT	<b>DESIGN:</b> RCB	<b>RESIDUE TRIAL:</b> EFF
<b>% SILT:</b> 18	<b>PH:</b> 6.3	<b>ACTUAL REPS:</b> 3	<b>ACTUAL BLOCKS:</b> 1
<b>% CLAY:</b> 9	<b>CEC:</b> 4.8	<b>ACTUAL TRTS:</b> 14	<b>ACTUAL SUB-BLOCKS:</b> 14
<b>TEXTURE:</b> SL	<b>% OM:</b> 1.3		

**SOIL GEN:** C  
**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD  
**% RESIDUE:** 50  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**SUBMITTED BY:** \_\_\_\_\_

**REVIEWED BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Early preplant applications made 04/19/2006.
2. Study planted 05/01/2006. Variety - Pioneer 33B54.
3. Preemergence applications made 05/02/2006.
4. Seed protected with Yield Guard and Poncho 1250.
5. Kernal Guard added to the hopper box.
6. 5 gallons of 9-18-9-1S applied in row.
7. 10.8 gallons of 22-0-0-5S applied 2 inches to the side of the row.
8. A total of 30-10-5-6.2S applied at planting.
9. Gramoxone Inteon also applied to untreated checks.
10. Postemergence applications made 06/06/2006.
11. Study sidedressed with additional nitrogen on 06/02/2006.
12. Study harvested 10/03/2006.

APPL. NUMBER	01	02	03	UNIT
TIMINGS	00	01	02	
TYPE	LIQMIX	LIQMIX	LIQMIX	
APPLICATION DATE	04-19-06	05-02-06	06-06-06	USA
TIME - BEGIN	16:00	15:30	18:00	24H
TIME - END	16:30	16:30	18:30	24H
AIR TEMPERATURE	76	74	78	F
% REL. HUMIDITY	40	45	50	
WIND DIRECTION	WEST	NORTHWEST	SOUTHWEST	
WIND SPEED	5.0	3.0	3.0	M/H
CLOUD COVER	CLEAR	CLEAR	PARTCLDY	
DEW	NO	NO	NO	
SOIL MOISTURE	DRY/MOIST	DRY/MOIST	DRY/MOIST	
SOIL CONDITION	FRIABLE	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	65/4.00	67/4.00	78/4.00	F /
METHOD	SPRAY	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	0.03	GPM
NOZZLE NUMBER	6	6	6	
NOZZLE SPACING	20.000	20.000	20.000	IN
SCREEN SIZE				
SCREEN SZ DESC	NA	NA	NA	
SWATH WIDTH	10.0	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	20.0	IN
SPEED	3.00	3.00	3.00	M/H
MIX SIZE	0.560	0.560	0.560	
MIX SIZE UNIT	GAL	GAL	GAL	
SPRAY VOLUME	18.00	18.00	18.00	
SCREEN SIZE	GPA	GPA	GPA	
PRESSURE	20.00	20.00	20.00	PSI
DILUENT	WATER	WATER	WATER	
INC. DATE				USA
INC. START				24H
INC. END				24H
INC. DEPTH				IN
INC. EQUIPMENT	---	---	---	

## \* TIMING CODES

00 = PREPLA / EARLY PREPLANT - 15 DPP  
01 = PREPRE / PREEMERGENCE  
02 = POSPOS / POSTEMERGENCE - 4-6" WEEDS, 30 DAP

## \* NOZZLE DESCRIPTION

01 = SS-8003  
02 = SS-8003  
03 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD VAR/SPC INFO: PIONEER 33B54  
 TARGET: CROP SITE: FG POPULATION: 28500.00 IPA PLANTED: 05-01-2006  
 PLANTING DEPTH: 1.7 IN ROW WIDTH: 30.0 IN  
 INFESTATION DATE: - - METHOD: NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-02-2006	00	MED	28500.00 IPA	.	.	. IN	NA	
06-06-2006	15	MED	28500.00 IPA	16.00	16.00	16.00 IN	TUR	

02 P CHEAL - LAMBSQUARTERS, COMMON  
 TARGET: PEST SITE: FG PLANTED:  
 INFESTATION DATE: - - METHOD: NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-02-2006	00	NA	IND	.	.	. IN	---	
06-06-2006	14	LOW	1.00 SQY	2.00	2.00	2.00 IN	TUR	

03 P DIGSA - CRABGRASS, LARGE, SOUTHERN  
 TARGET: PEST SITE: FG PLANTED:  
 INFESTATION DATE: - - METHOD: NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-02-2006	00	NA	IND	.	.	. IN	---	
06-06-2006	13	LOW	1.00 SQY	2.00	2.00	2.00 IN	TUR	

04 P SETFA - FOXTAIL, GIANT  
 TARGET: PEST SITE: FG PLANTED:  
 INFESTATION DATE: - - METHOD: NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-02-2006	00	NA	IND	.	.	. IN	---	
06-06-2006	14	LOW	3.00 SQY	3.00	3.00	3.00 IN	TUR	

## \* STAGE CODE -- CORN

00 = DRY SEED (CARYOPSIS)

15 = 5 LEAVES UNFOLDED

## \* STAGE CODE -- GENERAL

00 = DRY SEED; DORMANCY

14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED

## \* STAGE CODE -- GENERAL GRASS

00 = DRY SEED (CARYOPSIS)

13 = 3 LEAVES UNFOLDED

14 = 4 LEAVES UNFOLDED

**TITLE:** WEED CONTROL PROGRAMS IN NO-TILL CORN  
**CREATED:** 04-03-2006 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			CON %	CON %	CON %	CON %	CON %
	RATE	UNIT	TM	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL
001 RAW 05-29-06 P SETFA								
002 RAW 05-29-06 P CHEAL								
003 RAW 06-12-06 P SETFA								
004 RAW 06-12-06 P CHEAL								
005 RAW 06-26-06 P SETFA								
1A UNTREATED CHECK	0.00	NA	1	0	0	0	0	0
2A PRINCEP 4L (SC)	1.25	LAA	0	100	100	97	100	95
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0					
C»GRAMOXONE INTEON (2SL)	0.50	LAA	1					
D»LUMAX (3.94 SE)	2.46	LAA	1					
3A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	97	100	92	100	80
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1					
C»LUMAX (3.94 SE)	2.46	LAA	1					
4A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	95	100	90	100	83
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1					
C»LUMAX (3.94 SE)	2.46	LAA	1					
D PRINCEP 4L (SC)	1.00	LAA	1					
5A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	95	100	92	100	85
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1					
C»LUMAX (3.94 SE)	2.95	LAA	1					
6A PRINCEP 4L (SC)	1.25	LAA	0	100	100	97	100	92
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0					
C»GRAMOXONE INTEON (2SL)	0.50	LAA	1					
D»LEXAR (3.75C)	2.78	LAA	1					
7A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	97	100	87	100	78
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1					
C»LEXAR (3.75C)	2.78	LAA	1					
8A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	98	100	95	100	88
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1					
C»LEXAR (3.75C)	2.78	LAA	1					
D PRINCEP 4L (SC)	1.00	LAA	1					
9A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	97	100	90	100	82
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1					
C»LEXAR (3.75C)	3.24	LAA	1					
10A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	92	87	87	60	73
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1					
C»KEYSTONE (5.25SE)	3.28	LAA	1					
11A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	92	98	73	88	100
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	0					
C»KEYSTONE (5.25SE)	1.44	LAA	0					
D»HORNET (78.5DF)	0.098	LAA	0					
E»GLYPHOMAX XRT (5.4SL)	1.00	LAA	2					
F FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	2					
12A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	88	93	82	82	100
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	0					
C»KEYSTONE (5.25SE)	1.44	LAA	0					
D»PYTHON (80WG)	0.035	LAA	0					
E»GF-1280 (4 SL)	0.75	LAA	2					
F FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	2					
13A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	83	83	78	75	100
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1					
C»BICEP II MAGNUM (5.5SC)	1.45	LAA	1					
D»TOUCHDOWN TOTAL (4.17AE)	0.75	LAA	2					
E FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	2					

TITLE: WEED CONTROL PROGRAMS IN NO-TILL CORN

TRT TREATMENT NUM COMPONENT	DOSAGE		CON %	CON %	CON %	CON %	CON %
	RATE	UNIT TM	PL ALL	PL ALL	PL ALL	PL ALL	PL ALL
001 RAW	002 RAW	003 RAW	004 RAW	005 RAW			
05-29-06	05-29-06	06-12-06	06-12-06	06-26-06			
P SETFA	P CHEAL	P SETFA	P CHEAL	P SETFA			
14A UNTREATED CHECK	0.00	NA 1	0	0	0	0	0
	LSD (0.05)		6.50	9.77	11.12	17.00	9.67
	SIGNIFICANCE OF F		**	**	**	**	**
	STANDARD DEVIATION		3.16	4.75	5.41	8.26	4.70
	COEFFICIENT OF VARIANCE		4.78	7.00	8.77	12.81	7.63
	DAT APPLICATION # 01 TIMINGS (00)		40	40	54	54	68
	DAT APPLICATION # 02 TIMINGS (01)		27	27	41	41	55
	DAT APPLICATION # 03 TIMINGS (02)		NA	NA	6	6	20

TITLE: WEED CONTROL PROGRAMS IN NO-TILL CORN  
 CREATED: 04-03-2006 REVISED: 10-12-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			CON %	CON %	CON %	CON %	CON %
	RATE	UNIT	TM	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL
006 RAW 06-26-06 P CHEAL								
007 RAW 07-10-06 P SETFA								
008 RAW 07-10-06 P CHEAL								
009 RAW 08-07-06 P SETFA								
010 RAW 08-07-06 P CHEAL								
1A UNTREATED CHECK	0.00	NA	1	0	0	0	0	0
2A PRINCEP 4L (SC)	1.25	LAA	0	100	90	100	87	98
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0					
C»GRAMOXONE INTEON (2SL)	0.50	LAA	1					
D»LUMAX (3.94 SE)	2.46	LAA	1					
3A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	100	65	100	60	100
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1					
C»LUMAX (3.94 SE)	2.46	LAA	1					
4A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	100	73	100	72	100
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1					
C»LUMAX (3.94 SE)	2.46	LAA	1					
D PRINCEP 4L (SC)	1.00	LAA	1					
5A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	100	75	100	73	100
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1					
C»LUMAX (3.94 SE)	2.95	LAA	1					
6A PRINCEP 4L (SC)	1.25	LAA	0	100	83	98	77	98
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0					
C»GRAMOXONE INTEON (2SL)	0.50	LAA	1					
D»LEXAR (3.7SC)	2.78	LAA	1					
7A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	100	75	100	70	97
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1					
C»LEXAR (3.7SC)	2.78	LAA	1					
8A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	100	85	100	85	100
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1					
C»LEXAR (3.7SC)	2.78	LAA	1					
D PRINCEP 4L (SC)	1.00	LAA	1					
9A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	100	78	100	75	98
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1					
C»LEXAR (3.7SC)	3.24	LAA	1					
10A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	45	67	40	60	33
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1					
C»KEYSTONE (5.25SE)	3.28	LAA	1					
11A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	98	93	98	93	98
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	0					
C»KEYSTONE (5.25SE)	1.44	LAA	0					
D»HORNET (78.5DF)	0.098	LAA	0					
E»GLYPHOMAX XRT (5.4SL)	1.00	LAA	2					
F FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	2					
12A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	100	95	100	92	100
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	0					
C»KEYSTONE (5.25SE)	1.44	LAA	0					
D»PYTHON (80WG)	0.035	LAA	0					
E»GF-1280 (4 SL)	0.75	LAA	2					
F FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	2					
13A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	100	92	100	90	100
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1					
C»BICEP II MAGNUM (5.5SC)	1.45	LAA	1					
D»TOUCHDOWN TOTAL (4.17AE)	0.75	LAA	2					
E FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	2					

TITLE: WEED CONTROL PROGRAMS IN NO-TILL CORN

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	009 RAW	010 RAW
	RATE	UNIT	TM	06-26-06 P CHEAL	07-10-06 P SETFA	07-10-06 P CHEAL	08-07-06 P SETFA	08-07-06 P CHEAL
				CON % 1.00	CON % 1.00	CON % 1.00	CON % 1.00	CON % 1.00
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL
14A UNTREATED CHECK	0.00	NA	1	0	0	0	0	0
		LSD (0.05)		17.75	16.53	16.08	18.11	15.58
		SIGNIFICANCE OF F		**	**	**	**	**
		STANDARD DEVIATION		8.64	8.00	7.82	8.81	7.58
		COEFFICIENT OF VARIANCE		13.00	14.19	11.80	16.19	11.56
		DAT APPLICATION # 01 TIMINGS (00)		68	82	82	110	110
		DAT APPLICATION # 02 TIMINGS (01)		55	69	69	97	97
		DAT APPLICATION # 03 TIMINGS (02)		20	34	34	62	62



TITLE: WEED CONTROL PROGRAMS IN NO-TILL CORN  
 CREATED: 04-03-2006 REVISED: 10-12-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			011 RAW	011 CALC
	RATE	UNIT	TM	10-03-06 P ZEAMX	10-03-06 P ZEAMX
				VAR 01 YLD LB 1.00 PL SD	VAR 01 YLD BU 1.00 A SD
1A UNTREATED CHECK	0.00	NA	1	3.4	25.8
2A PRINCEP 4L (SC)	1.25	LAA	0	20.2	151.9
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0		
C»GRAMOXONE INTEON (2SL)	0.50	LAA	1		
D»LUMAX (3.94 SE)	2.46	LAA	1		
3A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	16.7	125.2
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1		
C»LUMAX (3.94 SE)	2.46	LAA	1		
4A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	16.9	127.2
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1		
C»LUMAX (3.94 SE)	2.46	LAA	1		
D PRINCEP 4L (SC)	1.00	LAA	1		
5A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	17.4	130.7
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1		
C»LUMAX (3.94 SE)	2.95	LAA	1		
6A PRINCEP 4L (SC)	1.25	LAA	0	17.2	129.4
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0		
C»GRAMOXONE INTEON (2SL)	0.50	LAA	1		
D»LEXAR (3.7SC)	2.78	LAA	1		
7A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	14.6	109.9
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1		
C»LEXAR (3.7SC)	2.78	LAA	1		
8A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	17.0	127.9
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1		
C»LEXAR (3.7SC)	2.78	LAA	1		
D PRINCEP 4L (SC)	1.00	LAA	1		
9A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	19.1	143.2
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1		
C»LEXAR (3.7SC)	3.24	LAA	1		
10A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	17.8	133.9
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1		
C»KEYSTONE (5.25SE)	3.28	LAA	1		
11A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	16.7	125.2
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	0		
C»KEYSTONE (5.25SE)	1.44	LAA	0		
D»HORNET (78.5DF)	0.098	LAA	0		
E»GLYPHOMAX XRT (5.4SL)	1.00	LAA	2		
F FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	2		
12A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	18.7	140.2
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	0		
C»KEYSTONE (5.25SE)	1.44	LAA	0		
D»PYTHON (80WG)	0.035	LAA	0		
E»GF-1280 (4 SL)	0.75	LAA	2		
F FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	2		
13A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	16.8	126.2
B (G) 2,4-D-ESTER (3.8EC)	0.50	LAA	1		
C»BICEP II MAGNUM (5.5SC)	1.45	LAA	1		
D»TOUCHDOWN TOTAL (4.17AE)	0.75	LAA	2		
E FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	2		

TITLE: WEED CONTROL PROGRAMS IN NO-TILL CORN

TRT TREATMENT	DOSAGE	VAR 01	VAR 01
NUM COMPONENT	RATE UNIT TM	YLD LB	YLD BU
		1.00	1.00
		PL SD	A SD
14A UNTREATED CHECK	0.00 NA 1	7.5	56.6
	LSD (0.05)	7.13	53.54
	SIGNIFICANCE OF F	**	**
	STANDARD DEVIATION	3.47	26.00
	COEFFICIENT OF VARIANCE	27.00	27.00
	DAT APPLICATION # 01 TIMINGS (00)	167	167
	DAT APPLICATION # 02 TIMINGS (01)	154	154
	DAT APPLICATION # 03 TIMINGS (02)	119	119

>> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPLA / EARLY PREPLANT - 15 DPP 04-19-2006(1)  
 01 = PREPRE / PREEMERGENCE 05-02-2006(2)  
 02 = POSPOS / POSTEMERGENCE - 4-6" WEEDS, 30 DAP 06-06-2006(3)

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR	SS	NOTE
001	SETFA	CON %	05-29-2006	04	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
002	CHEAL	CON %	05-29-2006	02	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
003	SETFA	CON %	06-12-2006	04	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
004	CHEAL	CON %	06-12-2006	02	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	SETFA	CON %	06-26-2006	04	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	CHEAL	CON %	06-26-2006	02	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
007	SETFA	CON %	07-10-2006	04	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
008	CHEAL	CON %	07-10-2006	02	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
009	SETFA	CON %	08-07-2006	04	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
010	CHEAL	CON %	08-07-2006	02	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
011	ZEAMX	LB/PLOT	10-03-2006	01	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

VAR 01 = PIONEER 33B54

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = PIONEER 33B54

\* USER DEFINED CALCULATIONS

US 003/06/01 001 HN--- 011 -- {RAW}\*(7.51)

US 003/06/01 001 HN--- 011 -- {RAW}\*(7.51)

**TRIAL SUMMARY  
GENERAL SITE INFORMATION**

**TRIAL #:** US 003/06/01 001 HO      **ALTERNATE ID#:** HF 15 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** HAYDEN FARM-06  
**CREATED BY:** US RITTER R  
**CREATED:** 04-03-2006      **REVISED:** 10-12-2006      **COMPLETED:** Y  
**TITLE:** KIH-485 VERSUS ACETOCHLOR OR METOLACHLOR FOR GRASS CONTROL IN NO-TILL CORN  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 73      **TILLAGE:** NOT  
**% SILT:** 18      **PH:** 6.3  
**% CLAY:** 9      **CEC:** 4.8  
**TEXTURE:** SL      **% OM:** 1.3  
**SOIL GEN:** C  
**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD  
**% RESIDUE:** 50  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** EFF  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 14      **ACTUAL SUB-BLOCKS:** 14

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**SUBMITTED BY:** \_\_\_\_\_      **REVIEWED BY:** \_\_\_\_\_  
**DATE:** \_\_\_\_\_      **DATE:** \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/01/2006. Variety - Pioneer 33B54.
2. Preemergence applications made 05/02/2006.
3. Seed protected with Yield Guard and Poncho 1250.
4. Kernal Guard added to the hopper box.
5. 5 gallons of 9-18-9-1S applied in row.
6. 10.8 gallons of 22-0-0-5S applied 2 inches to the side of the row.
7. A total of 30-10-5-6.2S applied at planting.
8. Gramoxone Inteon plus 2,4-D LVE also applied to the untreated checks on 05/02/2006.
9. Study sidedressed with additional nitrogen on 06/02/2006.
10. Study harvested 10/03/2006.

APPL. NUMBER	01	UNIT
TIMINGS	00	
TYPE	LIQMIX	
APPLICATION DATE	05-02-06	USA
TIME - BEGIN	15:30	24H
TIME - END	16:30	24H
AIR TEMPERATURE	74	F
% REL. HUMIDITY	45	
WIND DIRECTION	NORTHWEST	
WIND SPEED	3.0	M/H
CLOUD COVER	CLEAR	
DEW	NO	
SOIL MOISTURE	DRY/MOIST	
SOIL CONDITION	FRIABLE	
SOIL TEMP/DEPTH	67/4.00	F /
METHOD	SPRAY	
EQUIPMENT	SPRBAC	
PROPELLANT	COMCO2	
PLACEMENT	BRFOSO	
NOZZLE	FLATFAN	
NOZZLE VOLUME	0.03	GPM
NOZZLE NUMBER	6	
NOZZLE SPACING	20.000	IN
SCREEN SIZE		
SCREEN SZ DESC	NA	
SWATH WIDTH	10.0	FT
BOOM HEIGHT	20.0	IN
SPEED	3.00	M/H
MIX SIZE	0.560	
MIX SIZE UNIT	GAL	
SPRAY VOLUME	18.00	
SCREEN SIZE	GPA	
PRESSURE	20.00	PSI
DILUENT	WATER	
INC. DATE		USA
INC. START		24H
INC. END		24H
INC. DEPTH		IN
INC. EQUIPMENT	---	

## \* TIMING CODES

00 = PREPRE / PREEMERGENCE

## \* NOZZLE DESCRIPTION

01 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD VAR/SPC INFO: PIONEER 33B54  
 TARGET: CROP SITE: FG POPULATION: 28500.00 IPA PLANTED: 05-01-2006  
 PLANTING DEPTH: 1.7 IN ROW WIDTH: 30.0 IN  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON STAGE CODE POP.GEN. POPULATION MN SIZE MX SIZE AV SIZE CROP VIGOR NOTES  
 05-02-2006 00 MED 28500.00 IPA . . . IN NA

02 P CHEAL - LAMBSQUARTERS, COMMON PLANTED:  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON STAGE CODE POP.GEN. POPULATION MN SIZE MX SIZE AV SIZE CROP VIGOR NOTES  
 05-02-2006 00 NA IND . . . IN ---

03 P DIGSA - CRABGRASS, LARGE, SOUTHERN PLANTED:  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON STAGE CODE POP.GEN. POPULATION MN SIZE MX SIZE AV SIZE CROP VIGOR NOTES  
 05-02-2006 00 NA IND . . . IN ---

04 P SETFA - FOXTAIL, GIANT PLANTED:  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON STAGE CODE POP.GEN. POPULATION MN SIZE MX SIZE AV SIZE CROP VIGOR NOTES  
 05-02-2006 00 NA IND . . . IN ---

- \* STAGE CODE -- CORN
- 00 = DRY SEED (CARYOPSIS)
- \* STAGE CODE -- GENERAL
- 00 = DRY SEED; DORMANCY
- \* STAGE CODE -- GENERAL GRASS
- 00 = DRY SEED (CARYOPSIS)

TITLE: KIH-485 VERSUS ACETOCHLOR OR METOLACHLOR FOR GRASS CONTROL IN NO-TILL CORN  
CREATED: 04-03-2006 REVISED: 10-12-2006 COMPLETED: Y  
PROJECT TYPE: HERBICIDE  
LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	05-16-06	05-29-06	05-29-06	05-29-06	06-12-06	
				P ZEAMX	P ZEAMX	P DIGSA	P CHEAL	P DIGSA	
				VAR 01	VAR 01	CON %	CON %	CON %	
				PHY %	PHY %	PL ALL	PL ALL	PL ALL	
				1.00	1.00	1.00	1.00	1.00	
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	0	0	98	98	97	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»KIH-485 (85WG)	0.144	LAA	0						
3A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	0	0	100	100	97	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»KIH-485 (85WG)	0.181	LAA	0						
4A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	0	0	100	100	97	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»KIH-485 (85WG)	0.217	LAA	0						
5A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	0	3	100	100	100	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»KIH-485 (85WG)	0.362	LAA	0						
6A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	0	0	100	100	90	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»HARNESS PLUS (7 EC)	1.51	LAA	0						
7A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	0	0	100	100	95	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»HARNESS PLUS (7 EC)	1.94	LAA	0						
8A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	0	0	98	87	92	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»DUAL II MAGNUM (7.64EC)	0.96	LAA	0						
9A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	0	0	100	93	92	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»DUAL II MAGNUM (7.64EC)	1.43	LAA	0						
10A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	0	0	100	93	87	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»DUAL II MAGNUM (7.64EC)	1.91	LAA	0						
11A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	0	0	100	97	90	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»PARALLEL (7.8EC)	0.975	LAA	0						
12A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	0	0	100	97	88	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»PARALLEL (7.8EC)	1.46	LAA	0						
13A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	0	0	100	100	97	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»PARALLEL (7.8EC)	1.95	LAA	0						
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	0.00	2.59	1.76	11.22	12.40
				SIGNIFICANCE OF F	NS	NS	**	**	**
				STANDARD DEVIATION	0.00	1.26	0.856	5.46	6.00
				COEFFICIENT OF VARIANCE	0.00	648.07	1.23	8.00	9.23
				DAT APPLICATION # 01 TIMINGS (00)	14	27	27	27	41

**TITLE:** KIH-485 VERSUS ACETOCHLOR OR METOLACHLOR FOR GRASS CONTROL IN NO-TILL CORN  
**CREATED:** 04-03-2006 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			CON %	CON %	CON %	CON %	CON %	
	RATE	UNIT	TM	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	93	87	90	80	90	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»KIH-485 (85WG)	0.144	LAA	0						
3A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	95	95	95	93	92	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»KIH-485 (85WG)	0.181	LAA	0						
4A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	97	97	97	90	97	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»KIH-485 (85WG)	0.217	LAA	0						
5A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	100	98	98	98	98	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»KIH-485 (85WG)	0.362	LAA	0						
6A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	88	85	83	70	80	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»HARNES PLUS (7 EC)	1.51	LAA	0						
7A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	93	93	92	73	90	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»HARNES PLUS (7 EC)	1.94	LAA	0						
8A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	62	82	60	63	60	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»DUAL II MAGNUM (7.64EC)	0.96	LAA	0						
9A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	75	82	67	58	50	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»DUAL II MAGNUM (7.64EC)	1.43	LAA	0						
10A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	80	78	67	77	52	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»DUAL II MAGNUM (7.64EC)	1.91	LAA	0						
11A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	78	82	55	67	42	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»PARALLEL (7.8EC)	0.975	LAA	0						
12A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	82	77	77	58	40	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»PARALLEL (7.8EC)	1.46	LAA	0						
13A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	92	83	88	73	78	
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
C»PARALLEL (7.8EC)	1.95	LAA	0						
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	28.00	20.84	31.79	28.47	39.75
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	13.63	10.14	15.46	13.85	19.33
				COEFFICIENT OF VARIANCE	22.58	16.74	27.38	26.33	38.18
				DAT APPLICATION # 01 TIMINGS (00)	41	55	55	69	69



**TITLE:** KIH-485 VERSUS ACETOCHLOR OR METOLACHLOR FOR GRASS CONTROL IN NO-TILL CORN  
**CREATED:** 04-03-2006 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			011 RAW	012 RAW	013 RAW	013 CALC
	RATE	UNIT	TM	08-07-06	08-07-06	10-03-06	10-03-06
				P DIGSA	P CHEAL	P ZEAMX	P ZEAMX
				CON %	CON %	VAR 01	VAR 01
				1.00	1.00	YLD LB	YLD BU
				PL ALL	PL ALL	PL SD	A SD
1A UNTREATED CHECK	0.00	NA	0	0	0	7.2	54.1
2A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	75	85	14.3	107.1
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0				
C»KIH-485 (85WG)	0.144	LAA	0				
3A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	90	92	18.3	137.2
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0				
C»KIH-485 (85WG)	0.181	LAA	0				
4A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	88	95	15.1	113.7
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0				
C»KIH-485 (85WG)	0.217	LAA	0				
5A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	98	98	11.9	89.1
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0				
C»KIH-485 (85WG)	0.362	LAA	0				
6A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	63	73	14.5	109.2
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0				
C»HARNES PLUS (7 EC)	1.51	LAA	0				
7A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	50	87	13.3	100.2
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0				
C»HARNES PLUS (7 EC)	1.94	LAA	0				
8A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	53	55	13.6	101.9
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0				
C»DUAL II MAGNUM (7.64EC)	0.96	LAA	0				
9A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	42	27	16.1	120.7
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0				
C»DUAL II MAGNUM (7.64EC)	1.43	LAA	0				
10A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	68	27	14.4	108.4
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0				
C»DUAL II MAGNUM (7.64EC)	1.91	LAA	0				
11A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	47	30	11.8	88.4
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0				
C»PARALLEL (7.8EC)	0.975	LAA	0				
12A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	38	30	13.8	103.9
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0				
C»PARALLEL (7.8EC)	1.46	LAA	0				
13A»GRAMOXONE INTEON (2SL)	0.50	LAA	0	63	75	11.7	88.1
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	0				
C»PARALLEL (7.8EC)	1.95	LAA	0				
14A UNTREATED CHECK	0.00	NA	0	0	0	11.7	88.1
				LSD (0.05)			
				42.91	45.31	6.85	51.40
				SIGNIFICANCE OF F	**	**	NS
				STANDARD DEVIATION	20.87	22.00	3.33
				COEFFICIENT OF VARIANCE	46.08	48.86	30.41
				DAT APPLICATION # 01 TIMINGS (00)	97	97	154

> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 05-02-2006(1)

## TITLE: KIH-485 VERSUS ACETOCHLOR OR METOLACHLOR FOR GRASS CONTROL IN NO-TILL CORN

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	ZEAMK	% PHYTO	05-16-2006	01	P	ZEAMK		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	ZEAMK	% PHYTO	05-29-2006	01	P	ZEAMK		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
003	DIGSA	CON %	05-29-2006	03	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
004	CHEAL	CON %	05-29-2006	02	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	DIGSA	CON %	06-12-2006	03	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	CHEAL	CON %	06-12-2006	02	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
007	DIGSA	CON %	06-26-2006	03	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
008	CHEAL	CON %	06-26-2006	02	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
009	DIGSA	CON %	07-10-2006	03	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
010	CHEAL	CON %	07-10-2006	02	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
011	DIGSA	CON %	08-07-2006	03	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
012	CHEAL	CON %	08-07-2006	02	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
013	ZEAMK	LB/PLOT	10-03-2006	01	P	ZEAMK		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMK	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

## \* VARIETY/SPECIE INFO CODES

VAR 01 = PIONEER 33B54

## \* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = PIONEER 33B54

## \* USER DEFINED CALCULATIONS

US 003/06/01 001 HO--- 013 -- {RAW}\*(7.51)

US 003/06/01 001 HO--- 013 -- {RAW}\*(7.51)

TRIAL SUMMARY  
GENERAL SITE INFORMATION

TRIAL #: US 003/06/01 001 HP      ALTERNATE ID#: HF 16 2006  
 PROTOCOL#: US 003/06/01      ALTERNATE ID#: HAYDEN FARM-06  
 CREATED BY: US RITTER R  
 CREATED: 04-03-2006      REVISED: 10-12-2006      COMPLETED: Y  
 TITLE: POST CONTROL OF CRABGRASS IN NO-TILL CORN  
 COORDINATOR: US 001 Ron Ritter  
 TRIAL TYPE: HERBICIDE  
 PROJECT#2:  
 RESEARCHER: RITTER AND MENBERE      CONFIDENCE: HIGH CONFIDENCE IN TRIAL DATA  
 REPORTED BY: US Ron Ritter And Ron Ritter  
 COOPERATOR: MR. KEVIN CONOVER      DATA SOURCE: UNIVERSITY  
 LOCATION: HAYDEN FARM      TYPE: FIELD TRIAL  
 CITY: LAUREL      SUBDIVISION: MARYLAND  
 COUNTY: PRINCE GEORGE'S      ZIP: 20708  
 COUNTRY: UNITED STATES  
 WEATHER SITE: HF -- HAYDEN FARM      DISTANCE TO TRIAL: 5280.0 FT  
 WEEKS PRIOR TO FIRST APPLICATION: 4      WEEKS AFTER LAST APPLICATION: 4  
 EARLY WEATHER: NA      MID WEATHER: NA      LATE WEATHER: NA

SOIL INFORMATION

% SAND: 73      TILLAGE: NOT  
 % SILT: 18      PH: 6.3  
 % CLAY: 9      CEC: 4.8  
 TEXTURE: SL      % OM: 1.3  
 SOIL GEN: C  
 PREVIOUS CROP: ZEAMX - CORN, VOLUNTEER, FIELD  
 % RESIDUE: 50  
 PLOT WIDTH: 10.00 FT  
 PLOT LENGTH: 20.00 FT  
 PLOT AREA: 200.00 SFT

TRIAL INFORMATION

DESIGN: RCB      RESIDUE TRIAL: EFF  
 ACTUAL REPS: 3      ACTUAL BLOCKS: 1  
 ACTUAL TRTS: 16      ACTUAL SUB-BLOCKS: 16

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/01/2006. Variety - Pioneer 33B54.
2. Preemergence applications made 05/02/2006.
3. Seed protected with Yield Guard and Poncho 1250.
4. Kernal Guard added to the hopper box.
5. 5 gallons of 9-18-9-1S applied in row.
6. 10.8 gallons of 22-0-0-5S applied 2 inches to the side of the row.
7. A total of 30-10-5-6.2S applied at planting.
8. Gramoxone Inteon at 2 pt/acre plus 2,4-D LVE at 1 pt/acre applied to entire study on 05/03/2006.
9. Early post applications made 06/01/2006.
10. Mid-post applications made 06/06/2006.
11. Study sidedressed with additional nitrogen on 06/02/2006.
12. Study harvested 10/04/2006.

APPL. NUMBER	01	02	03	UNIT
TIMINGS	00	01	02	
TYPE	LIQMIX	LIQMIX	LIQMIX	
APPLICATION DATE	05-02-06	06-01-06	06-06-06	USA
TIME - BEGIN	15:30	18:30	18:00	24H
TIME - END	16:30	19:00	18:30	24H
AIR TEMPERATURE	74	88	78	F
% REL. HUMIDITY	45	75	50	
WIND DIRECTION	NORTHWEST	SOUTHWEST	SOUTHWEST	
WIND SPEED	3.0	3.0	3.0	M/H
CLOUD COVER	CLEAR	CLOUDY	PARTCLDY	
DEW	NO	NO	NO	
SOIL MOISTURE	---	DRY/MOIST	DRY/MOIST	
SOIL CONDITION	FRIABLE	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	67/4.00	88/4.00	78/4.00	F /
METHOD	SPRAY	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	0.03	GPM
NOZZLE NUMBER	6	6	6	
NOZZLE SPACING	20.000	20.000	20.000	IN
SCREEN SIZE				
SCREEN SZ DESC	NA	NA	NA	
SWATH WIDTH	10.0	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	20.0	IN
SPEED	3.00	3.00	3.00	M/H
MIX SIZE	0.560	0.560	0.560	
MIX SIZE UNIT	GAL	GAL	GAL	
SPRAY VOLUME	18.00	18.00	18.00	
SCREEN SIZE	GPA	GPA	GPA	
PRESSURE	20.00	20.00	20.00	PSI
DILUENT	WATER	WATER	WATER	
INC. DATE				USA
INC. START				24H
INC. END				24H
INC. DEPTH				IN
INC. EQUIPMENT	---	---	---	

## \* TIMING CODES

00 = PREPRE / PREEMERGENCE  
01 = POSPOS / EARLY POSTEMERGENCE  
02 = MIDPOS / MID-POSTEMERGENCE

## \* NOZZLE DESCRIPTION

01 = SS-8003  
02 = SS-8003  
03 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD      VAR/SPC INFO: PIONEER 33B54  
 TARGET: CROP      SITE: FG      POPULATION: 28500.00 IPA      PLANTED: 05-01-2006  
 PLANTING DEPTH: 1.7 IN      ROW WIDTH: 30.0 IN  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-02-2006	00	MED	28500.00 IPA	.	.	. IN		NA	
06-01-2006	14	MED	28500.00 IPA	12.00	12.00	12.00 IN		TUR	
06-06-2006	15	MED	28500.00 IPA	16.00	16.00	16.00 IN		TUR	

02 P CHEAL - LAMBSQUARTERS, COMMON  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-02-2006	00	NA	IND	.	.	. IN		---	
06-06-2006	14	LOW	1.00 SQY	2.00	2.00	2.00 IN		TUR	

03 P DIGSA - CRABGRASS, LARGE, SOUTHERN  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-02-2006	00	NA	IND	.	.	. IN		---	
06-01-2006	12	MED	3.00 IF2	1.00	1.00	1.00 IN		TUR	
06-06-2006	13	LOW	1.00 SQY	2.00	2.00	2.00 IN		TUR	

04 P SETFA - FOXTAIL, GIANT  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-02-2006	00	NA	IND	.	.	. IN		---	
06-01-2006	13	MED	3.00 IF2	4.00	4.00	4.00 IN		TUR	
06-06-2006	14	LOW	3.00 SQY	3.00	3.00	3.00 IN		TUR	

05 P ERICA - HORSEWEED / MARESTAIL  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-01-2006	19	LOW	1.00 SQY	2.00	2.00	2.00 IN		TUR	
06-01-2006	19	LOW	1.00 SQY	4.00	4.00	4.00 IN		TUR	

## \* STAGE CODE -- CORN

00 = DRY SEED (CARYOPSIS)  
 14 = 4 LEAVES UNFOLDED  
 15 = 5 LEAVES UNFOLDED

## \* STAGE CODE -- GENERAL

00 = DRY SEED; DORMANCY  
 14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED  
 19 = >8 TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED

## \* STAGE CODE -- GENERAL GRASS

00 = DRY SEED (CARYOPSIS)  
 12 = 2 LEAVES UNFOLDED  
 13 = 3 LEAVES UNFOLDED  
 14 = 4 LEAVES UNFOLDED

**TITLE:** POST CONTROL OF CRABGRASS IN NO-TILL CORN  
**CREATED:** 04-03-2006 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW
	RATE	UNIT	TM	06-07-06	06-07-06	06-14-06	06-26-06	07-10-06
				P ZEAMX	P DIGSA	P DIGSA	P DIGSA	P DIGSA
				VAR 01 PHY % 1.00	CON % 1.00	CON % 1.00	CON % 1.00	CON % 1.00
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
2A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	0	78	63	53	22
3A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	0	0	58	67	58
B»CALLISTO (4SC)	0.094	LAA	2					
C ATRAZINE 4L (SC)	0.50	LAA	2					
D ADJUVANT - COC (EC)	1.00	PMV	2					
E FERTILIZER - 28%UAN	2.50	PMV	2					
4A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	0	0	80	100	92
B»IMPACT (2.8SC)	0.016	LAA	2					
C ATRAZINE 4L (SC)	0.50	LAA	2					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	2					
E FERTILIZER - 28%UAN	2.50	PMV	2					
5A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	0	0	87	87	75
B»AE 0172747 (5.25SC)	0.123	LAA	2					
C ATRAZINE 4L (SC)	0.50	LAA	2					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	2					
E FERTILIZER - 28%UAN	1.50	QMA	2					
6A»CALLISTO (4SC)	0.094	LAA	1	0	60	52	33	13
B ATRAZINE 4L (SC)	0.50	LAA	1					
C ADJUVANT - COC (EC)	1.00	PMV	1					
D FERTILIZER - 28%UAN	2.50	PMV	1					
7A»IMPACT (2.8SC)	0.016	LAA	1	0	72	83	88	75
B ATRAZINE 4L (SC)	0.50	LAA	1					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	1					
D FERTILIZER - 28%UAN	2.50	PMV	1					
8A»AE 0172747 (5.25SC)	0.123	LAA	1	0	73	75	78	47
B ATRAZINE 4L (SC)	0.50	LAA	1					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	1					
D FERTILIZER - 28%UAN	1.50	QMA	1					
9A»CALLISTO (4SC)	0.094	LAA	1	0	45	58	78	75
B ATRAZINE 4L (SC)	0.50	LAA	1					
C ACCENT (75WG)	0.031	LAA	1					
D ADJUVANT - COC (EC)	1.00	PMV	1					
E FERTILIZER - 28%UAN	2.50	PMV	1					
10A»IMPACT (2.8SC)	0.016	LAA	1	0	67	70	80	67
B ATRAZINE 4L (SC)	0.50	LAA	1					
C ACCENT (75WG)	0.031	LAA	1					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	1					
E FERTILIZER - 28%UAN	2.50	PMV	1					
11A»AE 0172747 (5.25SC)	0.123	LAA	1	0	57	73	88	85
B ATRAZINE 4L (SC)	0.50	LAA	1					
C ACCENT (75WG)	0.031	LAA	1					
D ADJUVANT - COC (EC)	1.00	PMV	1					
E FERTILIZER - 28%UAN	1.50	QMA	1					
12A»CALLISTO (4SC)	0.094	LAA	1	0	47	63	65	42
B ATRAZINE 4L (SC)	0.50	LAA	1					
C»OPTION (35WG)	0.033	LAA	1					
D ADJUVANT - COC (EC)	1.00	PMV	1					
E FERTILIZER - 28%UAN	2.50	PMV	1					

TITLE: POST CONTROL OF CRABGRASS IN NO-TILL CORN

TRT TREATMENT NUM COMPONENT	DOSAGE RATE UNIT TM			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
				06-07-06	06-07-06	06-14-06	06-26-06	07-10-06	
				P ZEAMX	P DIGSA	P DIGSA	P DIGSA	P DIGSA	
				VAR 01					
				PHY %	CON %	CON %	CON %	CON %	
				1.00	1.00	1.00	1.00	1.00	
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	
13A»IMPACT (2.8SC)	0.016	LAA	1	0	60	72	78	68	
B ATRAZINE 4L (SC)	0.50	LAA	1						
C»OPTION (35WG)	0.033	LAA	1						
D ADJUVANT - VEGETABLE OIL	1.00	PMV	1						
E FERTILIZER - 28%UAN	2.50	PMV	1						
14A»AE 0172747 (5.25SC)	0.123	LAA	1	0	58	72	77	65	
B ATRAZINE 4L (SC)	0.50	LAA	1						
C»OPTION (35WG)	0.033	LAA	1						
D ADJUVANT - COC (EC)	1.00	PMV	1						
E FERTILIZER - 28%UAN	1.50	QMA	1						
15A»STEADFAST ATZ (89.3WG)	0.78	LAA	1	0	35	58	73	55	
B»DISTINCT (70WG)	0.088	LAA	1						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1						
D FERTILIZER - 28%UAN	2.00	QMA	1						
16A UNTREATED CHECK	0.00	NA	1	0	0	0	0	0	
				LSD (0.05)	0.00	12.26	19.84	22.61	31.75
				SIGNIFICANCE OF F	NS	**	**	**	**
				STANDARD DEVIATION	0.00	6.00	9.72	11.07	15.55
				COEFFICIENT OF VARIANCE	0.00	18.05	19.73	20.73	36.34
				DAT APPLICATION # 01 TIMINGS (00)	36	36	43	55	69
				DAT APPLICATION # 02 TIMINGS (01)	6	6	13	25	39
				DAT APPLICATION # 03 TIMINGS (02)	1	1	8	20	34



TITLE: POST CONTROL OF CRABGRASS IN NO-TILL CORN  
 CREATED: 04-03-2006 REVISED: 10-12-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	007 CALC
	RATE	UNIT	TM	08-07-06 P DIGSA	10-04-06 P ZEAMX	10-04-06 P ZEAMX
				CON % 1.00	VAR 01 YLD LB 1.00	VAR 01 YLD BU 1.00
				PL ALL	PL SD	A SD
1A UNTREATED CHECK	0.00	NA	0	0	5.9	44.1
2A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	10	13.4	100.9
3A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	37	13.7	103.1
B»CALLISTO (4SC)	0.094	LAA	2			
C ATRAZINE 4L (SC)	0.50	LAA	2			
D ADJUVANT - COC (EC)	1.00	PMV	2			
E FERTILIZER - 28%UAN	2.50	PMV	2			
4A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	85	17.1	128.7
B»IMPACT (2.8SC)	0.016	LAA	2			
C ATRAZINE 4L (SC)	0.50	LAA	2			
D ADJUVANT - VEGETABLE OIL	1.00	PMV	2			
E FERTILIZER - 28%UAN	2.50	PMV	2			
5A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	50	15.8	118.9
B»AE 0172747 (5.25SC)	0.123	LAA	2			
C ATRAZINE 4L (SC)	0.50	LAA	2			
D ADJUVANT - VEGETABLE OIL	1.00	PMV	2			
E FERTILIZER - 28%UAN	1.50	QMA	2			
6A»CALLISTO (4SC)	0.094	LAA	1	0	4.8	36.3
B ATRAZINE 4L (SC)	0.50	LAA	1			
C ADJUVANT - COC (EC)	1.00	PMV	1			
D FERTILIZER - 28%UAN	2.50	PMV	1			
7A»IMPACT (2.8SC)	0.016	LAA	1	52	13.5	101.1
B ATRAZINE 4L (SC)	0.50	LAA	1			
C ADJUVANT - VEGETABLE OIL	1.00	PMV	1			
D FERTILIZER - 28%UAN	2.50	PMV	1			
8A»AE 0172747 (5.25SC)	0.123	LAA	1	37	14.7	110.4
B ATRAZINE 4L (SC)	0.50	LAA	1			
C ADJUVANT - VEGETABLE OIL	1.00	PMV	1			
D FERTILIZER - 28%UAN	1.50	QMA	1			
9A»CALLISTO (4SC)	0.094	LAA	1	58	15.3	114.9
B ATRAZINE 4L (SC)	0.50	LAA	1			
C ACCENT (75WG)	0.031	LAA	1			
D ADJUVANT - COC (EC)	1.00	PMV	1			
E FERTILIZER - 28%UAN	2.50	PMV	1			
10A»IMPACT (2.8SC)	0.016	LAA	1	45	14.2	106.6
B ATRAZINE 4L (SC)	0.50	LAA	1			
C ACCENT (75WG)	0.031	LAA	1			
D ADJUVANT - VEGETABLE OIL	1.00	PMV	1			
E FERTILIZER - 28%UAN	2.50	PMV	1			
11A»AE 0172747 (5.25SC)	0.123	LAA	1	78	14.9	111.9
B ATRAZINE 4L (SC)	0.50	LAA	1			
C ACCENT (75WG)	0.031	LAA	1			
D ADJUVANT - COC (EC)	1.00	PMV	1			
E FERTILIZER - 28%UAN	1.50	QMA	1			
12A»CALLISTO (4SC)	0.094	LAA	1	20	9.5	71.3
B ATRAZINE 4L (SC)	0.50	LAA	1			
C»OPTION (35WG)	0.033	LAA	1			
D ADJUVANT - COC (EC)	1.00	PMV	1			
E FERTILIZER - 28%UAN	2.50	PMV	1			

TITLE: POST CONTROL OF CRABGRASS IN NO-TILL CORN

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW		007 RAW		007 CALC	
	RATE	UNIT	TM	CON %	PL ALL	YLD LB	PL SD	YLD BU	VAR 01
13A»IMPACT (2.8SC)	0.016	LAA	1	50		14.3		107.4	
B ATRAZINE 4L (SC)	0.50	LAA	1						
C»OPTION (35WG)	0.033	LAA	1						
D ADJUVANT - VEGETABLE OIL	1.00	PMV	1						
E FERTILIZER - 28%UAN	2.50	PMV	1						
14A»AE 0172747 (5.25SC)	0.123	LAA	1	53		13.0		97.6	
B ATRAZINE 4L (SC)	0.50	LAA	1						
C»OPTION (35WG)	0.033	LAA	1						
D ADJUVANT - COC (EC)	1.00	PMV	1						
E FERTILIZER - 28%UAN	1.50	QMA	1						
15A»STEADFAST ATZ (89.3WG)	0.78	LAA	1	35		15.7		118.2	
B»DISTINCT (70WG)	0.088	LAA	1						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1						
D FERTILIZER - 28%UAN	2.00	QMA	1						
16A UNTREATED CHECK	0.00	NA	1	0		2.9		21.5	
					LSD (0.05)	45.00	6.15	46.18	
					SIGNIFICANCE OF F	**	**	**	
					STANDARD DEVIATION	22.00	3.00	22.61	
					COEFFICIENT OF VARIANCE	70.81	29.68	29.68	
					DAT APPLICATION # 01 TIMINGS (00)	97	155	155	
					DAT APPLICATION # 02 TIMINGS (01)	67	125	125	
					DAT APPLICATION # 03 TIMINGS (02)	62	120	120	

> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 05-02-2006(1)  
01 = POSPOS / EARLY POSTEMERGENCE 06-01-2006(2)  
02 = MIDPOS / MID-POSTEMERGENCE 06-06-2006(3)

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	ZEAMX	% PHYTO	06-07-2006	01	P	ZEAMX		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	DIGSA	CON %	06-07-2006	03	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
003	DIGSA	CON %	06-14-2006	03	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
004	DIGSA	CON %	06-26-2006	03	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	DIGSA	CON %	07-10-2006	03	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	DIGSA	CON %	08-07-2006	03	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
007	ZEAMX	LB/PLOT	10-04-2006	01	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

VAR 01 = PIONEER 33B54

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = PIONEER 33B54

\* USER DEFINED CALCULATIONS

US 003/06/01 001 HP--- 007 -- {RAW}\*(7.51)

US 003/06/01 001 HP--- 007 -- {RAW}\*(7.51)

**TRIAL SUMMARY**  
**GENERAL SITE INFORMATION**

**TRIAL #:** US 003/06/01 001 HQ      **ALTERNATE ID#:** HF 17 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** HAYDEN FARM-06  
**CREATED BY:** US RITTER R  
**CREATED:** 04-05-2006      **REVISED:** 10-12-2006      **COMPLETED:** Y  
**TITLE:** A COMPARISON OF PRE-PACKS AND TANK-MIXES FOR CONVENTIONAL CORN - I  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 84      **TILLAGE:** COT  
**% SILT:** 9      **PH:** 6.4  
**% CLAY:** 7      **CEC:** 7.2  
**TEXTURE:** SL      **% OM:** 1.8  
**SOIL GEN:** C  
**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** EFF  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 14      **ACTUAL SUB-BLOCKS:** 14

**SUBMITTED BY:** \_\_\_\_\_

**REVIEWED BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/01/2006. Variety - Pioneer 33B54.
2. Preemergence applications made 05/01/2006.
3. Seed protected with Yield Guard and Poncho 1250.
4. Kernal Guard added to the hopper box.
5. 5 gallons of 9-18-9-1S applied in row.
6. 10.8 gallons of 22-0-0-5S applied 2 inches to the side of the row.
7. A total of 30-10-5-6.2S applied at planting.
8. Study sidedressed with additional nitrogen on 06/04/2006.
9. Study harvested 09/26/2006.

APPL. NUMBER	01	UNIT
TIMINGS	00	
TYPE	LIQMIX	
APPLICATION DATE	05-01-06	USA
TIME - BEGIN	17:00	24H
TIME - END	18:00	24H
AIR TEMPERATURE	64	F
% REL. HUMIDITY	30	
WIND DIRECTION	NORTHWEST	
WIND SPEED	3.0	M/H
CLOUD COVER	PARTCLDY	
DEW	NO	
SOIL MOISTURE	DRY/DRY	
SOIL CONDITION	FRIABLE	
SOIL TEMP/DEPTH	65/4.00	F /
METHOD	SPRAY	
EQUIPMENT	SPRBAC	
PROPELLANT	COMCO2	
PLACEMENT	BRFOSO	
NOZZLE	FLATFAN	
NOZZLE VOLUME	0.03	GPM
NOZZLE NUMBER	6	
NOZZLE SPACING	20.000	IN
SCREEN SIZE		
SCREEN SZ DESC	NA	
SWATH WIDTH	10.0	FT
BOOM HEIGHT	20.0	IN
SPEED	3.00	M/H
MIX SIZE	0.560	
MIX SIZE UNIT	GAL	
SPRAY VOLUME	18.00	
SCREEN SIZE	GPA	
PRESSURE	20.00	PSI
DILUENT	WATER	
INC. DATE		USA
INC. START		24H
INC. END		24H
INC. DEPTH		IN
INC. EQUIPMENT	---	

## \* TIMING CODES

00 = PREPRE / PREEMERGENCE

## \* NOZZLE DESCRIPTION

01 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD      VAR/SPC INFO: PIONEER 33B54  
 TARGET: CROP      SITE: FG      POPULATION: 28500.00 IPA      PLANTED: 05-01-2006  
 PLANTING DEPTH: 1.7 IN      ROW WIDTH: 30.0 IN  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MX SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-01-2006      00      MED      28500.00 IPA      .      .      . IN      NA

02 P AMBEL - RAGWEED, COMMON  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MX SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-01-2006      00      NA      IND      .      .      . IN      ---

03 P SETFA - FOXTAIL, GIANT  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MX SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-01-2006      00      NA      IND      .      .      . IN      ---

04 P XANST - COCKLEBUR, COMMON  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MX SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-01-2006      00      NA      IND      .      .      . IN      ---

05 P IPOSS - MORNINGGLORY  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MX SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-01-2006      00      NA      IND      .      .      . IN      ---

06 P DIGSA - CRABGRASS, LARGE, SOUTHERN  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MX SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-01-2006      00      NA      IND      .      .      . IN      ---

07 P CHEAL - LAMBSQUARTERS, COMMON  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA  
 STAGE ON      STAGE CODE      POP.GEN.      POPULATION      MN SIZE      MX SIZE      AV SIZE      CROP VIGOR      NOTES  
 05-01-2006      00      NA      IND      .      .      . IN      ---

\* STAGE CODE -- CORN  
 00 = DRY SEED (CARYOPSIS)  
 \* STAGE CODE -- GENERAL  
 00 = DRY SEED; DORMANCY  
 \* STAGE CODE -- GENERAL GRASS  
 00 = DRY SEED (CARYOPSIS)

**TITLE:** A COMPARISON OF PRE-PACKS AND TANK-MIXES FOR CONVENTIONAL CORN - I  
**CREATED:** 04-05-2006 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	05-16-06	05-16-05	05-29-06	05-29-06	05-29-06	
				P ZEAMX	P AMBEL	P DIGSA	P CHEAL	P AMBEL	
				VAR 01	CON %	CON %	CON %	CON %	
				PHY %	1.00	1.00	1.00	1.00	
				1.00	PL ALL	PL ALL	PL ALL	PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	0	100	100	100	97	
3A»GUARDSMAN MAX (5L)	2.50	LAA	0	0	100	98	100	100	
4A»HARNESS XTRA (5.6FL)	3.36	LAA	0	0	100	100	100	98	
5A»DEGREE XTRA (4 CS)	3.70	LAA	0	0	100	100	100	100	
6A»FULTIME (4CS)	3.30	LAA	0	0	100	98	100	100	
7A»KEYSTONE (5.25SE)	3.24	LAA	0	0	100	98	100	100	
8A»LUMAX (3.94 SE)	2.46	LAA	0	0	100	100	100	100	
9A»LEXAR (3.7SC)	2.78	LAA	0	0	100	100	100	100	
10A»DEFINE (4SC)	0.56	LAA	0	0	100	100	100	100	
B ATRAZINE 4L (SC)	1.25	LAA	0						
11A»GUARDSMAN MAX (5L)	2.50	LAA	0	0	100	100	100	98	
B»PROWL H2O (3.8CS)	1.50	LAA	0						
12A»KIH-485 (85WG)	0.181	LAA	0	0	100	100	100	97	
B ATRAZINE 4L (SC)	1.25	LAA	0						
13A»RADIUS (4SC)	0.66	LAA	0	3	100	100	100	100	
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	1.30	0.00	2.06	0.00	3.50
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	0.63	0.00	1.00	0.00	1.70
				COEFFICIENT OF VARIANCE	324.00	0.00	1.44	0.00	2.45
				DAT APPLICATION # 01 TIMINGS (00)	15	NA	28	28	28

**TITLE:** A COMPARISON OF PRE-PACKS AND TANK-MIXES FOR CONVENTIONAL CORN - I  
**CREATED:** 04-05-2006 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	009 RAW	010 RAW	
	RATE	UNIT	TM	06-12-06 P DIGSA	06-12-06 P CHEAL	06-12-06 P AMBEL	06-26-06 P DIGSA	06-26-06 P CHEAL	
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	100	100	88	100	100	
3A»GUARDSMAN MAX (5L)	2.50	LAA	0	100	98	93	98	100	
4A»HARNES XTRA (5.6FL)	3.36	LAA	0	100	100	97	100	100	
5A»DEGREE XTRA (4 CS)	3.70	LAA	0	100	98	95	100	98	
6A»FULTIME (4CS)	3.30	LAA	0	97	100	97	97	100	
7A»KEYSTONE (5.25SE)	3.24	LAA	0	98	98	93	97	98	
8A»LUMAX (3.94 SE)	2.46	LAA	0	98	100	98	98	100	
9A»LEXAR (3.7SC)	2.78	LAA	0	100	100	100	100	100	
10A»DEFINE (4SC)	0.56	LAA	0	100	100	93	98	100	
B ATRAZINE 4L (SC)	1.25	LAA	0						
11A»GUARDSMAN MAX (5L)	2.50	LAA	0	100	100	97	100	100	
B»PROWL H20 (3.8CS)	1.50	LAA	0						
12A»KIH-485 (85WG)	0.181	LAA	0	97	100	92	97	100	
B ATRAZINE 4L (SC)	1.25	LAA	0						
13A»RADIUS (4SC)	0.66	LAA	0	100	100	100	100	98	
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	3.39	2.24	6.57	4.00	2.33
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	1.65	1.09	3.20	1.94	1.13
				COEFFICIENT OF VARIANCE	2.37	1.57	4.80	2.80	1.62
				DAT APPLICATION # 01 TIMINGS (00)	42	42	42	56	56



**TITLE:** A COMPARISON OF PRE-PACKS AND TANK-MIXES FOR CONVENTIONAL CORN - I  
**CREATED:** 04-05-2006 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			011 RAW	012 RAW	013 RAW	014 RAW	015 RAW	
	RATE	UNIT	TM	06-26-06 P AMBEL	07-10-06 P DIGSA	07-10-06 P CHEAL	07-10-06 P AMBEL	08-07-06 P AMBEL	
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	70	93	100	60	57	
3A»GUARDSMAN MAX (5L)	2.50	LAA	0	90	93	100	87	80	
4A»HARNESS XTRA (5.6FL)	3.36	LAA	0	97	92	100	92	87	
5A»DEGREE XTRA (4 CS)	3.70	LAA	0	95	98	98	88	85	
6A»FULLTIME (4CS)	3.30	LAA	0	92	93	100	90	87	
7A»KEYSTONE (5.25SE)	3.24	LAA	0	92	92	98	78	67	
8A»LUMAX (3.94 SE)	2.46	LAA	0	95	95	100	92	92	
9A»LEXAR (3.7SC)	2.78	LAA	0	98	98	100	98	93	
10A»DEFINE (4SC)	0.56	LAA	0	87	92	100	83	78	
B ATRAZINE 4L (SC)	1.25	LAA	0						
11A»GUARDSMAN MAX (5L)	2.50	LAA	0	95	97	100	92	88	
B»PROWL H20 (3.8CS)	1.50	LAA	0						
12A»KIH-485 (85WG)	0.181	LAA	0	85	97	100	77	75	
B ATRAZINE 4L (SC)	1.25	LAA	0						
13A»RADIUS (4SC)	0.66	LAA	0	100	100	98	100	100	
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	17.25	7.00	2.33	20.71	23.44
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	8.39	3.41	1.13	10.07	11.40
				COEFFICIENT OF VARIANCE	13.13	5.12	1.62	16.66	19.78
				DAT APPLICATION # 01 TIMINGS (00)	56	70	70	70	98

**TITLE:** A COMPARISON OF PRE-PACKS AND TANK-MIXES FOR CONVENTIONAL CORN - I  
**CREATED:** 04-05-2006 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			016 RAW	016 CALC
	RATE	UNIT	TM	09-26-06 P ZEAMX	09-26-06 P ZEAMX
1A UNTREATED CHECK	0.00	NA	0	8.2	61.6
2A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	20.8	156.5
3A»GUARDSMAN MAX (5L)	2.50	LAA	0	20.4	153.4
4A»HARNES XTRA (5.6FL)	3.36	LAA	0	23.6	177.5
5A»DEGREE XTRA (4 CS)	3.70	LAA	0	22.2	167.0
6A»FULTIME (4CS)	3.30	LAA	0	22.4	168.0
7A»KEYSTONE (5.25SE)	3.24	LAA	0	18.9	141.7
8A»LUMAX (3.94 SE)	2.46	LAA	0	19.8	148.5
9A»LEXAR (3.7SC)	2.78	LAA	0	24.7	185.3
10A»DEFINE (4SC)	0.56	LAA	0	23.5	176.5
B ATRAZINE 4L (SC)	1.25	LAA	0		
11A»GUARDSMAN MAX (5L)	2.50	LAA	0	19.8	148.7
B»PROWL H20 (3.8CS)	1.50	LAA	0		
12A»KIH-485 (85WG)	0.181	LAA	0	17.0	127.7
B ATRAZINE 4L (SC)	1.25	LAA	0		
13A»RADIUS (4SC)	0.66	LAA	0	21.7	162.7
14A UNTREATED CHECK	0.00	NA	0	6.4	48.1
				LSL (0.05)	7.76
				SIGNIFICANCE OF F	**
				STANDARD DEVIATION	3.77
				COEFFICIENT OF VARIANCE	24.00
				DAT APPLICATION # 01 TIMINGS (00)	148
					58.24
					**
					28.33
					24.00

» = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 05-01-2006(1)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	ZEAMX	% PHYTO	05-16-2006	01	P	ZEAMX		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	AMBEL	CON %	05-16-2005	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
003	DIGSA	CON %	05-29-2006	06	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
004	CHEAL	CON %	05-29-2006	07	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	AMBEL	CON %	05-29-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	DIGSA	CON %	06-12-2006	06	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
007	CHEAL	CON %	06-12-2006	07	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
008	AMBEL	CON %	06-12-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
009	DIGSA	CON %	06-26-2006	06	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
010	CHEAL	CON %	06-26-2006	07	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
011	AMBEL	CON %	06-26-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
012	DIGSA	CON %	07-10-2006	06	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
013	CHEAL	CON %	07-10-2006	07	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
014	AMBEL	CON %	07-10-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
015	AMBEL	CON %	08-07-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N

## TITLE: A COMPARISON OF PRE-PACKS AND TANK-MIXES FOR CONVENTIONAL CORN - I

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRTR	SS	NOTE
016	ZEAMX	YLD/PLOT	09-26-2006	01	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	YLD/ACRE						CALC	SD	YLD	BU	H	1.00 A				

## \* VARIETY/SPECIE INFO CODES

VAR 01 = PIONEER 33B54

## \* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = PIONEER 33B54

## \* USER DEFINED CALCULATIONS

US 003/06/01 001 HQ--- 016 -- {RAW}\*(7.51)

US 003/06/01 001 HQ--- 016 -- {RAW}\*(7.51)

**TRIAL SUMMARY**  
**GENERAL SITE INFORMATION**

**TRIAL #:** US 003/06/01 001 HR      **ALTERNATE ID#:** HF 18 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** HAYDEN FARM-06  
**CREATED BY:** US RITTER R  
**CREATED:** 04-05-2006      **REVISED:** 10-12-2006      **COMPLETED:** Y  
**TITLE:** A COMPARISON OF PRE-PACKS AND TANK-MIXES FOR CONVENTIONAL CORN - II  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

<b>SOIL INFORMATION</b>		<b>TRIAL INFORMATION</b>	
% SAND: 84	TILLAGE: COT	DESIGN: RCB	RESIDUE TRIAL: EFF
% SILT: 9	PH: 6.4	ACTUAL REPS: 3	ACTUAL BLOCKS: 1
% CLAY: 7	CEC: 7.2	ACTUAL TRTS: 14	ACTUAL SUB-BLOCKS: 14
TEXTURE: SL	% OM: 1.8		
SOIL GEN: C			
PREVIOUS CROP: ZEAMX - CORN, VOLUNTEER, FIELD			
% RESIDUE: 0			
PLOT WIDTH: 10.00 FT			
PLOT LENGTH: 20.00 FT			
PLOT AREA: 200.00 SFT			

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/01/2006. Variety - Pioneer 33B54.
2. Preemergence applications made 05/01/2006.
3. Seed protected with Yield Guard and Poncho 1250.
4. Kernal Guard added to the hopper box.
5. 5 gallons of 9-18-9-1S applied in row.
6. 10.8 gallons of 22-0-0-5S applied 2 inches to the side of the row.
7. A total of 30-10-5-6.2S applied at planting.
8. Study sidedressed with additional nitrogen on 06/04/2006.
9. Study harvested 09/26/2006.

APPL. NUMBER	01	UNIT
TIMINGS	00	
TYPE	LIQMIX	
APPLICATION DATE	05-01-06	USA
TIME - BEGIN	17:00	24H
TIME - END	18:00	24H
AIR TEMPERATURE	64	F
% REL. HUMIDITY	30	
WIND DIRECTION	NORTHWEST	
WIND SPEED	3.0	M/H
CLOUD COVER	PARTCLDY	
DEW	NO	
SOIL MOISTURE	DRY/DRY	
SOIL CONDITION	FRIABLE	
SOIL TEMP/DEPTH	65/4.00	F /
METHOD	SPRAY	
EQUIPMENT	SPRBAC	
PROPELLANT	COMCO2	
PLACEMENT	BRFOSO	
NOZZLE	FLATFAN	
NOZZLE VOLUME	0.03	GPM
NOZZLE NUMBER	6	
NOZZLE SPACING	20.000	IN
SCREEN SIZE		
SCREEN SZ DESC	NA	
SWATH WIDTH	10.0	FT
BOOM HEIGHT	20.0	IN
SPEED	3.00	M/H
MIX SIZE	0.560	
MIX SIZE UNIT	GAL	
SPRAY VOLUME	18.00	
SCREEN SIZE	GPA	
PRESSURE	20.00	PSI
DILUENT	WATER	
INC. DATE		USA
INC. START		24H
INC. END		24H
INC. DEPTH		IN
INC. EQUIPMENT	---	

\* TIMING CODES  
00 = PREPRE / PREEMERGENCE

\* NOZZLE DESCRIPTION  
01 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD VAR/SPC INFO: PIONEER 33B54  
**TARGET:** CROP **SITE:** FG **POPULATION:** 28500.00 IPA **PLANTED:** 05-01-2006  
**PLANTING DEPTH:** 1.7 IN **ROW WIDTH:** 30.0 IN  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON STAGE CODE POP.GEN. POPULATION MN SIZE MX SIZE AV SIZE CROP VIGOR NOTES**  
 05-01-2006 00 MED 28500.00 IPA . . . IN NA

02 P AMBEL - RAGWEED, COMMON **PLANTED:**  
**TARGET:** PEST **SITE:** FG  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON STAGE CODE POP.GEN. POPULATION MN SIZE MX SIZE AV SIZE CROP VIGOR NOTES**  
 05-01-2006 00 NA IND . . . IN ---

03 P SETFA - FOXTAIL, GIANT **PLANTED:**  
**TARGET:** PEST **SITE:** FG  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON STAGE CODE POP.GEN. POPULATION MN SIZE MX SIZE AV SIZE CROP VIGOR NOTES**  
 05-01-2006 00 NA IND . . . IN ---

04 P XANST - COCKLEBUR, COMMON **PLANTED:**  
**TARGET:** PEST **SITE:** FG  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON STAGE CODE POP.GEN. POPULATION MN SIZE MX SIZE AV SIZE CROP VIGOR NOTES**  
 05-01-2006 00 NA IND . . . IN ---

05 P IPOSS - MORNINGGLORY **PLANTED:**  
**TARGET:** PEST **SITE:** FG  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON STAGE CODE POP.GEN. POPULATION MN SIZE MX SIZE AV SIZE CROP VIGOR NOTES**  
 05-01-2006 00 NA IND . . . IN ---

06 P DIGSA - CRABGRASS, LARGE, SOUTHERN **PLANTED:**  
**TARGET:** PEST **SITE:** FG  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON STAGE CODE POP.GEN. POPULATION MN SIZE MX SIZE AV SIZE CROP VIGOR NOTES**  
 05-01-2006 00 NA IND . . . IN ---

07 P CHEAL - LAMBSQUARTERS, COMMON **PLANTED:**  
**TARGET:** PEST **SITE:** FG  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON STAGE CODE POP.GEN. POPULATION MN SIZE MX SIZE AV SIZE CROP VIGOR NOTES**  
 05-01-2006 00 NA IND . . . IN ---

\* **STAGE CODE -- CORN**  
 00 = DRY SEED (CARYOPSIS)  
 \* **STAGE CODE -- GENERAL**  
 00 = DRY SEED; DORMANCY  
 \* **STAGE CODE -- GENERAL GRASS**  
 00 = DRY SEED (CARYOPSIS)

**TITLE:** A COMPARISON OF PRE-PACKS AND TANK-MIXES FOR CONVENTIONAL CORN - II  
**CREATED:** 04-05-2006 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			VAR 01		VAR 01		VAR 01	
	RATE	UNIT	TM	PHY % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	PHY % 1.00 PL ALL	CON % 1.00 PL ALL	
001 RAW 05-16-06 P ZEAMX									
002 RAW 05-16-06 P SETFA									
003 RAW 05-16-06 P AMBEL									
004 RAW 05-29-06 P ZEAMX									
005 RAW 05-29-06 P SETFA									
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»BICEP II MAGNUM (5.5SC)	1.79	LAA	0	0	98	90	0	100	
3A»BICEP II MAGNUM (5.5SC)	2.75	LAA	0	0	100	93	0	100	
4A»BICEP II MAGNUM (5.5SC)	3.58	LAA	0	0	100	100	0	100	
5A»PARALLEL PLUS EC (5.5L)	1.93	LAA	0	0	98	97	0	100	
6A»PARALLEL PLUS EC (5.5L)	3.09	LAA	0	0	100	98	0	100	
7A»PARALLEL PLUS EC (5.5L)	3.89	LAA	0	0	100	98	0	100	
8A»BICEP II MAGNUM (5.5SC) B»BASIS (75 DF)	2.75 0.016	LAA LAA	0 0	0 0	100 0	97 0	5 0	100 100	
9A»BICEP II MAGNUM (5.5SC) B»BASIS (75 DF)	2.75 0.023	LAA LAA	0 0	0 0	100 0	95 0	5 0	100 100	
10A»BICEP II MAGNUM (5.5SC) B»RESOLVE (25DF)	2.75 0.016	LAA LAA	0 0	0 0	100 0	98 0	5 0	100 100	
11A»KEYSTONE (5.25SE)	3.28	LAA	0	0	100	100	0	100	
12A»KEYSTONE (5.25SE) B»HORNET (78.5DF)	3.28 0.147	LAA LAA	0 0	0 0	100 0	100 0	8 0	100 100	
13A»KEYSTONE (5.25SE) B»PYTHON (80WG)	3.28 0.04	LAA LAA	0 0	0 0	100 0	100 0	8 0	100 100	
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	0.00	1.87	4.60	1.87	0.00
				SIGNIFICANCE OF F	NS	**	**	**	**
				STANDARD DEVIATION	0.00	0.908	2.24	0.908	0.00
				COEFFICIENT OF VARIANCE	0.00	1.30	3.29	49.16	0.00
				DAT APPLICATION # 01 TIMINGS (00)	15	15	15	28	28



TITLE: A COMPARISON OF PRE-PACKS AND TANK-MIXES FOR CONVENTIONAL CORN - II  
 CREATED: 04-05-2006 REVISED: 10-12-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			CON %	CON %	CON %	CON %	CON %	
	RATE	UNIT	TM	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	
006 RAW 05-29-06 P AMBEL									
007 RAW 06-12-06 P SETFA									
008 RAW 06-12-06 P AMBEL									
009 RAW 06-26-06 P SETFA									
010 RAW 06-26-06 P AMBEL									
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»BICEP II MAGNUM (5.5SC)	1.79	LAA	0	83	93	62	92	38	
3A»BICEP II MAGNUM (5.5SC)	2.75	LAA	0	97	100	88	100	80	
4A»BICEP II MAGNUM (5.5SC)	3.58	LAA	0	97	100	93	100	88	
5A»PARALLEL PLUS EC (5.5L)	1.93	LAA	0	100	97	92	97	90	
6A»PARALLEL PLUS EC (5.5L)	3.09	LAA	0	100	100	98	100	97	
7A»PARALLEL PLUS EC (5.5L)	3.89	LAA	0	100	100	98	100	95	
8A»BICEP II MAGNUM (5.5SC)	2.75	LAA	0	100	100	98	98	92	
B»BASIS (75 DF)	0.016	LAA	0						
9A»BICEP II MAGNUM (5.5SC)	2.75	LAA	0	100	100	98	100	95	
B»BASIS (75 DF)	0.023	LAA	0						
10A»BICEP II MAGNUM (5.5SC)	2.75	LAA	0	100	100	98	100	98	
B»RESOLVE (25DF)	0.016	LAA	0						
11A»KEYSTONE (5.25SE)	3.28	LAA	0	100	100	98	100	95	
12A»KEYSTONE (5.25SE)	3.28	LAA	0	100	100	100	100	100	
B»HORNET (78.5DF)	0.147	LAA	0						
13A»KEYSTONE (5.25SE)	3.28	LAA	0	100	100	100	100	98	
B»PYTHON (80WG)	0.04	LAA	0						
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	7.43	3.80	7.53	3.21	10.42
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	3.61	1.85	3.66	1.56	5.07
				COEFFICIENT OF VARIANCE	5.27	2.66	5.59	2.26	8.15
				DAT APPLICATION # 01 TIMINGS (00)	28	42	42	56	56

**TITLE:** A COMPARISON OF PRE-PACKS AND TANK-MIXES FOR CONVENTIONAL CORN - II  
**CREATED:** 04-05-2006 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			011 RAW	012 RAW	013 RAW	014 RAW	014 CALC	
	RATE	UNIT	TM	07-10-06	07-10-06	08-07-06	09-26-06	09-26-06	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	8.5	63.6	
2A»BICEP II MAGNUM (5.5SC)	1.79	LAA	0	92	10	0	12.8	96.1	
3A»BICEP II MAGNUM (5.5SC)	2.75	LAA	0	98	60	45	19.3	144.9	
4A»BICEP II MAGNUM (5.5SC)	3.58	LAA	0	98	77	67	16.6	124.7	
5A»PARALLEL PLUS EC (5.5L)	1.93	LAA	0	88	75	73	17.5	131.4	
6A»PARALLEL PLUS EC (5.5L)	3.09	LAA	0	93	93	92	18.9	142.0	
7A»PARALLEL PLUS EC (5.5L)	3.89	LAA	0	95	88	88	18.7	140.7	
8A»BICEP II MAGNUM (5.5SC)	2.75	LAA	0	88	73	73	19.3	145.0	
B»BASIS (75 DF)	0.016	LAA	0						
9A»BICEP II MAGNUM (5.5SC)	2.75	LAA	0	93	82	78	19.1	143.2	
B»BASIS (75 DF)	0.023	LAA	0						
10A»BICEP II MAGNUM (5.5SC)	2.75	LAA	0	95	90	87	19.6	147.5	
B»RESOLVE (25DF)	0.016	LAA	0						
11A»KEYSTONE (5.25SE)	3.28	LAA	0	93	85	85	17.2	129.2	
12A»KEYSTONE (5.25SE)	3.28	LAA	0	92	100	100	22.7	170.2	
B»HORNET (78.5DF)	0.147	LAA	0						
13A»KEYSTONE (5.25SE)	3.28	LAA	0	90	93	93	21.0	157.7	
B»PYTHON (80WG)	0.04	LAA	0						
14A UNTREATED CHECK	0.00	NA	0	0	0	0	14.8	111.4	
				LSD (0.05)	5.69	17.23	17.05	5.91	44.37
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	2.77	8.38	8.29	2.87	21.58
				COEFFICIENT OF VARIANCE	4.25	15.50	16.13	20.00	20.00
				DAT APPLICATION # 01 TIMINGS (00)	70	70	98	148	148

>> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 05-01-2006(1)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	ZEAMX	PHY %	05-16-2006	01	P	ZEAMX		RAW	ALL	PHY %	H		1.00 PL	NO	0001	0	N
002	SETFA	CON %	05-16-2006	03	P	SETFA		RAW	ALL	CON %	H		1.00 PL	NO	0001	0	N
003	AMBEL	CON %	05-16-2006	02	P	AMBEL		RAW	ALL	CON %	H		1.00 PL	NO	0001	0	N
004	ZEAMX	PHY %	05-29-2006	01	P	ZEAMX		RAW	ALL	PHY %	H		1.00 PL	NO	0001	0	N
005	SETFA	CON %	05-29-2006	03	P	SETFA		RAW	ALL	CON %	H		1.00 PL	NO	0001	0	N
006	AMBEL	CON %	05-29-2006	02	P	AMBEL		RAW	ALL	CON %	H		1.00 PL	NO	0001	0	N
007	SETFA	CON %	06-12-2006	03	P	SETFA		RAW	ALL	CON %	H		1.00 PL	NO	0001	0	N
008	AMBEL	CON %	06-12-2006	02	P	AMBEL		RAW	ALL	CON %	H		1.00 PL	NO	0001	0	N
009	SETFA	CON %	06-26-2006	03	P	SETFA		RAW	ALL	CON %	H		1.00 PL	NO	0001	0	N
010	AMBEL	CON %	06-26-2006	02	P	AMBEL		RAW	ALL	CON %	H		1.00 PL	NO	0001	0	N
011	SETFA	CON %	07-10-2006	03	P	SETFA		RAW	ALL	CON %	H		1.00 PL	NO	0001	0	N
012	AMBEL	CON %	07-10-2006	02	P	AMBEL		RAW	ALL	CON %	H		1.00 PL	NO	0001	0	N
013	AMBEL	CON %	08-07-2006	02	P	AMBEL		RAW	ALL	CON %	H		1.00 PL	NO	0001	0	N

TITLE: A COMPARISON OF PRE-PACKS AND TANK-MIXES FOR CONVENTIONAL CORN - II

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR	SS	NOTE
014	ZEAMX	YLD/PLOT	09-26-2006	01	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	YLD/ACRE						CALC	SD	YLD	BU	H	1.00 A				

## \* VARIETY/SPECIE INFO CODES

VAR 01 = PIONEER 33B54

## \* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = PIONEER 33B54

## \* USER DEFINED CALCULATIONS

US 003/06/01 001 HR--- 014 -- {RAW}\*(7.51)

US 003/06/01 001 HR--- 014 -- {RAW}\*(7.51)

**TRIAL SUMMARY  
GENERAL SITE INFORMATION**

**TRIAL #:** US 003/06/01 001 HS      **ALTERNATE ID#:** HF 19 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** HAYDEN FARM-06  
**CREATED BY:** US RITTER R  
**CREATED:** 04-10-2006      **REVISED:** 10-12-2006      **COMPLETED:** Y  
**TITLE:** EARLY POST PROGRAMS FOR CONVENTIONAL CORN - I  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 76      **TILLAGE:** COT  
**% SILT:** 17      **PH:** 6.9  
**% CLAY:** 7      **CEC:** 14.9  
**TEXTURE:** SL      **% OM:** 2.1  
**SOIL GEN:** C  
**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** EFF  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 16      **ACTUAL SUB-BLOCKS:** 16

**SUBMITTED BY:** \_\_\_\_\_

**REVIEWED BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/01/2006. Variety - Pioneer 33B54.
2. Preemergence applications made 05/02/2006.
3. Seed protected with Yield Guard and Poncho 1250.
4. Kernal Guard added to the hopper box.
5. 5 gallons of 9-18-9-1S applied in row.
6. 10.8 gallons of 22-0-0-5S applied 2 inches to the side of the row.
7. A total of 30-10-5-6.2S applied at planting.
8. Early post applications made 05/25/2006.
9. Study sidedressed with additional nitrogen on 06/04/2006.
10. Study harvested 09/28/2006.

APPL. NUMBER	01	02	UNIT
TIMINGS	00	01	
TYPE	LIQMIX	LIQMIX	
APPLICATION DATE	05-25-06	05-02-06	USA
TIME - BEGIN	12:00	17:00	24H
TIME - END	13:00	18:00	24H
AIR TEMPERATURE	70	74	F
% REL. HUMIDITY	65	45	
WIND DIRECTION	SOUTHWEST	NORTHWEST	
WIND SPEED	3.0	3.0	M/H
CLOUD COVER	CLOUDY	CLEAR	
DEW	NO	NO	
SOIL MOISTURE	DRY/MOIST	DRY/MOIST	
SOIL CONDITION	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	68/0.00	68/4.00	F /
METHOD	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	GPM
NOZZLE NUMBER	6	6	
NOZZLE SPACING	20.000	20.000	IN
SCREEN SIZE			
SCREEN SZ DESC	NA	NA	
SWATH WIDTH	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	IN
SPEED	3.00	3.00	M/H
MIX SIZE	0.560	0.560	
MIX SIZE UNIT	GAL	GAL	
SPRAY VOLUME	18.00	18.00	
SCREEN SIZE	GPA	GPA	
PRESSURE	20.00	20.00	PSI
DILUENT	WATER	WATER	
INC. DATE			USA
INC. START			24H
INC. END			24H
INC. DEPTH			IN
INC. EQUIPMENT	---	---	

## \* TIMING CODES

00 = POSPOS / POSTEMERGENCE  
01 = PREPRE / PREEMERGENCE

## \* NOZZLE DESCRIPTION

01 = SS-8003  
02 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD      VAR/SPC INFO: PIONEER 33B54  
 TARGET: CROP    SITE: FG                    POPULATION: 28500.00 IPA    PLANTED: 05-01-2006  
 PLANTING DEPTH: 1.7 IN                    ROW WIDTH: 30.0 IN  
 INFESTATION DATE: - - METHOD: NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-02-2006	00	MED	28500.00 IPA	.	.	. IN	NA	
05-25-2006	14	MED	28500.00 IPA	4.00	6.00	5.00 IN	TUR	

02 P AMBEL - RAGWEED, COMMON  
 TARGET: PEST    SITE: FG                    PLANTED:  
 INFESTATION DATE: - - METHOD: NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-02-2006	00	NA	IND	.	.	. IN	---	
05-25-2006	14	MED	2.00 SQY	2.00	2.00	2.00 IN	TUR	

03 P SETFA - FOXTAIL, GIANT  
 TARGET: PEST    SITE: FG                    PLANTED:  
 INFESTATION DATE: - - METHOD: NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-02-2006	00	NA	IND	.	.	. IN	---	

04 P XANST - COCKLEBUR, COMMON  
 TARGET: PEST    SITE: FG                    PLANTED:  
 INFESTATION DATE: - - METHOD: NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-02-2006	00	NA	IND	.	.	. IN	---	
05-25-2006	12	MED	2.00 SQY	2.00	2.00	2.00 IN	TUR	

05 P IPOSS - MORNINGGLORY  
 TARGET: PEST    SITE: FG                    PLANTED:  
 INFESTATION DATE: - - METHOD: NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-01-2006	00	NA	IND	.	.	. IN	---	
05-25-2006	10	MED	1.00 SQY	1.00	1.00	1.00 IN	TUR	

06 P DIGSA - CRABGRASS, LARGE, SOUTHERN  
 TARGET: PEST    SITE: FG                    PLANTED:  
 INFESTATION DATE: - - METHOD: NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-01-2006	00	NA	IND	.	.	. IN	---	
05-25-2006	12	MED	3.00 IF2	0.50	0.50	0.50 IN	TUR	

07 P CHEAL - LAMBSQUARTERS, COMMON  
 TARGET: PEST    SITE: FG                    PLANTED:  
 INFESTATION DATE: - - METHOD: NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-02-2006	00	NA	IND	.	.	. IN	---	
05-25-2006	14	MED	2.00 SQY	2.00	2.00	2.00 IN	TUR	

- \* STAGE CODE -- CORN
- 00 = DRY SEED (CARYOPSIS)
- 14 = 4 LEAVES UNFOLDED
- \* STAGE CODE -- GENERAL
- 00 = DRY SEED; DORMANCY
- 10 = 1ST LEAF EMERGED; COTYLEDONS UNFOLDED
- 12 = 2ND TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- 14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- \* STAGE CODE -- GENERAL GRASS
- 00 = DRY SEED (CARYOPSIS)
- 12 = 2 LEAVES UNFOLDED

**TITLE:** EARLY POST PROGRAMS FOR CONVENTIONAL CORN - I  
**CREATED:** 04-10-2006 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW
	RATE	UNIT	TM	06-02-06 P ZEAMX	06-02-06 P CHEAL	06-02-06 P AMBEL	06-02-06 P XANST	06-08-06 P CHEAL
				VAR 01 PHY % 1.00	CON % 1.00	CON % 1.00	CON % 1.00	CON % 1.00
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
2A»IMPACT (2.8SC)	0.016	LAA	0	0	100	100	100	100
B ATRAZINE 4L (SC)	0.50	LAA	0					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					
3A»CALLISTO (4SC)	0.094	LAA	0	0	100	100	98	100
B ATRAZINE 4L (SC)	0.25	LAA	0					
C ADJUVANT - COC (EC)	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					
4A»IMPACT (2.8SC)	0.016	LAA	0	0	100	100	98	100
B»STEADFAST (75WDG)	0.035	LAA	0					
C ATRAZINE 4L (SC)	0.50	LAA	0					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
E FERTILIZER - 28%UAN	2.50	PMV	0					
5A»CALLISTO (4SC)	0.094	LAA	0	0	100	100	98	100
B»STEADFAST (75WDG)	0.035	LAA	0					
C ATRAZINE 4L (SC)	0.25	LAA	0					
D ADJUVANT - COC (EC)	1.00	PMV	0					
E FERTILIZER - 28%UAN	2.50	PMV	0					
6A»STEADFAST (75WDG)	0.035	LAA	0	0	100	98	73	100
B ATRAZINE 4L (SC)	0.50	LAA	0					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					
7A»IMPACT (2.8SC)	0.016	LAA	0	0	100	100	98	100
B ACCENT (75WG)	0.031	LAA	0					
C ATRAZINE 4L (SC)	0.50	LAA	0					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
E FERTILIZER - 28%UAN	2.50	PMV	0					
8A ACCENT (75WG)	0.031	LAA	0	0	100	100	67	100
B ATRAZINE 4L (SC)	0.50	LAA	0					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					
9A»IMPACT (2.8SC)	0.016	LAA	0	0	100	100	100	100
B»OPTION (35WG)	0.033	LAA	0					
C ATRAZINE 4L (SC)	0.50	LAA	0					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
E FERTILIZER - 28%UAN	2.50	PMV	0					
10A»OPTION (35WG)	0.033	LAA	0	0	100	100	70	100
B ATRAZINE 4L (SC)	0.50	LAA	0					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					
11A»IMPACT (2.8SC)	0.016	LAA	0	0	100	100	100	100
B»STOUT (72.5WG)	0.034	LAA	0					
C ATRAZINE 4L (SC)	0.50	LAA	0					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
E FERTILIZER - 28%UAN	2.50	PMV	0					
12A»STOUT (72.5WG)	0.034	LAA	0	0	100	100	60	100
B ATRAZINE 4L (SC)	0.50	LAA	0					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					



## TITLE: EARLY POST PROGRAMS FOR CONVENTIONAL CORN - I

TRT TREATMENT NUM COMPONENT	DOSAGE		TM	001 RAW	002 RAW	003 RAW	004 RAW	005 RAW
	RATE	UNIT		06-02-06 P ZEAMX	06-02-06 P CHEAL	06-02-06 P AMBEL	06-02-06 P XANST	06-08-06 P CHEAL
				VAR 01 PHY % 1.00	CON % 1.00	CON % 1.00	CON % 1.00	CON % 1.00
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL
13A»IMPACT (2.8SC)	0.016	LAA	0	0	100	100	97	100
B»RESOLVE (25DF)	0.016	LAA	0					
C ATRAZINE 4L (SC)	0.50	LAA	0					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
E FERTILIZER - 28%UAN	2.50	PMV	0					
14A»RESOLVE (25DF)	0.016	LAA	0	0	100	100	58	100
B ATRAZINE 4L (SC)	0.50	LAA	0					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					
15A»BICEP II MAGNUM (5.5SC)	2.89	LAA	1	0	100	100	65	100
16A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
LSD (0.05)				0.00	0.00	1.20	12.62	0.00
SIGNIFICANCE OF F				NS	**	**	**	**
STANDARD DEVIATION				0.00	0.00	0.589	6.18	0.00
COEFFICIENT OF VARIANCE				0.00	0.00	0.826	10.24	0.00
DAT APPLICATION # 01 TIMINGS (00)				8	8	8	8	14
DAT APPLICATION # 02 TIMINGS (01)				31	31	31	31	37

TITLE: EARLY POST PROGRAMS FOR CONVENTIONAL CORN - I  
 CREATED: 04-10-2006 REVISED: 10-12-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	009 RAW	010 RAW
	RATE	UNIT	TM	06-08-06 P AMBEL	06-08-06 P XANST	06-21-06 P CHEAL	06-21-06 P AMBEL	06-21-06 P XANST
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
2A»IMPACT (2.8SC)	0.016	LAA	0	100	100	100	100	100
B ATRAZINE 4L (SC)	0.50	LAA	0					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					
3A»CALLISTO (4SC)	0.094	LAA	0	100	98	100	98	97
B ATRAZINE 4L (SC)	0.25	LAA	0					
C ADJUVANT - COC (EC)	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					
4A»IMPACT (2.8SC)	0.016	LAA	0	100	100	100	100	98
B»STEADFAST (75WDG)	0.035	LAA	0					
C ATRAZINE 4L (SC)	0.50	LAA	0					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
E FERTILIZER - 28%UAN	2.50	PMV	0					
5A»CALLISTO (4SC)	0.094	LAA	0	100	100	100	100	100
B»STEADFAST (75WDG)	0.035	LAA	0					
C ATRAZINE 4L (SC)	0.25	LAA	0					
D ADJUVANT - COC (EC)	1.00	PMV	0					
E FERTILIZER - 28%UAN	2.50	PMV	0					
6A»STEADFAST (75WDG)	0.035	LAA	0	95	87	98	88	78
B ATRAZINE 4L (SC)	0.50	LAA	0					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					
7A»IMPACT (2.8SC)	0.016	LAA	0	100	97	100	100	92
B ACCENT (75WG)	0.031	LAA	0					
C ATRAZINE 4L (SC)	0.50	LAA	0					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
E FERTILIZER - 28%UAN	2.50	PMV	0					
8A ACCENT (75WG)	0.031	LAA	0	98	82	100	83	70
B ATRAZINE 4L (SC)	0.50	LAA	0					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					
9A»IMPACT (2.8SC)	0.016	LAA	0	100	98	100	100	100
B»OPTION (35WG)	0.033	LAA	0					
C ATRAZINE 4L (SC)	0.50	LAA	0					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
E FERTILIZER - 28%UAN	2.50	PMV	0					
10A»OPTION (35WG)	0.033	LAA	0	100	93	100	100	93
B ATRAZINE 4L (SC)	0.50	LAA	0					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					
11A»IMPACT (2.8SC)	0.016	LAA	0	100	100	100	100	97
B»STOUT (72.5WG)	0.034	LAA	0					
C ATRAZINE 4L (SC)	0.50	LAA	0					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
E FERTILIZER - 28%UAN	2.50	PMV	0					
12A»STOUT (72.5WG)	0.034	LAA	0	98	77	100	93	73
B ATRAZINE 4L (SC)	0.50	LAA	0					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					

## TITLE: EARLY POST PROGRAMS FOR CONVENTIONAL CORN - I

TRT TREATMENT NUM COMPONENT	DOSAGE RATE UNIT TM	006 RAW	007 RAW	008 RAW	009 RAW	010 RAW
		06-08-06 P AMBEL	06-08-06 P XANST	06-21-06 P CHEAL	06-21-06 P AMBEL	06-21-06 P XANST
		CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL
13A»IMPACT (2.8SC)	0.016 LAA 0	100	97	100	100	90
B»RESOLVE (25DF)	0.016 LAA 0					
C ATRAZINE 4L (SC)	0.50 LAA 0					
D ADJUVANT - VEGETABLE OIL	1.00 PMV 0					
E FERTILIZER - 28%UAN	2.50 PMV 0					
14A»RESOLVE (25DF)	0.016 LAA 0	98	77	100	95	68
B ATRAZINE 4L (SC)	0.50 LAA 0					
C ADJUVANT - VEGETABLE OIL	1.00 PMV 0					
D FERTILIZER - 28%UAN	2.50 PMV 0					
15A»BICEP II MAGNUM (5.5SC)	2.89 LAA 1	100	65	98	93	45
16A UNTREATED CHECK	0.00 NA 0	0	0	0	0	0
	LSD (0.05)	2.85	10.94	1.64	7.23	10.78
	SIGNIFICANCE OF F	**	**	**	**	**
	STANDARD DEVIATION	1.39	5.36	0.805	3.54	5.28
	COEFFICIENT OF VARIANCE	2.00	8.26	1.13	5.13	8.61
	DAT APPLICATION # 01 TIMINGS (00)	14	14	27	27	27
	DAT APPLICATION # 02 TIMINGS (01)	37	37	50	50	50

**TITLE:** EARLY POST PROGRAMS FOR CONVENTIONAL CORN - I  
**CREATED:** 04-10-2006 **REVISED:** 10-12-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			011 RAW	012 RAW	013 RAW	014 RAW	015 RAW
	RATE	UNIT	TM	07-07-06 P CHEAL	07-07-06 P AMBEL	07-07-06 P XANST	07-07-06 P IPOSS	07-07-06 P SETFA
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
2A»IMPACT (2.8SC)	0.016	LAA	0	100	100	92	40	83
B ATRAZINE 4L (SC)	0.50	LAA	0					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					
3A»CALLISTO (4SC)	0.094	LAA	0	100	100	97	83	52
B ATRAZINE 4L (SC)	0.25	LAA	0					
C ADJUVANT - COC (EC)	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					
4A»IMPACT (2.8SC)	0.016	LAA	0	100	100	97	52	88
B»STEADFAST (75WDG)	0.035	LAA	0					
C ATRAZINE 4L (SC)	0.50	LAA	0					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
E FERTILIZER - 28%UAN	2.50	PMV	0					
5A»CALLISTO (4SC)	0.094	LAA	0	100	100	100	72	90
B»STEADFAST (75WDG)	0.035	LAA	0					
C ATRAZINE 4L (SC)	0.25	LAA	0					
D ADJUVANT - COC (EC)	1.00	PMV	0					
E FERTILIZER - 28%UAN	2.50	PMV	0					
6A»STEADFAST (75WDG)	0.035	LAA	0	100	83	55	57	88
B ATRAZINE 4L (SC)	0.50	LAA	0					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					
7A»IMPACT (2.8SC)	0.016	LAA	0	100	100	80	70	85
B ACCENT (75WG)	0.031	LAA	0					
C ATRAZINE 4L (SC)	0.50	LAA	0					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
E FERTILIZER - 28%UAN	2.50	PMV	0					
8A ACCENT (75WG)	0.031	LAA	0	100	73	53	60	85
B ATRAZINE 4L (SC)	0.50	LAA	0					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					
9A»IMPACT (2.8SC)	0.016	LAA	0	100	100	97	48	92
B»OPTION (35WG)	0.033	LAA	0					
C ATRAZINE 4L (SC)	0.50	LAA	0					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
E FERTILIZER - 28%UAN	2.50	PMV	0					
10A»OPTION (35WG)	0.033	LAA	0	98	100	88	37	75
B ATRAZINE 4L (SC)	0.50	LAA	0					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					
11A»IMPACT (2.8SC)	0.016	LAA	0	100	100	90	30	87
B»STOUT (72.5WG)	0.034	LAA	0					
C ATRAZINE 4L (SC)	0.50	LAA	0					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
E FERTILIZER - 28%UAN	2.50	PMV	0					
12A»STOUT (72.5WG)	0.034	LAA	0	100	90	53	50	70
B ATRAZINE 4L (SC)	0.50	LAA	0					
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0					
D FERTILIZER - 28%UAN	2.50	PMV	0					

TITLE: EARLY POST PROGRAMS FOR CONVENTIONAL CORN - I

TRT TREATMENT NUM COMPONENT	DOSAGE			011 RAW	012 RAW	013 RAW	014 RAW	015 RAW	
	RATE	UNIT	TM	07-07-06 P CHEAL	07-07-06 P AMBEL	07-07-06 P XANST	07-07-06 P IPOSS	07-07-06 P SETFA	
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	
13A»IMPACT (2.8SC)	0.016	LAA	0	100	100	78	47	92	
B»RESOLVE (25DF)	0.016	LAA	0						
C ATRAZINE 4L (SC)	0.50	LAA	0						
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0						
E FERTILIZER - 28%UAN	2.50	PMV	0						
14A»RESOLVE (25DF)	0.016	LAA	0	100	90	47	63	92	
B ATRAZINE 4L (SC)	0.50	LAA	0						
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0						
D FERTILIZER - 28%UAN	2.50	PMV	0						
15A»BICEP II MAGNUM (5.5SC)	2.89	LAA	1	100	88	0	63	97	
16A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	1.20	9.00	20.92	32.82	18.63
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	0.589	4.40	10.24	16.07	9.12
				COEFFICIENT OF VARIANCE	0.826	6.51	19.55	40.81	15.22
				DAT APPLICATION # 01 TIMINGS (00)	43	43	43	43	43
				DAT APPLICATION # 02 TIMINGS (01)	66	66	66	66	66

TITLE: EARLY POST PROGRAMS FOR CONVENTIONAL CORN - I  
 CREATED: 04-10-2006 REVISED: 10-12-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			016 RAW	017 RAW	017 CALC
	RATE	UNIT	TM	08-07-06 P AMBEL	09-26-06 P ZEAMX	09-26-06 P ZEAMX
				CON % 1.00 PL ALL	VAR 01 YLD LB 1.00 PL SD	VAR 01 YLD BU 1.00 A SD
1A UNTREATED CHECK	0.00	NA	0	0	7.2	52.9
2A»IMPACT (2.8SC)	0.016	LAA	0	98	23.2	171.2
B ATRAZINE 4L (SC)	0.50	LAA	0			
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0			
D FERTILIZER - 28%UAN	2.50	PMV	0			
3A»CALLISTO (4SC)	0.094	LAA	0	100	15.6	115.4
B ATRAZINE 4L (SC)	0.25	LAA	0			
C ADJUVANT - COC (EC)	1.00	PMV	0			
D FERTILIZER - 28%UAN	2.50	PMV	0			
4A»IMPACT (2.8SC)	0.016	LAA	0	100	23.5	173.4
B»STEADFAST (75WDG)	0.035	LAA	0			
C ATRAZINE 4L (SC)	0.50	LAA	0			
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0			
E FERTILIZER - 28%UAN	2.50	PMV	0			
5A»CALLISTO (4SC)	0.094	LAA	0	100	25.1	185.2
B»STEADFAST (75WDG)	0.035	LAA	0			
C ATRAZINE 4L (SC)	0.25	LAA	0			
D ADJUVANT - COC (EC)	1.00	PMV	0			
E FERTILIZER - 28%UAN	2.50	PMV	0			
6A»STEADFAST (75WDG)	0.035	LAA	0	87	24.8	183.3
B ATRAZINE 4L (SC)	0.50	LAA	0			
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0			
D FERTILIZER - 28%UAN	2.50	PMV	0			
7A»IMPACT (2.8SC)	0.016	LAA	0	100	26.8	197.8
B ACCENT (75WG)	0.031	LAA	0			
C ATRAZINE 4L (SC)	0.50	LAA	0			
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0			
E FERTILIZER - 28%UAN	2.50	PMV	0			
8A ACCENT (75WG)	0.031	LAA	0	75	23.8	175.9
B ATRAZINE 4L (SC)	0.50	LAA	0			
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0			
D FERTILIZER - 28%UAN	2.50	PMV	0			
9A»IMPACT (2.8SC)	0.016	LAA	0	100	24.3	179.6
B»OPTION (35WG)	0.033	LAA	0			
C ATRAZINE 4L (SC)	0.50	LAA	0			
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0			
E FERTILIZER - 28%UAN	2.50	PMV	0			
10A»OPTION (35WG)	0.033	LAA	0	98	23.2	171.2
B ATRAZINE 4L (SC)	0.50	LAA	0			
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0			
D FERTILIZER - 28%UAN	2.50	PMV	0			
11A»IMPACT (2.8SC)	0.016	LAA	0	100	22.4	165.6
B»STOUT (72.5WG)	0.034	LAA	0			
C ATRAZINE 4L (SC)	0.50	LAA	0			
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0			
E FERTILIZER - 28%UAN	2.50	PMV	0			
12A»STOUT (72.5WG)	0.034	LAA	0	93	23.6	174.2
B ATRAZINE 4L (SC)	0.50	LAA	0			
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0			
D FERTILIZER - 28%UAN	2.50	PMV	0			

TITLE: EARLY POST PROGRAMS FOR CONVENTIONAL CORN - I

TRT TREATMENT NUM COMPONENT	DOSAGE			016 RAW	017 RAW	017 CALC
	RATE	UNIT	TM	08-07-06	09-26-06	09-26-06
				P AMBEL	P ZEAMX	P ZEAMX
				CON %	VAR 01	VAR 01
				1.00	YLD LB	YLD BU
				PL ALL	PL SD	A SD
13A»IMPACT (2.8SC)	0.016	LAA	0	100	24.9	183.5
B»RESOLVE (25DF)	0.016	LAA	0			
C ATRAZINE 4L (SC)	0.50	LAA	0			
D ADJUVANT - VEGETABLE OIL	1.00	PMV	0			
E FERTILIZER - 28%UAN	2.50	PMV	0			
14A»RESOLVE (25DF)	0.016	LAA	0	93	23.0	169.7
B ATRAZINE 4L (SC)	0.50	LAA	0			
C ADJUVANT - VEGETABLE OIL	1.00	PMV	0			
D FERTILIZER - 28%UAN	2.50	PMV	0			
15A»BICEP II MAGNUM (5.5SC)	2.89	LAA	1	90	21.2	156.7
16A UNTREATED CHECK	0.00	NA	0	0	7.6	56.3
				LSD (0.05)	5.12	8.00
				SIGNIFICANCE OF F	**	**
				STANDARD DEVIATION	2.51	3.90
				COEFFICIENT OF VARIANCE	3.68	22.43
				DAT APPLICATION # 01 TIMINGS (00)	74	124
				DAT APPLICATION # 02 TIMINGS (01)	97	147

> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = POSPOS / POSTEMERGENCE 05-25-2006(1)  
01 = PREPRE / PREEMERGENCE 05-02-2006(2)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	ZEAMX	% PHYTO	06-02-2006	01	P	ZEAMX		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	CHEAL	CON %	06-02-2006	07	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
003	AMBEL	CON %	06-02-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
004	XANST	CON %	06-02-2006	04	P	XANST		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	CHEAL	CON %	06-08-2006	07	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	AMBEL	CON %	06-08-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
007	XANST	CON %	06-08-2006	04	P	XANST		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
008	CHEAL	CON %	06-21-2006	07	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
009	AMBEL	CON %	06-21-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
010	XANST	CON %	06-21-2006	04	P	XANST		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
011	CHEAL	CON %	07-07-2006	07	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
012	AMBEL	CON %	07-07-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
013	XANST	CON %	07-07-2006	04	P	XANST		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
014	IPOSS	CON %	07-07-2006	05	P	IPOSS		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
015	SETFA	CON %	07-07-2006	03	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
016	AMBEL	CON %	08-07-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
017	ZEAMX	YLD/PLOT	09-26-2006	01	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	YLD/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

VAR 01 = PIONEER 33B54

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = PIONEER 33B54

\* USER DEFINED CALCULATIONS

US 003/06/01 001 HS--- 017 -- {RAW}\*(7.38)

US 003/06/01 001 HS--- 017 -- {RAW}\*(7.38)

**TRIAL SUMMARY  
GENERAL SITE INFORMATION**

**TRIAL #:** US 003/06/01 001 HT      **ALTERNATE ID#:** HF 20 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** HAYDEN FARM-06  
**CREATED BY:** US RITTER R  
**CREATED:** 04-10-2006      **REVISED:** 10-25-2006      **COMPLETED:** Y  
**TITLE:** EARLY POST PROGRAMS FOR CONVENTIONAL CORN - II  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 76      **TILLAGE:** COT  
**% SILT:** 17      **PH:** 6.9  
**% CLAY:** 7      **CEC:** 14.9  
**TEXTURE:** SL      **% OM:** 2.1  
**SOIL GEN:** C

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** EFF  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 16      **ACTUAL SUB-BLOCKS:** 16

**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_



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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/01/2006. Variety - Pioneer 33B54.
2. Preemergence applications made 05/02/2006.
3. Seed protected with Yield Guard and Poncho 1250.
4. Kernal Guard added to the hopper box.
5. 5 gallons of 9-18-9-1S applied in row.
6. 10.8 gallons of 22-0-0-5S applied 2 inches to the side of the row.
7. A total of 30-10-5-6.2S applied at planting.
8. Early post applications made 05/25/2006.
9. Mid-post applications made 05/31/2006.
10. Study sidedressed with additional nitrogen on 06/04/2006.
11. Study harvested 09/28/2006.

APPL. NUMBER	01	02	03	UNIT
TIMINGS	00	01	02	
TYPE	LIQMIX	LIQMIX	LIQMIX	
APPLICATION DATE	05-02-06	05-25-06	05-31-06	USA
TIME - BEGIN	17:00	12:00	19:00	24H
TIME - END	18:00	13:00	19:30	24H
AIR TEMPERATURE	74	70	86	F
% REL. HUMIDITY	45	65	70	
WIND DIRECTION	NORTHWEST	SOUTHWEST	SOUTHWEST	
WIND SPEED	3.0	3.0	3.0	M/H
CLOUD COVER	CLEAR	CLOUDY	HAZY SUN	
DEW	NO	NO	NO	
SOIL MOISTURE	DRY/MOIST	DRY/MOIST	DRY/MOIST	
SOIL CONDITION	FRIABLE	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	68/4.00	68/4.00	86/4.00	F /
METHOD	SPRAY	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	0.03	GPM
NOZZLE NUMBER	6	6	6	
NOZZLE SPACING	20.000	20.000	20.000	IN
SCREEN SIZE				
SCREEN SZ DESC	NA	NA	NA	
SWATH WIDTH	10.0	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	20.0	IN
SPEED	3.00	3.00	3.00	M/H
MIX SIZE	0.560	0.560	0.560	
MIX SIZE UNIT	GAL	GAL	GAL	
SPRAY VOLUME	18.00	18.00	18.00	
SCREEN SIZE	GPA	GPA	GPA	
PRESSURE	20.00	20.00	20.00	PSI
DILUENT	WATER	WATER	WATER	
INC. DATE				USA
INC. START				24H
INC. END				24H
INC. DEPTH				IN
INC. EQUIPMENT	---	---	---	

## \* TIMING CODES

00 = PREPRE / PREEMERGENCE  
01 = POSPOS / EARLY POSTEMERGENCE  
02 = MIDPOS / MID-POSTEMERGENCE

## \* NOZZLE DESCRIPTION

01 = SS-8003  
02 = SS-8003  
03 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD VAR/SPC INFO: PIONEER 33B54  
 TARGET: CROP SITE: FG POPULATION: 28500.00 IPA PLANTED: 05-01-2006  
 PLANTING DEPTH: 1.7 IN ROW WIDTH: 30.0 IN  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-02-2006	00	MED	28500.00 IPA	.	.	. IN		NA	
05-25-2006	14	MED	28500.00 IPA	4.00	6.00	5.00 IN		TUR	
05-31-2006	15	MED	28500.00 IPA	12.00	12.00	12.00 IN		TUR	

02 P AMBEL - RAGWEED, COMMON PLANTED:  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-02-2006	00	NA	IND	.	.	. IN		---	
05-25-2006	14	MED	2.00 SQY	2.00	2.00	2.00 IN		TUR	
05-31-2006	14	MED	3.00 SQY	4.00	4.00	4.00 IN		TUR	

03 P SETFA - FOXTAIL, GIANT PLANTED:  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-02-2006	00	NA	IND	.	.	. IN		---	
05-25-2006	13	MED	1.00 IF2	3.00	3.00	3.00 IN		TUR	
05-31-2006	14	MED	1.00 IF2	4.00	4.00	4.00 IN		TUR	

04 P XANST - COCKLEBUR, COMMON PLANTED:  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-02-2006	00	NA	IND	.	.	. IN		---	
05-25-2006	12	MED	2.00 SQY	2.00	2.00	2.00 IN		TUR	
05-31-2006	16	MED	1.00 SQY	6.00	6.00	6.00 IN		TUR	

05 P IPOSS - MORNINGGLORY PLANTED:  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-01-2006	00	NA	IND	.	.	. IN		---	
05-25-2006	10	MED	1.00 SQY	1.00	1.00	1.00 IN		TUR	

06 P DIGSA - CRABGRASS, LARGE, SOUTHERN PLANTED:  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-01-2006	00	NA	IND	.	.	. IN		---	
05-25-2006	12	MED	3.00 IF2	0.50	0.50	0.50 IN		TUR	

07 P CHEAL - LAMBSQUARTERS, COMMON PLANTED:  
 TARGET: PEST SITE: FG  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-02-2006	00	NA	IND	.	.	. IN		---	

- \* STAGE CODE -- CORN
- 00 = DRY SEED (CARYOPSIS)
- 14 = 4 LEAVES UNFOLDED
- 15 = 5 LEAVES UNFOLDED
- \* STAGE CODE -- GENERAL
- 00 = DRY SEED; DORMANCY
- 10 = 1ST LEAF EMERGED; COTYLEDONS UNFOLDED
- 12 = 2ND TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- 14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- 16 = 6TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- \* STAGE CODE -- GENERAL GRASS
- 00 = DRY SEED (CARYOPSIS)
- 12 = 2 LEAVES UNFOLDED
- 13 = 3 LEAVES UNFOLDED
- 14 = 4 LEAVES UNFOLDED

TITLE: EARLY POST PROGRAMS FOR CONVENTIONAL CORN - II  
 CREATED: 04-10-2006 REVISED: 10-25-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	06-02-06 P ZEAMX	06-02-06 P SETFA	06-02-06 P AMBEL	06-02-06 P CHEAL	06-02-06 P XANST	
				VAR 01 PHY % 1.00	CON % 1.00	CON % 1.00	CON % 1.00	CON % 1.00	
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»CINCH ATZ (5.5EC)	2.89	LAA	0	0	100	100	100	95	
3A»CINCH ATZ (5.5EC)	2.89	LAA	0	10	100	100	100	92	
B»BASIS (75 DF)	0.023	LAA	0						
4A»CINCH ATZ (5.5EC)	2.89	LAA	0	7	100	100	100	95	
B»RESOLVE (25DF)	0.016	LAA	0						
5A»ROUNDUP ORIGINAL (4SL)	1.00	LAA	1	0	100	100	100	98	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1						
C FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	1						
6A»ROUNDUP ORIGINAL (4SL)	1.00	LAA	1	0	100	100	100	100	
B»RESOLVE (25DF)	0.016	LAA	1						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1						
D FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	1						
7A»CINCH ATZ (5.5EC)	2.89	LAA	0	0	100	100	100	90	
B»ROUNDUP ORIGINAL (4SL)	1.00	LAA	2						
C»RESOLVE (25DF)	0.016	LAA	2						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	2						
E FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	2						
8A»CINCH ATZ (5.5EC)	2.89	LAA	0	0	100	98	100	88	
B»STEADFAST (75WDG)	0.035	LAA	2						
C»CALLISTO (4SC)	0.06	LAA	2						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	2						
9A»STEADFAST ATZ (89.3WG)	0.783	LAA	2	0	0	0	0	0	
B»CALLISTO (4SC)	0.06	LAA	2						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2						
10A»STEADFAST (75WDG)	0.035	LAA	2	0	0	0	0	0	
B»LUMAX (3.94 SE)	0.985	LAA	2						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2						
11A»CINCH (7.64EC)	1.91	LAA	0	0	33	10	33	10	
B ACCENT (75WG)	0.023	LAA	2						
C»HARMONY GT (50SG)	0.002	LAA	2						
D»CALLISTO (4SC)	0.047	LAA	2						
E ATRAZINE 4L (SC)	0.50	LAA	2						
F ADJUVANT - COC (EC)	1.00	PMV	2						
G FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	2						
12A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	0	100	100	100	90	
B»DISTINCT (70WG)	0.175	LAA	1						
13A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	0	100	100	100	88	
B»BAS 799 (56WG)	0.175	LAA	1						
14A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	0	100	100	100	93	
B»CLARITY (4SL)	0.50	LAA	1						
15A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	0	100	100	100	93	
B»DICAM (4SL)	0.50	LAA	1						
16A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	2.45	34.08	25.41	34.08	25.61
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	1.20	16.67	12.43	16.67	12.52
				COEFFICIENT OF VARIANCE	140.93	29.69	22.65	29.69	24.54

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TITLE: EARLY POST PROGRAMS FOR CONVENTIONAL CORN - II					
DAT APPLICATION # 02 TIMINGS (01)	8	8	8	8	8
DAT APPLICATION # 03 TIMINGS (02)	2	2	2	2	2

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TITLE: EARLY POST PROGRAMS FOR CONVENTIONAL CORN - II  
 CREATED: 04-10-2006 REVISED: 10-25-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	009 RAW	010 RAW	
	RATE	UNIT	TM	06-08-06 P SETFA	06-08-06 P AMBEL	06-08-06 P CHEAL	06-08-06 P XANST	06-21-06 P SETFA	
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»CINCH ATZ (5.5EC)	2.89	LAA	0	100	98	98	93	95	
3A»CINCH ATZ (5.5EC)	2.89	LAA	0	100	100	100	92	100	
B»BASIS (75 DF)	0.023	LAA	0						
4A»CINCH ATZ (5.5EC)	2.89	LAA	0	100	100	100	97	100	
B»RESOLVE (25DF)	0.016	LAA	0						
5A»ROUNDUP ORIGINAL (4SL)	1.00	LAA	1	100	100	100	92	97	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1						
C FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	1						
6A»ROUNDUP ORIGINAL (4SL)	1.00	LAA	1	100	100	100	98	100	
B»RESOLVE (25DF)	0.016	LAA	1						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1						
D FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	1						
7A»CINCH ATZ (5.5EC)	2.89	LAA	0	100	100	100	100	100	
B»ROUNDUP ORIGINAL (4SL)	1.00	LAA	2						
C»RESOLVE (25DF)	0.016	LAA	2						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	2						
E FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	2						
8A»CINCH ATZ (5.5EC)	2.89	LAA	0	100	100	100	97	100	
B»STEADFAST (75WDG)	0.035	LAA	2						
C»CALLISTO (4SC)	0.06	LAA	2						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	2						
9A»STEADFAST ATZ (89.3WG)	0.783	LAA	2	80	100	100	87	98	
B»CALLISTO (4SC)	0.06	LAA	2						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2						
10A»STEADFAST (75WDG)	0.035	LAA	2	82	100	100	82	97	
B»LUMAX (3.94 SE)	0.985	LAA	2						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2						
11A»CINCH (7.64EC)	1.91	LAA	0	100	100	100	88	100	
B ACCENT (75WG)	0.023	LAA	2						
C»HARMONY GT (50SG)	0.002	LAA	2						
D»CALLISTO (4SC)	0.047	LAA	2						
E ATRAZINE 4L (SC)	0.50	LAA	2						
F ADJUVANT - COC (EC)	1.00	PMV	2						
G FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	2						
12A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	100	100	100	97	100	
B»DISTINCT (70WG)	0.175	LAA	1						
13A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	100	100	100	98	100	
B»BAS 799 (56WG)	0.175	LAA	1						
14A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	100	100	100	100	98	
B»CLARITY (4SL)	0.50	LAA	1						
15A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	100	100	100	98	100	
B»DICAM (4SL)	0.50	LAA	1						
16A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	1.20	1.20	1.20	8.54	4.07
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	0.589	0.589	0.589	4.18	2.00
				COEFFICIENT OF VARIANCE	0.848	0.826	0.826	6.21	2.82

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<b>TITLE:</b> EARLY POST PROGRAMS FOR CONVENTIONAL CORN - II					
DAT APPLICATION # 02 TIMINGS (01)	14	14	14	14	27
DAT APPLICATION # 03 TIMINGS (02)	8	8	8	8	21

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**TITLE:** EARLY POST PROGRAMS FOR CONVENTIONAL CORN - II  
**CREATED:** 04-10-2006 **REVISED:** 10-25-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			CON %		CON %		CON %		CON %		CON %	
	RATE	UNIT	TM	PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	PL ALL
011 RAW 06-21-06 P AMBEL													
012 RAW 06-21-06 P CHEAL													
013 RAW 06-21-06 P XANST													
014 RAW 07-07-06 P SETFA													
015 RAW 07-07-06 P AMBEL													
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	0	0	0	0	0
2A»CINCH ATZ (5.5EC)	2.89	LAA	0	95	95	85	97	92					
3A»CINCH ATZ (5.5EC)	2.89	LAA	0	98	100	82	97	97					
B»BASIS (75 DF)	0.023	LAA	0										
4A»CINCH ATZ (5.5EC)	2.89	LAA	0	98	100	93	97	95					
B»RESOLVE (25DF)	0.016	LAA	0										
5A»ROUNDUP ORIGINAL (4SL)	1.00	LAA	1	92	100	83	93	95					
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1										
C FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	1										
6A»ROUNDUP ORIGINAL (4SL)	1.00	LAA	1	100	100	87	95	97					
B»RESOLVE (25DF)	0.016	LAA	1										
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1										
D FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	1										
7A»CINCH ATZ (5.5EC)	2.89	LAA	0	100	100	97	98	100					
B»ROUNDUP ORIGINAL (4SL)	1.00	LAA	2										
C»RESOLVE (25DF)	0.016	LAA	2										
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	2										
E FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	2										
8A»CINCH ATZ (5.5EC)	2.89	LAA	0	100	100	98	100	100					
B»STEADFAST (75WDG)	0.035	LAA	2										
C»CALLISTO (4SC)	0.06	LAA	2										
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	2										
9A»STEADFAST ATZ (89.3WG)	0.783	LAA	2	98	100	97	97	100					
B»CALLISTO (4SC)	0.06	LAA	2										
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2										
10A»STEADFAST (75WDG)	0.035	LAA	2	100	100	97	88	100					
B»LUMAX (3.94 SE)	0.985	LAA	2										
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2										
11A»CINCH (7.64EC)	1.91	LAA	0	100	100	98	100	100					
B ACCENT (75WG)	0.023	LAA	2										
C»HARMONY GT (50SG)	0.002	LAA	2										
D»CALLISTO (4SC)	0.047	LAA	2										
E ATRAZINE 4L (SC)	0.50	LAA	2										
F ADJUVANT - COC (EC)	1.00	PMV	2										
G FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	2										
12A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	100	100	97	93	100					
B»DISTINCT (70WG)	0.175	LAA	1										
13A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	100	100	95	92	100					
B»BAS 799 (56WG)	0.175	LAA	1										
14A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	100	100	100	90	100					
B»CLARITY (4SL)	0.50	LAA	1										
15A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	100	100	100	95	100					
B»DICAM (4SL)	0.50	LAA	1										
16A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0					
LSD (0.05)				4.20	3.61	9.79	8.72	4.17					
SIGNIFICANCE OF F				**	**	**	**	**					
STANDARD DEVIATION				2.06	1.77	4.79	4.27	2.00					
COEFFICIENT OF VARIANCE				2.92	2.48	7.18	6.28	2.91					



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<b>TITLE:</b> EARLY POST PROGRAMS FOR CONVENTIONAL CORN - II					
DAT APPLICATION # 02 TIMINGS (01)	27	27	27	43	43
DAT APPLICATION # 03 TIMINGS (02)	21	21	21	37	37

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**TITLE:** EARLY POST PROGRAMS FOR CONVENTIONAL CORN - II  
**CREATED:** 04-10-2006 **REVISED:** 10-25-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			016 RAW	017 RAW	018 RAW	019 RAW	020 RAW	VAR 01
	RATE	UNIT	TM	07-07-06 P CHEAL	07-07-06 P XANST	07-07-06 P IPOSS	08-07-06 P AMBEL	09-28-06 P ZEAMX	YLD LB 1.00
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	PL SD
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	10.3
2A»CINCH ATZ (5.5EC)	2.89	LAA	0	97	73	68	92		23.0
3A»CINCH ATZ (5.5EC)	2.89	LAA	0	100	65	60	97		21.4
B»BASIS (75 DF)	0.023	LAA	0						
4A»CINCH ATZ (5.5EC)	2.89	LAA	0	100	90	65	90		18.9
B»RESOLVE (25DF)	0.016	LAA	0						
5A»ROUNDUP ORIGINAL (4SL)	1.00	LAA	1	98	67	57	92		19.6
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1						
C FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	1						
6A»ROUNDUP ORIGINAL (4SL)	1.00	LAA	1	100	67	60	97		21.0
B»RESOLVE (25DF)	0.016	LAA	1						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1						
D FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	1						
7A»CINCH ATZ (5.5EC)	2.89	LAA	0	100	87	83	98		23.7
B»ROUNDUP ORIGINAL (4SL)	1.00	LAA	2						
C»RESOLVE (25DF)	0.016	LAA	2						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	2						
E FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	2						
8A»CINCH ATZ (5.5EC)	2.89	LAA	0	100	92	90	100		22.9
B»STEADFAST (75WDG)	0.035	LAA	2						
C»CALLISTO (4SC)	0.06	LAA	2						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	2						
9A»STEADFAST ATZ (89.3WG)	0.783	LAA	2	100	92	88	97		19.4
B»CALLISTO (4SC)	0.06	LAA	2						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2						
10A»STEADFAST (75WDG)	0.035	LAA	2	100	83	93	98		23.1
B»LUMAX (3.94 SE)	0.985	LAA	2						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2						
11A»CINCH (7.64EC)	1.91	LAA	0	100	95	90	97		18.8
B ACCENT (75WG)	0.023	LAA	2						
C»HARMONY GT (50SG)	0.002	LAA	2						
D»CALLISTO (4SC)	0.047	LAA	2						
E ATRAZINE 4L (SC)	0.50	LAA	2						
F ADJUVANT - COC (EC)	1.00	PMV	2						
G FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	2						
12A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	100	90	80	98		20.7
B»DISTINCT (70WG)	0.175	LAA	1						
13A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	100	95	58	100		20.1
B»BAS 799 (56WG)	0.175	LAA	1						
14A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	100	98	93	98		20.4
B»CLARITY (4SL)	0.50	LAA	1						
15A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0	100	100	92	100		24.8
B»DICAM (4SL)	0.50	LAA	1						
16A UNTREATED CHECK	0.00	NA	0	0	0	0	0		8.4
				LSD (0.05)	2.73	16.52	20.41	6.11	4.52
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	1.34	8.09	10.00	3.00	2.21
				COEFFICIENT OF VARIANCE	1.88	13.28	18.16	4.33	13.71

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<b>TITLE:</b> EARLY POST PROGRAMS FOR CONVENTIONAL CORN - II					
DAT APPLICATION # 02 TIMINGS (01)	43	43	43	74	126
DAT APPLICATION # 03 TIMINGS (02)	37	37	37	68	120

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TITLE: EARLY POST PROGRAMS FOR CONVENTIONAL CORN - II  
 CREATED: 04-10-2006 REVISED: 10-25-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			TM	YLD BU 1.00 A SD
	RATE	UNIT			
					020 CALC 09-28-06 P ZEAMX
1A UNTREATED CHECK	0.00	NA	0		76.3
2A»CINCH ATZ (5.5EC)	2.89	LAA	0		169.7
3A»CINCH ATZ (5.5EC)	2.89	LAA	0		158.2
B»BASIS (75 DF)	0.023	LAA	0		
4A»CINCH ATZ (5.5EC)	2.89	LAA	0		139.2
B»RESOLVE (25DF)	0.016	LAA	0		
5A»ROUNDUP ORIGINAL (4SL)	1.00	LAA	1		144.4
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1		
C FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	1		
6A»ROUNDUP ORIGINAL (4SL)	1.00	LAA	1		154.7
B»RESOLVE (25DF)	0.016	LAA	1		
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1		
D FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	1		
7A»CINCH ATZ (5.5EC)	2.89	LAA	0		174.9
B»ROUNDUP ORIGINAL (4SL)	1.00	LAA	2		
C»RESOLVE (25DF)	0.016	LAA	2		
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	2		
E FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	2		
8A»CINCH ATZ (5.5EC)	2.89	LAA	0		169.0
B»STEADFAST (75WDG)	0.035	LAA	2		
C»CALLISTO (4SC)	0.06	LAA	2		
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	2		
9A»STEADFAST ATZ (89.3WG)	0.783	LAA	2		142.9
B»CALLISTO (4SC)	0.06	LAA	2		
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2		
10A»STEADFAST (75WDG)	0.035	LAA	2		170.7
B»LUMAX (3.94 SE)	0.985	LAA	2		
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2		
11A»CINCH (7.64EC)	1.91	LAA	0		139.0
B ACCENT (75WG)	0.023	LAA	2		
C»HARMONY GT (50SG)	0.002	LAA	2		
D»CALLISTO (4SC)	0.047	LAA	2		
E ATRAZINE 4L (SC)	0.50	LAA	2		
F ADJUVANT - COC (EC)	1.00	PMV	2		
G FERTILIZER-21% AMMONIUM SULFATE	2.00	LMA	2		
12A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0		153.0
B»DISTINCT (70WG)	0.175	LAA	1		
13A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0		148.6
B»BAS 799 (56WG)	0.175	LAA	1		
14A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0		150.3
B»CLARITY (4SL)	0.50	LAA	1		
15A»DUAL II MAGNUM (7.64EC)	1.59	LAA	0		182.8
B»DICAM (4SL)	0.50	LAA	1		
16A UNTREATED CHECK	0.00	NA	0		62.0
					LSD (0.05) 33.37
					SIGNIFICANCE OF F **
					STANDARD DEVIATION 16.34
					COEFFICIENT OF VARIANCE 13.71

TITLE: EARLY POST PROGRAMS FOR CONVENTIONAL CORN - II  
DAT APPLICATION # 02 TIMINGS (01) 126  
DAT APPLICATION # 03 TIMINGS (02) 120

> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 05-02-2006(1)  
01 = POSPOS / EARLY POSTEMERGENCE 05-25-2006(2)  
02 = MIDPOS / MID-POSTEMERGENCE 05-31-2006(3)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR	SS	NOTE
001	ZEAMK	% PHYTO	06-02-2006	01	P	ZEAMK		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	SETFA	CON %	06-02-2006	03	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
003	AMBEL	CON %	06-02-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
004	CHEAL	CON %	06-02-2006	07	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	KANST	CON %	06-02-2006	04	P	KANST		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	SETFA	CON %	06-08-2006	03	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
007	AMBEL	CON %	06-08-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
008	CHEAL	CON %	06-08-2006	07	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
009	KANST	CON %	06-08-2006	04	P	KANST		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
010	SETFA	CON %	06-21-2006	03	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
011	AMBEL	CON %	06-21-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
012	CHEAL	CON %	06-21-2006	07	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
013	KANST	CON %	06-21-2006	04	P	KANST		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
014	SETFA	CON %	07-07-2006	03	P	SETFA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
015	AMBEL	CON %	07-07-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
016	CHEAL	CON %	07-07-2006	07	P	CHEAL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
017	KANST	CON %	07-07-2006	04	P	KANST		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
018	IPOSS	CON %	07-07-2006	05	P	IPOSS		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
019	AMBEL	CON %	08-07-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
020	ZEAMK	YLD/PLOT	09-28-2006	01	P	ZEAMK		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMK	YLD/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

VAR 01 = PIONEER 33B54

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = PIONEER 33B54

\* USER DEFINED CALCULATIONS

US 003/06/01 001 HT--- 020 -- {RAW}\*(7.38)

US 003/06/01 001 HT--- 020 -- {RAW}\*(7.38)

**TRIAL SUMMARY  
GENERAL SITE INFORMATION**

TRIAL #: US 003/06/01 001 HU      ALTERNATE ID#: HF 21 2006  
PROTOCOL#: US 003/06/01      ALTERNATE ID#: HAYDEN FARM-06  
CREATED BY: US RITTER R  
CREATED: 04-10-2006      REVISED: 10-12-2006      COMPLETED: Y  
TITLE: MANAGING VOLUNTEER RR CORN IN CORN REPLANT SITUATIONS

COORDINATOR: US 001 Ron Ritter  
TRIAL TYPE: HERBICIDE  
PROJECT#2:  
RESEARCHER: RITTER AND MENBERE  
REPORTED BY: US Ron Ritter And Ron Ritter  
COOPERATOR: MR. KEVIN CONOVER  
LOCATION: HAYDEN FARM  
CITY: LAUREL  
COUNTY: PRINCE GEORGE'S  
COUNTRY: UNITED STATES

CONFIDENCE: HIGH CONFIDENCE IN TRIAL DATA  
DATA SOURCE: UNIVERSITY  
TYPE: FIELD TRIAL  
SUBDIVISION: MARYLAND  
ZIP: 20708

WEATHER SITE: HF -- HAYDEN FARM      DISTANCE TO TRIAL: 5280.0 FT  
WEEKS PRIOR TO FIRST APPLICATION: 4      WEEKS AFTER LAST APPLICATION: 4  
EARLY WEATHER: NA      MID WEATHER: NA      LATE WEATHER: NA

**SOIL INFORMATION**

% SAND: 82      TILLAGE: NOT  
% SILT: 13      PH: 6.7  
% CLAY: 5      CEC: 9.3  
TEXTURE: SL      % OM: 1.9  
SOIL GEN: C

**TRIAL INFORMATION**

DESIGN: RCB      RESIDUE TRIAL: EFF  
ACTUAL REPS: 3      ACTUAL BLOCKS: 1  
ACTUAL TRTS: 16      ACTUAL SUB-BLOCKS: 16

PREVIOUS CROP: ZEAMX - CORN, VOLUNTEER, FIELD  
% RESIDUE: 50  
PLOT WIDTH: 10.00 FT  
PLOT LENGTH: 20.00 FT  
PLOT AREA: 200.00 SFT

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Early preplant application made 04/25/2006.
2. At time of early preplant application, field had 100% chickweed cover.
3. Gramoxone Inteon applied to entire field at 2 pt/acre on 04/26/2006.
4. Study planted 05/01/2006. Variety - Pioneer 33B54
5. Seed protected with Yield Guard and Poncho 1250.
6. Kernal Guard added to the hopper box.
7. 5 gallons of 9-18-9-1S applied in row.
8. 10.8 gallons of 22-0-0-5S applied 2 inches to the side of the row.
9. A total of 30-10-5-6.2S applied at planting.
10. Atrazine plus Princep applied at 1.25 + 1.25 qt/acre to entire study on 05/03/2006.
11. Early post applications made 05/16/2006.
12. Mid-post applications made 05/25/2006.
13. Study sidedressed with additional nitrogen on 06/04/2006.
14. The CNT number for the 06/28/2006 rating represents the number of plants per the middle two rows of each treatments, averaged over reps.
15. The study was harvested 09/25/2006.

APPL. NUMBER	01	02	03	UNIT
TIMINGS	00	01	02	
TYPE	LIQMIX	LIQMIX	LIQMIX	
APPLICATION DATE	04-25-06	05-16-06	05-25-06	USA
TIME - BEGIN	16:00	16:00	10:30	24H
TIME - END	16:30	16:30	11:00	24H
AIR TEMPERATURE	70	66	68	F
% REL. HUMIDITY	40	50	60	
WIND DIRECTION	NORTHWEST	SOUTHWEST	SOUTHWEST	
WIND SPEED	3.0	3.0	3.0	M/H
CLOUD COVER	PARTCLDY	CLEAR	HAZY SUN	
DEW	NO	NO	YES	
SOIL MOISTURE	MOIST/MOI	MOIST/MOI	DRY/MOIST	
SOIL CONDITION	FRIABLE	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	66/4.00	66/4.00	62/4.00	F /
METHOD	SPRAY	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	0.03	GPM
NOZZLE NUMBER	6	6	6	
NOZZLE SPACING	20.000	20.000	20.000	IN
SCREEN SIZE				
SCREEN SZ DESC	NA	NA	NA	
SWATH WIDTH	10.0	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	20.0	IN
SPEED	3.00	3.00	3.00	M/H
MIX SIZE	0.560	0.560	0.560	
MIX SIZE UNIT	GAL	GAL	GAL	
SPRAY VOLUME	18.00	18.00	18.00	
SCREEN SIZE	GPA	GPA	GPA	
PRESSURE	20.00	20.00	20.00	PSI
DILUENT	WATER	WATER	WATER	
INC. DATE				USA
INC. START				24H
INC. END				24H
INC. DEPTH				IN
INC. EQUIPMENT	---	---	---	

## \* TIMING CODES

00 = PREPLA / 7 - 10 DAYS PREPLANT  
 01 = POSPOS / EARLY POSTEMERGENCE - 1 TO 3" CORN  
 02 = MIDPOS / MID-POSTEMERGENCE - 4 TO 6" CORN

## \* NOZZLE DESCRIPTION

01 = SS-8003  
 02 = SS-8003  
 03 = SS-8003



01 P ZEAMX - CORN, VOLUNTEER, FIELD

TARGET: CROP SITE: FG POPULATION: 28500.00 IPA PLANTED: 05-01-2006

PLANTING DEPTH: 1.7 IN ROW WIDTH: 30.0 IN

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-01-2006	00	MED	28500.00 IPA	.	.	. IN	NA	
05-16-2006	13	MED	28500.00 IPA	3.00	3.00	3.00 IN	TUR	
05-25-2006	14	MED	28500.00 IPA	6.00	6.00	6.00 IN	TUR	

## \* STAGE CODE -- CORN

00 = DRY SEED (CARYOPSIS)

13 = 3 LEAVES UNFOLDED

14 = 4 LEAVES UNFOLDED

TITLE: MANAGING VOLUNTEER RR CORN IN CORN REPLANT SITUATIONS

CREATED: 04-10-2006 REVISED: 10-12-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	05-25-06 P ZEAMX 14	06-02-06 P ZEAMX	06-09-06 P ZEAMX	06-14-06 P ZEAMX	06-28-06 P ZEAMX	
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»SELECT MAX (1EC)	0.03	LAA	0	0	0	0	0	0	
3A SENCOR DF (75WG)	0.188	LAA	0	0	0	0	0	0	
4A LOROX DF (50WG)	0.25	LAA	0	0	0	0	0	0	
5A»SELECT MAX (1EC)	0.015	LAA	1	60	73	75	73	72	
B ADJUVANT - COC (EC)	1.00	PMV	1						
6A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	43	40	38	38	35	
B ADJUVANT - COC (EC)	1.00	PMV	1						
7A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	65	75	73	68	55	
B ADJUVANT - COC (EC)	1.00	PMV	1						
C SENCOR DF (75WG)	0.094	LAA	1						
8A»GRAMOXONE INTEON (2SL)	0.375	LAA	1	67	80	82	80	68	
B ADJUVANT - COC (EC)	1.00	PMV	1						
C SENCOR DF (75WG)	0.094	LAA	1						
9A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	77	87	87	85	78	
B ADJUVANT - COC (EC)	1.00	PMV	1						
C LOROX DF (50WG)	0.125	LAA	1						
10A»GRAMOXONE INTEON (2SL)	0.50	LAA	1	58	60	62	58	40	
B ADJUVANT - COC (EC)	1.00	PMV	1						
C ATRAZINE 4L (SC)	1.00	LAA	1						
11A»SELECT MAX (1EC)	0.015	LAA	2	0	53	40	30	20	
B ADJUVANT - COC (EC)	1.00	PMV	2						
12A»GRAMOXONE INTEON (2SL)	0.50	LAA	2	0	95	98	97	95	
B ADJUVANT - COC (EC)	1.00	PMV	2						
13A»GRAMOXONE INTEON (2SL)	0.50	LAA	2	0	97	100	100	98	
B ADJUVANT - COC (EC)	1.00	PMV	2						
C SENCOR DF (75WG)	0.094	LAA	2						
14A»GRAMOXONE INTEON (2SL)	0.375	LAA	2	0	100	100	100	98	
B ADJUVANT - COC (EC)	1.00	PMV	2						
C SENCOR DF (75WG)	0.094	LAA	2						
15A»GRAMOXONE INTEON (2SL)	0.50	LAA	2	0	98	98	98	95	
B ADJUVANT - COC (EC)	1.00	PMV	2						
C LOROX DF (50WG)	0.125	LAA	2						
16A»GRAMOXONE INTEON (2SL)	0.50	LAA	2	0	95	97	97	93	
B ADJUVANT - COC (EC)	1.00	PMV	2						
C ATRAZINE 4L (SC)	1.00	LAA	2						
				LSD (0.05)	19.24	22.31	23.07	23.73	26.39
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	9.42	10.92	11.30	11.62	12.93
				COEFFICIENT OF VARIANCE	49.90	22.45	23.31	24.62	29.86
				DAT APPLICATION # 01 TIMINGS (00)	30	38	45	50	64
				DAT APPLICATION # 02 TIMINGS (01)	9	17	24	29	43
				DAT APPLICATION # 03 TIMINGS (02)	0	8	15	20	34

TITLE: MANAGING VOLUNTEER RR CORN IN CORN REPLANT SITUATIONS

CREATED: 04-10-2006 REVISED: 10-12-2006

COMPLETED: Y

PROJECT TYPE: HERBICIDE

LOCATION: HAYDEN FARM

RESEARCHED BY: RITTER AND MENBERE

DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN

PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG

PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			CNT % 1.00 PL ALL	YLD LB 1.00 PL SD	YLD BU 1.00 A SD	
	RATE	UNIT	TM				
006 RAW 06-28-06 P ZEAMX					007 RAW 09-25-06 P ZEAMX	007 CALC 09-25-06 P ZEAMX	
1A UNTREATED CHECK	0.00	NA	0	66	22.3	161.9	
2A»SELECT MAX (1EC)	0.03	LAA	0	62	20.1	146.2	
3A SENCOR DF (75WG)	0.188	LAA	0	66	24.4	177.4	
4A LOROX DF (50WG)	0.25	LAA	0	67	19.7	143.2	
5A»SELECT MAX (1EC) B ADJUVANT - COC (EC)	0.015 1.00	LAA PMV	1 1	16	6.5	47.4	
6A»GRAMOXONE INTEON (2SL) B ADJUVANT - COC (EC)	0.50 1.00	LAA PMV	1 1	42	11.2	81.6	
7A»GRAMOXONE INTEON (2SL) B ADJUVANT - COC (EC) C SENCOR DF (75WG)	0.50 1.00 0.094	LAA PMV LAA	1 1 1	22	7.3	53.0	
8A»GRAMOXONE INTEON (2SL) B ADJUVANT - COC (EC) C SENCOR DF (75WG)	0.375 1.00 0.094	LAA PMV LAA	1 1 1	20	8.2	59.8	
9A»GRAMOXONE INTEON (2SL) B ADJUVANT - COC (EC) C LOROX DF (50WG)	0.50 1.00 0.125	LAA PMV LAA	1 1 1	18	10.3	74.5	
10A»GRAMOXONE INTEON (2SL) B ADJUVANT - COC (EC) C ATRAZINE 4L (SC)	0.50 1.00 1.00	LAA PMV LAA	1 1 1	31	11.6	84.0	
11A»SELECT MAX (1EC) B ADJUVANT - COC (EC)	0.015 1.00	LAA PMV	2 2	52	14.8	107.2	
12A»GRAMOXONE INTEON (2SL) B ADJUVANT - COC (EC)	0.50 1.00	LAA PMV	2 2	4	2.2	16.0	
13A»GRAMOXONE INTEON (2SL) B ADJUVANT - COC (EC) C SENCOR DF (75WG)	0.50 1.00 0.094	LAA PMV LAA	2 2 2	1	0.4	2.9	
14A»GRAMOXONE INTEON (2SL) B ADJUVANT - COC (EC) C SENCOR DF (75WG)	0.375 1.00 0.094	LAA PMV LAA	2 2 2	1	1.2	8.5	
15A»GRAMOXONE INTEON (2SL) B ADJUVANT - COC (EC) C LOROX DF (50WG)	0.50 1.00 0.125	LAA PMV LAA	2 2 2	2	1.4	9.9	
16A»GRAMOXONE INTEON (2SL) B ADJUVANT - COC (EC) C ATRAZINE 4L (SC)	0.50 1.00 1.00	LAA PMV LAA	2 2 2	5	2.6	18.7	
				LSL (0.05)	12.55	4.74	34.43
				SIGNIFICANCE OF F	**	**	**
				STANDARD DEVIATION	6.14	2.32	16.86
				COEFFICIENT OF VARIANCE	25.31	27.71	27.72
				DAT APPLICATION # 01 TIMINGS (00)	64	153	153
				DAT APPLICATION # 02 TIMINGS (01)	43	132	132
				DAT APPLICATION # 03 TIMINGS (02)	34	123	123

>> = SUPPLEMENTAL CHEMICAL

**\* TIMING CODES**

00 = PREPLA / 7 - 10 DAYS PREPLANT 04-25-2006(1)  
 01 = POSPOS / EARLY POSTEMERGENCE - 1 TO 3" CORN 05-16-2006(2)  
 02 = MIDPOS / MID-POSTEMERGENCE - 4 TO 6" CORN 05-25-2006(3)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	ZEAMX	CON %	05-25-2006	01	P	ZEAMX	14	RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
002	ZEAMX	CON %	06-02-2006	01	P	ZEAMX		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
003	ZEAMX	CON %	06-09-2006	01	P	ZEAMX		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
004	ZEAMX	CON %	06-14-2006	01	P	ZEAMX		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	ZEAMX	CON %	06-28-2006	01	P	ZEAMX		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	ZEAMX	# LIVE	06-28-2006	01	P	ZEAMX		RAW	ALL	CNT	%	---	1.00 PL	NO	0001	0	N
007	ZEAMX	YLD/PLOT	09-25-2006	01	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

**\* STAGE CODE**

14 = 4 LEAVES UNFOLDED

**\* USER DEFINED CALCULATIONS**

US 003/06/01 001 HU--- 007 -- {RAW}\*(7.26)

US 003/06/01 001 HU--- 007 -- {RAW}\*(7.26)

**TRIAL SUMMARY  
GENERAL SITE INFORMATION**

**TRIAL #:** US 003/06/01 001 HX      **ALTERNATE ID#:** HF 24 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** HAYDEN FARM-06  
**CREATED BY:** US RITTER R  
**CREATED:** 04-11-2006      **REVISED:** 11-22-2006      **COMPLETED:** Y  
**TITLE:** USE OF VALOR FOR MARESTAIL CONTROL IN FULL-SEASON NO-TILL SOYBEAN  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 70      **TILLAGE:** COT  
**% SILT:** 20      **PH:** 6.3  
**% CLAY:** 10      **CEC:** 8.0  
**TEXTURE:** SL      **% OM:** 2.3  
**SOIL GEN:** C  
**PREVIOUS CROP:** GLXMA - SOYBEAN  
**% RESIDUE:** 50  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 15.00 FT  
**PLOT AREA:** 150.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** EFF  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 14      **ACTUAL SUB-BLOCKS:** 14

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Early preplant applications made 05/05/2006.
2. Study planted 05/23/2006. Variety - Pioneer 93M92.
3. Study oversprayed with Roundup Weather Max at 24 oz/acre on 06/30/2006.
4. Study harvested 11/20/2006.

APPL. NUMBER	01	UNIT
TIMINGS	00	
TYPE	LIQMIX	
APPLICATION DATE	05-05-06	USA
TIME - BEGIN	16:00	24H
TIME - END	17:00	24H
AIR TEMPERATURE	74	F
% REL. HUMIDITY	50	
WIND DIRECTION	SOUTHEAST	
WIND SPEED	3.0	M/H
CLOUD COVER	HAZY SUN	
DEW	NO	
SOIL MOISTURE	DRY/DRY	
SOIL CONDITION	FRIABLE	
SOIL TEMP/DEPTH	74/4.00	F /
METHOD	SPRAY	
EQUIPMENT	SPRBAC	
PROPELLANT	COMCO2	
PLACEMENT	BRFOSO	
NOZZLE	FLATFAN	
NOZZLE VOLUME	0.03	GPM
NOZZLE NUMBER	6	
NOZZLE SPACING	20.000	IN
SCREEN SIZE		
SCREEN SZ DESC	NA	
SWATH WIDTH	10.0	FT
BOOM HEIGHT	20.0	IN
SPEED	3.00	M/H
MIX SIZE	0.560	
MIX SIZE UNIT	GAL	
SPRAY VOLUME	18.00	
SCREEN SIZE	GPA	
PRESSURE	20.00	PSI
DILUENT	WATER	
INC. DATE		USA
INC. START		24H
INC. END		24H
INC. DEPTH		IN
INC. EQUIPMENT	---	

\* TIMING CODES  
00 = PREPLA / 3 WEEKS PREPLANT

\* NOZZLE DESCRIPTION  
01 = SS-8003

01 P ERICA - HORSEWEED / MARESTAIL

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-05-2006	19	MED	3.00 SQY	4.00	6.00	4.00 IN	DST	

02 P GLXMA - SOYBEAN

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-23-2006	00	MED	5.00 SFR	.	.	. IN	NA	

\* STAGE CODE -- GENERAL

19 = &gt;8 TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED

\* STAGE CODE -- SOYBEAN

00 = DRY SEED



**TITLE:** USE OF VALOR FOR MARESTAIL CONTROL IN FULL-SEASON NO-TILL SOYBEAN  
**CREATED:** 04-11-2006 **REVISED:** 11-22-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 15.00 FT LONG  
**PLOT AREA:** 150.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	05-11-06 P ERICA	05-18-06 P ERICA	06-02-06 P ERICA	06-16-06 P ERICA	06-30-06 P ERICA	
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	32	97	100	100	100	
3A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	58	98	98	98	98	
B»VALOR SX (51WG)	0.063	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
4A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	50	98	100	100	100	
B»VALOR SX (51WG)	0.063	LAA	0						
C»FIRSTRATE (84 WG)	0.021	LAA	0						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
5A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	58	100	100	100	100	
B»VALOR SX (51WG)	0.063	LAA	0						
C CLASSIC (25WG)	0.021	LAA	0						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
6A CLARITY (4SL)	0.25	LAA	0	53	68	87	95	98	
B»VALOR SX (51WG)	0.063	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
7A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	62	95	100	100	100	
B CLARITY (4SL)	0.25	LAA	0						
C»VALOR SX (51WG)	0.063	LAA	0						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
8A CLARITY (4SL)	0.25	LAA	0	62	77	95	95	100	
B»VALOR SX (51WG)	0.063	LAA	0						
C»FIRSTRATE (84 WG)	0.021	LAA	0						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
9A»GRAMOXONE INTEON (2SL)	0.47	LAA	0	88	92	97	98	98	
B CLARITY (4SL)	0.25	LAA	0						
C»VALOR SX (51WG)	0.063	LAA	0						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
10A»GRAMOXONE INTEON (2SL)	0.47	LAA	0	90	93	95	93	93	
B CLARITY (4SL)	0.25	LAA	0						
C»VALOR SX (51WG)	0.063	LAA	0						
D»FIRSTRATE (84 WG)	0.021	LAA	0						
E SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
11A»GRAMOXONE INTEON (2SL)	0.47	LAA	0	92	95	97	97	97	
B»2,4-D ESTER (4L)	0.50	LAA	0						
C»VALOR SX (51WG)	0.063	LAA	0						
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
12A»GRAMOXONE INTEON (2SL)	0.47	LAA	0	88	93	98	98	98	
B»2,4-D ESTER (4L)	0.50	LAA	0						
C»VALOR SX (51WG)	0.063	LAA	0						
D»FIRSTRATE (84 WG)	0.021	LAA	0						
E SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
13A»GRAMOXONE INTEON (2SL)	0.47	LAA	0	90	95	95	95	95	
B»2,4-D ESTER (4L)	0.50	LAA	0						
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSL (0.05)	6.46	8.69	5.32	5.00	4.00
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	3.14	4.23	2.59	2.43	1.93
				COEFFICIENT OF VARIANCE	6.54	6.58	3.82	3.56	2.81
				DAT APPLICATION # 01 TIMINGS (00)	6	13	28	42	56

**TITLE:** USE OF VALOR FOR MARESTAIL CONTROL IN FULL-SEASON NO-TILL SOYBEAN  
**CREATED:** 04-11-2006 **REVISED:** 11-22-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 15.00 FT LONG  
**PLOT AREA:** 150.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	006 CALC
	RATE	UNIT	TM	11-20-06 P GLXMA	11-20-06 P GLXMA
				VAR 02 YLD LB	VAR 02 YLD BU
				1.00 PL SD	1.00 A SD
1A UNTREATED CHECK	0.00	NA	0	2.5	11.9
2A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	5.0	24.0
3A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	6.4	30.5
B»VALOR SX (51WG)	0.063	LAA	0		
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
4A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	6.4	30.3
B»VALOR SX (51WG)	0.063	LAA	0		
C»FIRSTRATE (84 WG)	0.021	LAA	0		
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
5A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	5.0	23.6
B»VALOR SX (51WG)	0.063	LAA	0		
C CLASSIC (25WG)	0.021	LAA	0		
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
6A CLARITY (4SL)	0.25	LAA	0	6.2	29.5
B»VALOR SX (51WG)	0.063	LAA	0		
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
7A»ROUNDUP WEATHER MAX (5.5 SL)	1.00	LAA	0	5.7	27.1
B CLARITY (4SL)	0.25	LAA	0		
C»VALOR SX (51WG)	0.063	LAA	0		
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
8A CLARITY (4SL)	0.25	LAA	0	7.2	34.4
B»VALOR SX (51WG)	0.063	LAA	0		
C»FIRSTRATE (84 WG)	0.021	LAA	0		
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
9A»GRAMOXONE INTEON (2SL)	0.47	LAA	0	6.3	30.1
B CLARITY (4SL)	0.25	LAA	0		
C»VALOR SX (51WG)	0.063	LAA	0		
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
10A»GRAMOXONE INTEON (2SL)	0.47	LAA	0	6.1	28.9
B CLARITY (4SL)	0.25	LAA	0		
C»VALOR SX (51WG)	0.063	LAA	0		
D»FIRSTRATE (84 WG)	0.021	LAA	0		
E SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
11A»GRAMOXONE INTEON (2SL)	0.47	LAA	0	5.8	27.8
B»2,4-D ESTER (4L)	0.50	LAA	0		
C»VALOR SX (51WG)	0.063	LAA	0		
D SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
12A»GRAMOXONE INTEON (2SL)	0.47	LAA	0	6.1	29.2
B»2,4-D ESTER (4L)	0.50	LAA	0		
C»VALOR SX (51WG)	0.063	LAA	0		
D»FIRSTRATE (84 WG)	0.021	LAA	0		
E SURFACTANT - NON-IONIC (SL)	0.25	PMV	0		
13A»GRAMOXONE INTEON (2SL)	0.47	LAA	0	5.6	26.8
B»2,4-D ESTER (4L)	0.50	LAA	0		
14A UNTREATED CHECK	0.00	NA	0	1.9	9.0
				LSD (0.05)	1.70
				SIGNIFICANCE OF F	**
				STANDARD DEVIATION	0.826
				COEFFICIENT OF VARIANCE	18.56
				DAT APPLICATION # 01 TIMINGS (00)	199

TITLE: USE OF VALOR FOR MARESTAIL CONTROL IN FULL-SEASON NO-TILL SOYBEAN  
» = SUPPLEMENTAL CHEMICAL

## \* TIMING CODES

00 = PREPLA / 3 WEEKS PREPLANT 05-05-2006(1)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	ERICA	CON %	05-11-2006	01	P	ERICA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
002	ERICA	CON %	05-18-2006	01	P	ERICA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
003	ERICA	CON %	06-02-2006	01	P	ERICA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
004	ERICA	CON %	06-16-2006	01	P	ERICA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	ERICA	CON %	06-30-2006	01	P	ERICA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	GLXMA	YLD/PLOT	11-20-2006	02	P	GLXMA		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	GLXMA	YLD/ACRE						CALC	SD	YLD	BU	H	1.00 A				

## \* VARIETY/SPECIE INFO CODES

VAR 02 = PIONEER 93M92

## \* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

02 = PIONEER 93M92

## \* USER DEFINED CALCULATIONS

US 003/06/01 001 HX--- 006 -- {RAW} \* (4.76)

US 003/06/01 001 HX--- 006 -- {RAW} \* (4.76)

TRIAL SUMMARY  
GENERAL SITE INFORMATION

TRIAL #: US 003/06/01 001 HY      ALTERNATE ID#: HF 25 2006  
 PROTOCOL#: US 003/06/01      ALTERNATE ID#: HAYDEN FARM-06  
 CREATED BY: US RITTER R  
 CREATED: 05-07-2006      REVISED: 10-31-2006      COMPLETED: Y  
 TITLE: MARESTAIL CONTROL IN FULL-SEASON NO-TILL SOYBEANS  
 COORDINATOR: US 001 Ron Ritter  
 TRIAL TYPE: HERBICIDE  
 PROJECT#2:  
 RESEARCHER: RITTER AND MENBERE      CONFIDENCE: HIGH CONFIDENCE IN TRIAL DATA  
 REPORTED BY: US Ron Ritter And Ron Ritter  
 COOPERATOR: MR. KEVIN CONOVER      DATA SOURCE: UNIVERSITY  
 LOCATION: HAYDEN FARM      TYPE: FIELD TRIAL  
 CITY: LAUREL      SUBDIVISION: MARYLAND  
 COUNTY: PRINCE GEORGE'S      ZIP: 20708  
 COUNTRY: UNITED STATES  
 WEATHER SITE: HF -- HAYDEN FARM      DISTANCE TO TRIAL: 5280.0 FT  
 WEEKS PRIOR TO FIRST APPLICATION: 4      WEEKS AFTER LAST APPLICATION: 4  
 EARLY WEATHER: NA      MID WEATHER: NA      LATE WEATHER: NA

## SOIL INFORMATION

% SAND: 84      TILLAGE: COT  
 % SILT: 9      PH: 6.4  
 % CLAY: 7      CEC: 7.2  
 TEXTURE: SL      % OM: 1.8  
 SOIL GEN: C  
 PREVIOUS CROP: GLXMA - SOYBEAN  
 % RESIDUE: 50  
 PLOT WIDTH: 10.00 FT  
 PLOT LENGTH: 15.00 FT  
 PLOT AREA: 150.00 SFT

## TRIAL INFORMATION

DESIGN: RCB      RESIDUE TRIAL: EFF  
 ACTUAL REPS: 3      ACTUAL BLOCKS: 1  
 ACTUAL TRTS: 14      ACTUAL SUB-BLOCKS: 14

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Early preplant application made 05/12/2006.
2. Study planted 05/23/2006. Variety - Pioneer 93M92.
3. Preemergence applications made 05/23/2006.
4. Postemergence applications made 06/22/2006.
5. Study oversprayed with Roundup Weather Max at 24 oz/acre on 06/30/2006.
6. Study harvested 10/26/2006.

APPL. NUMBER	01	02	03	UNIT
TIMINGS	00	01	02	
TYPE	LIQMIX	LIQMIX	LIQMIX	
APPLICATION DATE	05-12-06	05-23-06	06-22-06	USA
TIME - BEGIN	15:00	19:00	12:00	24H
TIME - END	15:15	19:30	12:30	24H
AIR TEMPERATURE	65	65	85	F
% REL. HUMIDITY	50	35	80	
WIND DIRECTION	SOUTH	WEST	WEST	
WIND SPEED	5.0	3.0	2.0	M/H
CLOUD COVER	PARTCLDY	CLEAR	CLOUDY	
DEW	NO	NO	YES	
SOIL MOISTURE	MOIST/MOI	DRY/MOIST	MOIST/MOI	
SOIL CONDITION	FRIABLE	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	67/4.00	70/4.00	83/4.00	F /
METHOD	SPRAY	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	0.03	GPM
NOZZLE NUMBER	6	6	6	
NOZZLE SPACING	20.000	20.000	20.000	IN
SCREEN SIZE				
SCREEN SZ DESC	NA	NA	NA	
SWATH WIDTH	10.0	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	20.0	IN
SPEED	3.00	3.00	3.00	M/H
MIX SIZE	0.560	0.560	0.560	
MIX SIZE UNIT	GAL	GAL	GAL	
SPRAY VOLUME	18.00	18.00	18.00	
SCREEN SIZE	GPA	GPA	GPA	
PRESSURE	20.00	20.00	20.00	PSI
DILUENT	WATER	WATER	WATER	
INC. DATE				USA
INC. START				24H
INC. END				24H
INC. DEPTH				IN
INC. EQUIPMENT	---	---	---	

## \* TIMING CODES

00 = PREPLA / EARLY PREPLANT - 2WPP  
01 = PREPRE / PREEMERGENCE  
02 = POSPOS / POSTEMERGENCE

## \* NOZZLE DESCRIPTION

01 = SS-8003  
02 = SS-8003  
03 = SS-8003

01 P ERICA - HORSEWEED / MARESTAIL

TARGET: PEST SITE: FG

PLANTED:

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-12-2006	19	MED	3.00 SQY	2.00	5.00	3.00 IN		TUR	
05-23-2006	19	MED	3.00 SQY	4.00	10.00	6.00 IN		TUR	
06-22-2006	19	MED	3.00 SQY	10.00	10.00	10.00 IN		TUR	

02 P GLXMA - SOYBEAN

VAR/SPC INFO: PIONEER 93M92

TARGET: CROP SITE: FG

POPULATION: 5.00 SFR

PLANTED: 05-23-2006

PLANTING DEPTH: 1.0 IN

ROW WIDTH: 15.0 IN

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-23-2006	00	MED	5.00 SFR	.	.	. IN		NA	
06-22-2006	15	MED	5.00 SFR	6.00	6.00	6.00 IN		TUR	

\* STAGE CODE -- GENERAL

19 = &gt;8 TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED

\* STAGE CODE -- SOYBEAN

00 = DRY SEED

15 = 5TH LEAF (3RD TRIFOLIATE LEAF) UNFOLDED, 4 NODES

TITLE: MARESTAIL CONTROL IN FULL-SEASON NO-TILL SOYBEANS  
 CREATED: 05-07-2006 REVISED: 10-31-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 15.00 FT LONG  
 PLOT AREA: 150.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	VAR 02 YLD LB PL SD
	RATE	UNIT	TM	06-02-06 P ERICA	06-08-06 P ERICA	06-22-06 P ERICA 19	06-30-06 P ERICA	10-26-06 P GLXMA	
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	1	0	0	0	0	0	1.2
2A>>PYTHON (80WG)	0.04	LAA	0	100	100	100	100	100	4.0
B>>GF-1280 (4 SL)	0.75	LAA	0						
C (G) 2,4-D-ESTER (4EC)	0.50	LAA	0						
D FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	0						
E>>GF-1280 (4 SL)	0.75	LAA	2						
F FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	2						
3A>>VALOR SX (51WG)	0.048	LAA	1	35	40	40	90	90	5.5
B>>FIRSTRATE (84 WG)	0.016	LAA	1						
C (G) 2,4-D-ESTER (4EC)	0.50	LAA	1						
D>>GLYPHOMAX XRT (4.0AE)	0.75	LAA	2						
E FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA	2						
4A>>LIBERTY (1.67 EC)	0.50	LAA	1	100	100	97	98	98	5.1
B FERTILIZER-21% AMMONIUM SULFATE	3.00	LMA	1						
5A>>LIBERTY (1.67 EC)	0.75	LAA	1	100	100	98	98	98	5.6
B FERTILIZER-21% AMMONIUM SULFATE	3.00	LMA	1						
6A>>GRAMOXONE INTEON (2SL)	0.75	LAA	1	100	98	98	97	97	5.1
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	1						
7A>>GRAMOXONE INTEON (2SL)	0.75	LAA	1	100	97	97	95	95	6.4
B SENCOR DF (75WG)	0.188	LAA	1						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1						
8A>>TOUCHDOWN TOTAL (5.1SL)	0.75	LAA	1	95	97	97	97	97	4.4
9A>>TOUCHDOWN TOTAL (5.1SL)	0.75	LAA	1	90	98	98	97	97	4.2
B SENCOR DF (75WG)	0.188	LAA	1						
10A>>GRAMOXONE INTEON (2SL)	0.75	LAA	1	98	98	95	95	95	6.4
B>>FIRSTRATE (84 WG)	0.016	LAA	1						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1						
11A>>TOUCHDOWN TOTAL (5.1SL)	0.75	LAA	1	100	100	98	98	98	4.5
B>>FIRSTRATE (84 WG)	0.016	LAA	1						
12A>>GRAMOXONE INTEON (2SL)	0.75	LAA	1	100	98	98	95	95	5.4
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	1						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1						
13A>>TOUCHDOWN TOTAL (5.1SL)	0.75	LAA	1	97	100	100	100	100	5.6
B (G) 2,4-D-ESTER (4EC)	0.50	LAA	1						
14A UNTREATED CHECK	0.00	NA	1	0	0	0	0	0	1.3
				LSL (0.05)	3.75	5.52	6.06	4.94	2.00
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	1.82	2.68	2.95	2.40	1.00
				COEFFICIENT OF VARIANCE	2.81	4.08	4.53	3.55	26.29
				DAT APPLICATION # 01 TIMINGS (00)	21	27	41	49	167
				DAT APPLICATION # 02 TIMINGS (01)	10	16	30	38	156
				DAT APPLICATION # 03 TIMINGS (02)	NA	NA	0	8	126



**TITLE:** MARESTAIL CONTROL IN FULL-SEASON NO-TILL SOYBEANS  
**CREATED:** 05-07-2006 **REVISED:** 10-31-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 15.00 FT LONG  
**PLOT AREA:** 150.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			TM	YLD BU 1.00 A SD
	RATE	UNIT			
1A UNTREATED CHECK	0.00	NA		1	5.6
2A»PYTHON (80WG)	0.04	LAA		0	19.2
B»GF-1280 (4 SL)	0.75	LAA		0	
C (G) 2,4-D-ESTER (4EC)	0.50	LAA		0	
D FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA		0	
E»GF-1280 (4 SL)	0.75	LAA		2	
F FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA		2	
3A»VALOR SX (51WG)	0.048	LAA		1	26.6
B»FIRSTRATE (84 WG)	0.016	LAA		1	
C (G) 2,4-D-ESTER (4EC)	0.50	LAA		1	
D»GLYPHOMAX XRT (4.0AE)	0.75	LAA		2	
E FERTILIZER-21% AMMONIUM SULFATE	2.50	LMA		2	
4A»LIBERTY (1.67 EC)	0.50	LAA		1	24.5
B FERTILIZER-21% AMMONIUM SULFATE	3.00	LMA		1	
5A»LIBERTY (1.67 EC)	0.75	LAA		1	27.1
B FERTILIZER-21% AMMONIUM SULFATE	3.00	LMA		1	
6A»GRAMOXONE INTEON (2SL)	0.75	LAA		1	24.5
B SURFACTANT - NON-IONIC (SL)	0.25	PMV		1	
7A»GRAMOXONE INTEON (2SL)	0.75	LAA		1	31.0
B SENCOR DF (75WG)	0.188	LAA		1	
C SURFACTANT - NON-IONIC (SL)	0.25	PMV		1	
8A»TOUCHDOWN TOTAL (5.1SL)	0.75	LAA		1	21.3
9A»TOUCHDOWN TOTAL (5.1SL)	0.75	LAA		1	20.2
B SENCOR DF (75WG)	0.188	LAA		1	
10A»GRAMOXONE INTEON (2SL)	0.75	LAA		1	31.1
B»FIRSTRATE (84 WG)	0.016	LAA		1	
C SURFACTANT - NON-IONIC (SL)	0.25	PMV		1	
11A»TOUCHDOWN TOTAL (5.1SL)	0.75	LAA		1	21.8
B»FIRSTRATE (84 WG)	0.016	LAA		1	
12A»GRAMOXONE INTEON (2SL)	0.75	LAA		1	26.3
B (G) 2,4-D-ESTER (4EC)	0.50	LAA		1	
C SURFACTANT - NON-IONIC (SL)	0.25	PMV		1	
13A»TOUCHDOWN TOTAL (5.1SL)	0.75	LAA		1	27.1
B (G) 2,4-D-ESTER (4EC)	0.50	LAA		1	
14A UNTREATED CHECK	0.00	NA		1	6.1
					LSD (0.05) 9.84
					SIGNIFICANCE OF F **
					STANDARD DEVIATION 4.79
					COEFFICIENT OF VARIANCE 26.26
					DAT APPLICATION # 01 TIMINGS (00) 167
					DAT APPLICATION # 02 TIMINGS (01) 156
					DAT APPLICATION # 03 TIMINGS (02) 126

» = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPLA / EARLY PREPLANT - 2WPP 05-12-2006(1)

**\* TIMING CODES**

01 = PREPRE / PREEMERGENCE 05-23-2006(2)  
02 = POSPOS / POSTEMERGENCE 06-22-2006(3)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	ERICA	CON %	06-02-2006	01	P	ERICA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
002	ERICA	CON %	06-08-2006	01	P	ERICA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
003	ERICA	CON %	06-22-2006	01	P	ERICA	19	RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
004	ERICA	CON %	06-30-2006	01	P	ERICA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	GLXMA	LB/PLOT	10-26-2006	02	P	GLXMA		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	GLXMA	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

**\* VARIETY/SPECIE INFO CODES**

VAR 02 = PIONEER 93M92

**\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)**

02 = PIONEER 93M92

**\* STAGE CODE**

19 = >8 TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED

**\* USER DEFINED CALCULATIONS**

US 003/06/01 001 HY--- 005 -- {RAW} \* (4.84)

US 003/06/01 001 HY--- 005 -- {RAW} \* (4.84)

**TRIAL SUMMARY**  
**GENERAL SITE INFORMATION**

**TRIAL #:** US 003/06/01 001 HZ      **ALTERNATE ID#:** HF 26 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** HAYDEN FARM-06  
**CREATED BY:** US RITTER R  
**CREATED:** 05-07-2006      **REVISED:** 10-25-2006      **COMPLETED:** Y  
**TITLE:** POSTEMERGENCE USE OF DICAM IN CONVENTIONAL CORN  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 76      **TILLAGE:** COT  
**% SILT:** 17      **PH:** 6.9  
**% CLAY:** 7      **CEC:** 14.9  
**TEXTURE:** SL      **% OM:** 2.1  
**SOIL GEN:** C  
**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** EFF  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 14      **ACTUAL SUB-BLOCKS:** 14

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/01/2006. Variety - Pioneer 33B54.
2. Dual applied preemergence to entire study at 1.3 pt/acre on 05/03/2006.
3. Seed protected with Yield Guard and Poncho 1250.
4. Kernal Guard added to the hopper box.
5. 5 gallons of 9-18-9-1S applied in row.
6. 10.8 gallons of 22-0-0-5S applied 2 inches to the side of the row.
7. A total of 30-10-5-6.2S applied at planting.
8. Early post applications made 05/31/2006.
9. Study sidedressed with additional nitrogen on 06/04/2006.
10. Study harvested 09/28/2006.

APPL. NUMBER	01	UNIT
TIMINGS	00	
TYPE	LIQMIX	
APPLICATION DATE	05-31-06	USA
TIME - BEGIN	19:00	24H
TIME - END	19:30	24H
AIR TEMPERATURE	86	F
% REL. HUMIDITY	70	
WIND DIRECTION	SOUTHWEST	
WIND SPEED	3.0	M/H
CLOUD COVER	HAZY SUN	
DEW	NO	
SOIL MOISTURE	DRY/MOIST	
SOIL CONDITION	FRIABLE	
SOIL TEMP/DEPTH	86/4.00	F /
METHOD	SPRAY	
EQUIPMENT	SPRBAC	
PROPELLANT	COMCO2	
PLACEMENT	BRFOSO	
NOZZLE	FLATFAN	
NOZZLE VOLUME	0.03	GPM
NOZZLE NUMBER	6	
NOZZLE SPACING	20.000	IN
SCREEN SIZE		
SCREEN SZ DESC	NA	
SWATH WIDTH	10.0	FT
BOOM HEIGHT	20.0	IN
SPEED	3.00	M/H
MIX SIZE	0.560	
MIX SIZE UNIT	GAL	
SPRAY VOLUME	18.00	
SCREEN SIZE	GPA	
PRESSURE	20.00	PSI
DILUENT	WATER	
INC. DATE		USA
INC. START		24H
INC. END		24H
INC. DEPTH		IN
INC. EQUIPMENT	---	

\* TIMING CODES  
00 = POSPOS / POSTEMERGENCE

\* NOZZLE DESCRIPTION  
01 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD      VAR/SPC INFO: PIONEER 33B54  
 TARGET: CROP      SITE: FG      POPULATION: 28500.00 IPA      PLANTED: 05-01-2006  
 PLANTING DEPTH: 1.7 IN      ROW WIDTH: 30.0 IN  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-01-2006	00	MED	28500.00 IPA	.	.	. IN	NA	
05-31-2006	15	MED	28500.00 IPA	12.00	12.00	12.00 IN	TUR	

02 P AMBEL - RAGWEED, COMMON  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-01-2006	00	NA	IND	.	.	. IN	---	
05-31-2006	14	MED	1.00 IF2	2.00	2.00	2.00 IN	TUR	

03 P IPOSS - MORNINGGLORY  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-01-2006	00	NA	IND	.	.	. IN	---	
05-31-2006	14	MED	1.00 SQY	1.50	1.50	1.50 IN	TUR	

04 P XANST - COCKLEBUR, COMMON  
 TARGET: PEST      SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-01-2006	00	NA	IND	.	.	. IN	---	
05-31-2006	14	MED	1.00 SQY	2.00	2.00	2.00 IN	TUR	

\* STAGE CODE -- CORN  
 00 = DRY SEED (CARYOPSIS)  
 15 = 5 LEAVES UNFOLDED  
 \* STAGE CODE -- GENERAL  
 00 = DRY SEED; DORMANCY  
 14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED

TITLE: POSTEMERGENCE USE OF DICAM IN CONVENTIONAL CORN  
 CREATED: 05-07-2006 REVISED: 10-25-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE RATE UNIT TM	VAR 01				
		PHY % 1.00	CON % 1.00	CON % 1.00	CON % 1.00	CON % 1.00
		PL ALL	PL ALL	PL ALL	PL ALL	PL ALL
001 RAW 06-08-06 P ZEAMX	002 RAW 06-08-06 P AMBEL	003 RAW 06-08-06 P IPOSS	004 RAW 06-08-06 P XANST	005 RAW 06-15-06 P AMBEL		
1A UNTREATED CHECK	0.00 NA 0	0	0	0	0	0
2A»DICAM (4SL)	0.063 LAA 0	0	27	7	27	10
3A»DICAM (4SL) B»REDDY IT	0.063 LAA 0 0.25 PMV 0	0	27	27	27	73
4A»DICAM (4SL)	0.125 LAA 0	0	28	22	28	77
5A»DICAM (4SL) B»REDDY IT	0.125 LAA 0 0.25 PMV 0	0	30	30	30	83
6A»DICAM (4SL)	0.25 LAA 0	0	50	30	50	90
7A»DICAM (4SL) B»REDDY IT	0.25 LAA 0 0.25 PMV 0	0	50	50	50	87
8A CLARITY (4SL)	0.25 LAA 0	0	67	63	67	80
9A CLARITY (4SL) B»REDDY IT	0.25 LAA 0 0.25 PMV 0	0	70	70	70	77
10A»DISTINCT (70WG)	0.175 LAA 0	0	70	70	70	80
11A»DISTINCT (70WG) B»REDDY IT	0.175 LAA 0 0.25 PMV 0	0	67	67	67	80
12A»BAS 799 (56WG)	0.174 LAA 0	0	67	67	67	87
13A»BAS 799 (56WG) B»REDDY IT	0.174 LAA 0 0.25 PMV 0	0	70	70	70	87
14A UNTREATED CHECK	0.00 NA 0	0	0	0	0	0
	LSLSD (0.05)	0.00	5.34	11.12	5.34	13.84
	SIGNIFICANCE OF F	NS	**	**	**	**
	STANDARD DEVIATION	0.00	2.60	5.41	2.60	6.73
	COEFFICIENT OF VARIANCE	0.00	7.16	16.23	7.16	12.68
	DAT APPLICATION # 01 TIMINGS (00)	8	8	8	8	15

**TITLE:** POSTEMERGENCE USE OF DICAM IN CONVENTIONAL CORN  
**CREATED:** 05-07-2006 **REVISED:** 10-25-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	009 RAW	010 RAW
	RATE	UNIT	TM	06-15-06 P IPOSS	06-15-06 P XANST	06-28-06 P AMBEL	06-28-06 P IPOSS	06-28-06 P XANST
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
2A»DICAM (4SL)	0.063	LAA	0	0	10	60	30	90
3A»DICAM (4SL)	0.063	LAA	0	27	28	80	30	97
B»REDDY IT	0.25	PMV	0					
4A»DICAM (4SL)	0.125	LAA	0	53	50	93	60	100
5A»DICAM (4SL)	0.125	LAA	0	35	40	97	43	100
B»REDDY IT	0.25	PMV	0					
6A»DICAM (4SL)	0.25	LAA	0	53	53	100	77	97
7A»DICAM (4SL)	0.25	LAA	0	57	57	97	72	100
B»REDDY IT	0.25	PMV	0					
8A CLARITY (4SL)	0.25	LAA	0	70	70	100	82	100
9A CLARITY (4SL)	0.25	LAA	0	73	73	100	87	100
B»REDDY IT	0.25	PMV	0					
10A»DISTINCT (70WG)	0.175	LAA	0	75	78	100	90	100
11A»DISTINCT (70WG)	0.175	LAA	0	75	75	100	85	100
B»REDDY IT	0.25	PMV	0					
12A»BAS 799 (56WG)	0.174	LAA	0	73	73	100	93	100
13A»BAS 799 (56WG)	0.174	LAA	0	80	80	100	83	100
B»REDDY IT	0.25	PMV	0					
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
		LSD (0.05)		14.21	15.11	6.30	16.37	3.73
		SIGNIFICANCE OF F		**	**	**	**	**
		STANDARD DEVIATION		6.91	7.35	3.07	8.00	1.82
		COEFFICIENT OF VARIANCE		17.64	18.30	4.67	16.42	2.63
		DAT APPLICATION # 01 TIMINGS (00)		15	15	28	28	28



TITLE: POSTEMERGENCE USE OF DICAM IN CONVENTIONAL CORN  
 CREATED: 05-07-2006 REVISED: 10-25-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			011 RAW	012 RAW	013 RAW	014 RAW	015 RAW	VAR 01
	RATE	UNIT	TM	07-12-06 P AMBEL	07-12-06 P XANST	07-12-06 P IPOSS	08-07-06 P AMBEL	09-28-06 P ZEAMX	YLD LB 1.00
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL		PL SD
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0		6.7
2A»DICAM (4SL)	0.063	LAA	0	73	90	30	70		12.4
3A»DICAM (4SL)	0.063	LAA	0	80	93	30	83		18.7
B»REDDY IT	0.25	PMV	0						
4A»DICAM (4SL)	0.125	LAA	0	93	97	50	93		15.8
5A»DICAM (4SL)	0.125	LAA	0	97	100	38	93		16.8
B»REDDY IT	0.25	PMV	0						
6A»DICAM (4SL)	0.25	LAA	0	100	100	63	98		14.8
7A»DICAM (4SL)	0.25	LAA	0	97	100	60	95		14.6
B»REDDY IT	0.25	PMV	0						
8A CLARITY (4SL)	0.25	LAA	0	100	100	75	100		15.7
9A CLARITY (4SL)	0.25	LAA	0	100	100	65	97		13.6
B»REDDY IT	0.25	PMV	0						
10A»DISTINCT (70WG)	0.175	LAA	0	100	100	73	100		17.0
11A»DISTINCT (70WG)	0.175	LAA	0	100	100	77	100		17.4
B»REDDY IT	0.25	PMV	0						
12A»BAS 799 (56WG)	0.174	LAA	0	100	100	80	100		14.2
13A»BAS 799 (56WG)	0.174	LAA	0	100	100	70	100		17.7
B»REDDY IT	0.25	PMV	0						
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0		6.1
		LSD (0.05)		9.12	3.59	18.54	10.45		5.72
		SIGNIFICANCE OF F		**	**	**	**		**
		STANDARD DEVIATION		4.43	1.75	9.00	5.08		2.78
		COEFFICIENT OF VARIANCE		6.67	2.54	21.73	7.72		23.69
		DAT APPLICATION # 01 TIMINGS (00)		42	42	42	68		120

TITLE: POSTEMERGENCE USE OF DICAM IN CONVENTIONAL CORN  
 CREATED: 05-07-2006 REVISED: 10-25-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			YLD BU	
	RATE	UNIT	TM	A	SD
1A UNTREATED CHECK	0.00	NA	0	49.2	
2A»DICAM (4SL)	0.063	LAA	0	91.5	
3A»DICAM (4SL)	0.063	LAA	0	138.0	
B»REDDY IT	0.25	PMV	0		
4A»DICAM (4SL)	0.125	LAA	0	116.6	
5A»DICAM (4SL)	0.125	LAA	0	124.2	
B»REDDY IT	0.25	PMV	0		
6A»DICAM (4SL)	0.25	LAA	0	109.5	
7A»DICAM (4SL)	0.25	LAA	0	108.0	
B»REDDY IT	0.25	PMV	0		
8A CLARITY (4SL)	0.25	LAA	0	115.6	
9A CLARITY (4SL)	0.25	LAA	0	100.1	
B»REDDY IT	0.25	PMV	0		
10A»DISTINCT (70WG)	0.175	LAA	0	125.5	
11A»DISTINCT (70WG)	0.175	LAA	0	128.4	
B»REDDY IT	0.25	PMV	0		
12A»BAS 799 (56WG)	0.174	LAA	0	104.8	
13A»BAS 799 (56WG)	0.174	LAA	0	130.4	
B»REDDY IT	0.25	PMV	0		
14A UNTREATED CHECK	0.00	NA	0	45.3	
				LSD (0.05)	42.24
				SIGNIFICANCE OF F	**
				STANDARD DEVIATION	20.55
				COEFFICIENT OF VARIANCE	23.69
				DAT APPLICATION # 01 TIMINGS (00)	120

» = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = POSPOS / POSTEMERGENCE 05-31-2006(1)

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	ZEAMX	% PHYTO	06-08-2006	01	P	ZEAMX		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	AMBEL	CON %	06-08-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
003	IPOSS	CON %	06-08-2006	03	P	IPOSS		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
004	XANST	CON %	06-08-2006	04	P	XANST		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
005	AMBEL	CON %	06-15-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	IPOSS	CON %	06-15-2006	03	P	IPOSS		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
007	XANST	CON %	06-15-2006	04	P	XANST		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
008	AMBEL	CON %	06-28-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
009	IPOSS	CON %	06-28-2006	03	P	IPOSS		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
010	XANST	CON %	06-28-2006	04	P	XANST		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
011	AMBEL	CON %	07-12-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
012	XANST	CON %	07-12-2006	04	P	XANST		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N

TITLE: POSTEMERGENCE USE OF DICAM IN CONVENTIONAL CORN

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR1	SS	NOTE
013	IPOSS	CON %	07-12-2006	03	P	IPOSS		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
014	AMBEL	CON %	08-07-2006	02	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
015	ZEAMX	YLD/PLOT	09-28-2006	01	P	ZEAMX		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	ZEAMX	YLD/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

VAR 01 = PIONEER 33B54

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = PIONEER 33B54

\* USER DEFINED CALCULATIONS

US 003/06/01 001 HZ--- 015 -- {RAW}\*(7.38)

US 003/06/01 001 HZ--- 015 -- {RAW}\*(7.38)

**TRIAL SUMMARY  
GENERAL SITE INFORMATION**

**TRIAL #:** US 003/06/01 001 AH      **ALTERNATE ID#:** HF 27 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** HAYDEN FARM-06  
**CREATED BY:** US RITTER R  
**CREATED:** 05-07-2006      **REVISED:** 10-30-2006      **COMPLETED:** Y  
**TITLE:** WEED CONTROL IN CONVENTIONAL SUNFLOWERS  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 84      **TILLAGE:** COT  
**% SILT:** 9      **PH:** 6.4  
**% CLAY:** 7      **CEC:** 7.2  
**TEXTURE:** SL      **% OM:** 1.8  
**SOIL GEN:** C  
**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 15.00 FT  
**PLOT AREA:** 150.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** EFF  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 14      **ACTUAL SUB-BLOCKS:** 14

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/23/2006. Variety - Pioneer 63A70.
2. Preemergence applications made 05/23/2006.
3. Early post applications made 06/15/2006.
4. Study sidedressed with additional nitrogen on 06/04/2006.
5. Study not harvested.

APPL. NUMBER	01	02	UNIT
TIMINGS	00	01	
TYPE	LIQMIX	LIQMIX	
APPLICATION DATE	05-23-06	06-15-06	USA
TIME - BEGIN	18:00	11:00	24H
TIME - END	18:30	12:00	24H
AIR TEMPERATURE	65	82	F
% REL. HUMIDITY	35	75	
WIND DIRECTION	WEST	SOUTHWEST	
WIND SPEED	5.0	5.0	M/H
CLOUD COVER	CLEAR	CLEAR	
DEW	NO	NO	
SOIL MOISTURE	DRY/MOIST	DRY/MOIST	
SOIL CONDITION	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	70/4.00	79/4.00	F /
METHOD	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	GPM
NOZZLE NUMBER	6	6	
NOZZLE SPACING	20.000	20.000	IN
SCREEN SIZE			
SCREEN SZ DESC	NA	NA	
SWATH WIDTH	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	IN
SPEED	3.00	3.00	M/H
MIX SIZE	0.560	0.560	
MIX SIZE UNIT	GAL	GAL	
SPRAY VOLUME	18.00	18.00	
SCREEN SIZE	GPA	GPA	
PRESSURE	20.00	20.00	PSI
DILUENT	WATER	WATER	
INC. DATE			USA
INC. START			24H
INC. END			24H
INC. DEPTH			IN
INC. EQUIPMENT	---	---	

**\* TIMING CODES**

00 = PREPRE / PREEMERGENCE  
01 = POSPOS / POSTEMERGENCE

**\* NOZZLE DESCRIPTION**

01 = SS-8003  
02 = SS-8003

01 P HELAN - SUNFLOWER, COMMON, VOLUNTEER VAR/SPC INFO: PIONEER 63A70  
 TARGET: CROP SITE: FG POPULATION: 22000.00 IPA PLANTED: 05-23-2006  
 PLANTING DEPTH: 1.0 IN ROW WIDTH: 30.0 IN  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-23-2006	00	MED	22000.00 IPA	.	.	. IN		NA	
06-15-2006	18	MED	22000.00 IPA	8.00	8.00	8.00 IN		TUR	

02 P DIGSA - CRABGRASS, LARGE, SOUTHERN

TARGET: PEST SITE: FG PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-23-2006	00	NA	IND	.	.	. IN		---	
06-15-2006	23	MED	3.00 SQY	2.00	2.00	2.00 IN		TUR	

03 P IPOSS - MORNINGGLORY

TARGET: PEST SITE: FG PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-23-2006	00	NA	IND	.	.	. IN		---	
06-15-2006	14	MED	3.00 SQY	3.00	3.00	3.00 IN		TUR	

\* STAGE CODE -- GENERAL

- 00 = DRY SEED; DORMANCY
- 14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED

\* STAGE CODE -- GENERAL GRASS

- 00 = DRY SEED (CARYOPSIS)
- 23 = 3 TILLERS DETECTABLE

\* STAGE CODE -- SUNFLOWER

- 00 = DRY SEED (ACHENE)
- 18 = 8 LEAVES UNFOLDED

TITLE: WEED CONTROL IN CONVENTIONAL SUNFLOWERS  
 CREATED: 05-07-2006 REVISED: 10-30-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 15.00 FT LONG  
 PLOT AREA: 150.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE RATE UNIT TM	001 RAW	002 RAW	003 RAW	004 RAW	005 RAW
		06-07-06	06-07-06	06-21-06	06-28-06	06-28-06
		P HELAN	P DIGSA	P DIGSA	P HELAN	P DIGSA
		VAR 01 PHY % 1.00	CON % 1.00	CON % 1.00	VAR 01 PHY % 1.00	CON % 1.00
		PL ALL	PL ALL	PL ALL	PL ALL	PL ALL
1A UNTREATED CHECK	0.00 NA 0	0	0	0	0	0
2A»KIH-485 (85WG)	0.107 LAA 0	0	98	97	0	98
3A»KIH-485 (85WG)	0.144 LAA 0	0	98	97	0	97
4A»KIH-485 (85WG)	0.181 LAA 0	0	97	97	0	98
5A»KIH-485 (85WG)	0.217 LAA 0	7	100	100	3	100
6A»KIH-485 (85WG)	0.362 LAA 0	17	100	100	13	100
7A»PROWL H20 (3.8CS)	1.25 LAA 0	0	100	95	0	88
8A»PROWL H20 (3.8CS)	1.25 LAA 0	10	100	93	3	83
B»AUTHORITY (75DF)	0.09 LAA 0					
9A»PROWL H20 (3.8CS)	1.25 LAA 0	10	100	95	3	92
B»AUTHORITY (75DF)	0.14 LAA 0					
10A»PROWL H20 (3.8CS)	1.25 LAA 0	10	100	97	7	97
B»AUTHORITY (75DF)	0.19 LAA 0					
11A»PROWL H20 (3.8CS)	1.25 LAA 0	53	100	97	12	93
B»VALOR SX (51WG)	0.048 LAA 0					
12A»PROWL H20 (3.8CS)	1.25 LAA 0	58	100	93	15	85
B»VALOR SX (51WG)	0.063 LAA 0					
13A»KIH-485 (85WG)	0.181 LAA 1	0	0	0	7	22
14A UNTREATED CHECK	0.00 NA 0	0	0	0	0	0
	LSD (0.05)	5.76	3.00	4.30	6.59	9.57
	SIGNIFICANCE OF F	**	**	**	**	**
	STANDARD DEVIATION	2.80	1.44	2.09	3.21	4.66
	COEFFICIENT OF VARIANCE	29.11	2.26	3.38	86.83	7.58
	DAT APPLICATION # 01 TIMINGS (00)	15	15	29	36	36
	DAT APPLICATION # 02 TIMINGS (01)	NA	NA	6	13	13



**TITLE:** WEED CONTROL IN CONVENTIONAL SUNFLOWERS  
**CREATED:** 05-07-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 15.00 FT LONG  
**PLOT AREA:** 150.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			CON %	CON %
	RATE	UNIT	TM	1.00 PL ALL	1.00 PL ALL
1A UNTREATED CHECK	0.00	NA	0	0	0
2A»KIH-485 (85WG)	0.107	LAA	0	98	27
3A»KIH-485 (85WG)	0.144	LAA	0	97	10
4A»KIH-485 (85WG)	0.181	LAA	0	97	27
5A»KIH-485 (85WG)	0.217	LAA	0	100	22
6A»KIH-485 (85WG)	0.362	LAA	0	97	0
7A»PROWL H20 (3.8CS)	1.25	LAA	0	83	27
8A»PROWL H20 (3.8CS) B»AUTHORITY (75DF)	1.25 0.09	LAA LAA	0 0	77	57
9A»PROWL H20 (3.8CS) B»AUTHORITY (75DF)	1.25 0.14	LAA LAA	0 0	90	57
10A»PROWL H20 (3.8CS) B»AUTHORITY (75DF)	1.25 0.19	LAA LAA	0 0	90	60
11A»PROWL H20 (3.8CS) B»VALOR SX (51WG)	1.25 0.048	LAA LAA	0 0	87	27
12A»PROWL H20 (3.8CS) B»VALOR SX (51WG)	1.25 0.063	LAA LAA	0 0	72	27
13A»KIH-485 (85WG)	0.181	LAA	1	20	20
14A UNTREATED CHECK	0.00	NA	0	0	0
		LSD (0.05)		12.08	30.00
		SIGNIFICANCE OF F		**	**
		STANDARD DEVIATION		5.88	14.57
		COEFFICIENT OF VARIANCE		10.00	69.73
		DAT APPLICATION # 01 TIMINGS (00)		48	48
		DAT APPLICATION # 02 TIMINGS (01)		25	25

> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 05-23-2006(1)  
 01 = POSPOS / POSTEMERGENCE 06-15-2006(2)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR	SS	NOTE
001	HELAN	% PHYTO	06-07-2006	01	P	HELAN		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	DIGSA	CON %	06-07-2006	02	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
003	DIGSA	CON %	06-21-2006	02	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
004	HELAN	% PHYTO	06-28-2006	01	P	HELAN		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
005	DIGSA	CON %	06-28-2006	02	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
006	DIGSA	CON %	07-10-2006	02	P	DIGSA		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
007	IPOSS	CON %	07-10-2006	03	P	IPOSS		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N

\* VARIETY/SPECIE INFO CODES

VAR 01 = PIONEER 63A70

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = PIONEER 63A70

**TRIAL SUMMARY**  
**GENERAL SITE INFORMATION**

**TRIAL #:** US 003/65/01 001 BH      **ALTERNATE ID#:** HF 28 2006  
**PROTOCOL#:** US 003/65/01      **ALTERNATE ID#:** US 005/04/01  
**CREATED BY:** US RITTER R  
**CREATED:** 05-08-06      **REVISED:** 11-10-06      **COMPLETED:** Y  
**TITLE:** POSTEMERGENCE COMBINATIONS FOR ROUNDUP-READY SOYBEANS  
  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTRY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**TRIAL INFORMATION**

<b>% SAND:</b> 84	<b>TILLAGE:</b> COT	<b>DESIGN:</b> RCB	<b>RESIDUE TRIAL:</b> ---
<b>% SILT:</b> 9	<b>PH:</b> 6.4	<b>ACTUAL REPS:</b> 3	<b>ACTUAL BLOCKS:</b> 1
<b>% CLAY:</b> 7	<b>CEC:</b> 7.2	<b>ACTUAL TRTS:</b> 14	<b>ACTUAL SUB-BLOCKS:</b> 14
<b>TEXTURE:</b> SL	<b>% OM:</b> 1.8		

**SOIL GEN:** C  
**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/23/2006. Variety - Pioneer 93M92.
2. Early post applications were made 06/15/2006.
3. Study harvested 11/05/2006.

**TRIAL SUMMARY**  
**GENERAL SITE INFORMATION**

**TRIAL #:** US 003/65/01 001 BH      **ALTERNATE ID#:** HF 28 2006  
**PROTOCOL#:** US 003/65/01      **ALTERNATE ID#:** US 005/04/01  
**CREATED BY:** US RITTER\_R  
**CREATED:** 05-08-06      **REVISED:** 11-10-06      **COMPLETED:** Y  
**TITLE:** POSTEMERGENCE COMBINATIONS FOR ROUNDUP-READY SOYBEANS

**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**TRIAL INFORMATION**

**% SAND:** 84      **TILLAGE:** COT      **DESIGN:** RCB      **RESIDUE TRIAL:** ---  
**% SILT:** 9      **PH:** 6.4      **ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**% CLAY:** 7      **CEC:** 7.2      **ACTUAL TRTS:** 14      **ACTUAL SUB-BLOCKS:** 14  
**TEXTURE:** SL      **% OM:** 1.8  
**SOIL GEN:** C  
**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

01 P GLXMA - SOYBEAN VAR/SPC INFO: PIONEER 93M92  
**TARGET:** CROP **SITE:** FG **POPULATION:** 5.00 SFR **PLANTED:** 05-23-2006  
**PLANTING DEPTH:** 1.0 IN **ROW WIDTH:** 15.0 IN  
**INFESTATION DATE:** - - **METHOD:** NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-23-2006	00	MED	5.00 SFR	.	.	. IN		NA	
06-15-2006	14	MED	5.00 SFR	4.00	4.00	4.00 IN		TUR	

02 P DIGSA - CRABGRASS, LARGE, SOUTHERN  
**TARGET:** PEST **SITE:** FG **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-23-2006	00	NA	IND	.	.	. IN		---	
06-15-2006	23	MED	3.00 SQY	2.00	2.00	2.00 IN		TUR	

03 P AMBEL - RAGWEED, COMMON  
**TARGET:** PEST **SITE:** FG **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-23-2006	00	NA	IND	.	.	. IN		---	
06-15-2006	14	LOW	1.00 SQY	3.00	3.00	3.00 IN		TUR	

04 P IPOSS - MORNINGGLORY  
**TARGET:** PEST **SITE:** FG **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-23-2006	00	NA	IND	.	.	. IN		---	
06-15-2006	14	LOW	1.00 SQY	3.00	3.00	3.00 IN		TUR	

- \* **STAGE CODE -- GENERAL**
- 00 = DRY SEED; DORMANCY
- 14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- \* **STAGE CODE -- GENERAL GRASS**
- 00 = DRY SEED (CARYOPSIS)
- 23 = 3 TILLERS DETECTABLE
- \* **STAGE CODE -- SOYBEAN**
- 00 = DRY SEED
- 14 = 4TH LEAF (2ND TRIFOLIATE LEAF) UNFOLDED, 3 NODES

TITLE: POSTEMERGENCE COMBINATIONS FOR ROUNDUP-READY SOYBEANS

CREATED: 05-08-2006 REVISED: 11-10-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT	TM	06-22-06 P GLXMA	06-22-06 P DIGSA	06-22-06 P AMBEL	06-22-06 P IPOSS	06-28-06 P GLXMA	
				VAR 01 PHY % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	VAR 01 PHY % 1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»ROUNDUP WEATHER MAX (4.5AE) B SURFACTANT - NON-IONIC (SL)	0.773 0.25	LAA PMV	0 0	0	100	100	48	0	
3A»ROUNDUP WEATHER MAX (4.5AE) B CLASSIC (25WG) C SURFACTANT - NON-IONIC (SL)	0.773 0.005 0.25	LAA LAA PMV	0 0 0	17	100	100	50	13	
4A»ROUNDUP WEATHER MAX (4.5AE) B»FIRSTRATE (84 WG) C SURFACTANT - NON-IONIC (SL)	0.773 0.016 0.25	LAA LAA PMV	0 0 0	3	100	100	53	3	
5A»ROUNDUP WEATHER MAX (4.5AE) B»HARMONY GT (75WG) C SURFACTANT - NON-IONIC (SL)	0.773 0.004 0.25	LAA LAA PMV	0 0 0	23	100	100	48	33	
6A»ROUNDUP WEATHER MAX (4.5AE) B RESOURCE (0.86EC) C SURFACTANT - NON-IONIC (SL)	0.773 0.02 0.25	LAA LAA PMV	0 0 0	10	100	100	100	10	
7A»ROUNDUP WEATHER MAX (4.5AE) B RESOURCE (0.86EC) C SURFACTANT - NON-IONIC (SL)	0.773 0.03 0.25	LAA LAA PMV	0 0 0	10	100	100	100	13	
8A»TOUCHDOWN TOTAL (4.17AE) B SURFACTANT - NON-IONIC (SL)	0.781 0.25	LAA PMV	0 0	0	100	100	48	0	
9A»TOUCHDOWN TOTAL (4.17AE) B CLASSIC (25WG) C SURFACTANT - NON-IONIC (SL)	0.781 0.005 0.25	LAA LAA PMV	0 0 0	15	100	100	40	13	
10A»TOUCHDOWN TOTAL (4.17AE) B»FIRSTRATE (84 WG) C SURFACTANT - NON-IONIC (SL)	0.781 0.016 0.25	LAA LAA PMV	0 0 0	0	100	100	45	3	
11A»TOUCHDOWN TOTAL (4.17AE) B»HARMONY GT (75WG) C SURFACTANT - NON-IONIC (SL)	0.781 0.004 0.25	LAA LAA PMV	0 0 0	20	100	100	45	30	
12A»TOUCHDOWN TOTAL (4.17AE) B RESOURCE (0.86EC) C SURFACTANT - NON-IONIC (SL)	0.781 0.02 0.25	LAA LAA PMV	0 0 0	10	100	100	100	10	
13A»TOUCHDOWN TOTAL (4.17AE) B RESOURCE (0.86EC) C SURFACTANT - NON-IONIC (SL)	0.781 0.03 0.25	LAA LAA PMV	0 0 0	10	100	100	100	13	
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	4.43	0.00	0.00	11.44	6.36
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	2.15	0.00	0.00	5.57	3.09
				COEFFICIENT OF VARIANCE	31.21	0.00	0.00	12.26	37.00
				DAT APPLICATION # 01 TIMINGS (00)	7	7	7	7	13

TITLE: POSTEMERGENCE COMBINATIONS FOR ROUNDUP-READY SOYBEANS

CREATED: 05-08-2006 REVISED: 11-10-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
 PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	009 RAW	010 RAW	
	RATE	UNIT	TM	06-28-06 P DIGSA	06-28-06 P AMBEL	06-28-06 P IPOSS	07-12-06 P GLXMA	07-12-06 P DIGSA	
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	VAR 01 PHY % 1.00 PL ALL	CON % 1.00 PL ALL	
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
2A»ROUNDUP WEATHER MAX (4.5AE)	0.773	LAA	0	100	100	80	0	93	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
3A»ROUNDUP WEATHER MAX (4.5AE)	0.773	LAA	0	100	100	73	0	93	
B CLASSIC (25WG)	0.005	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
4A»ROUNDUP WEATHER MAX (4.5AE)	0.773	LAA	0	100	100	73	0	95	
B»FIRSTRATE (84 WG)	0.016	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
5A»ROUNDUP WEATHER MAX (4.5AE)	0.773	LAA	0	100	100	52	10	87	
B»HARMONY GT (75WG)	0.004	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
6A»ROUNDUP WEATHER MAX (4.5AE)	0.773	LAA	0	100	100	95	0	90	
B RESOURCE (0.86EC)	0.02	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
7A»ROUNDUP WEATHER MAX (4.5AE)	0.773	LAA	0	100	100	97	7	88	
B RESOURCE (0.86EC)	0.03	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
8A»TOUCHDOWN TOTAL (4.17AE)	0.781	LAA	0	100	100	77	0	90	
B SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
9A»TOUCHDOWN TOTAL (4.17AE)	0.781	LAA	0	100	100	83	0	100	
B CLASSIC (25WG)	0.005	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
10A»TOUCHDOWN TOTAL (4.17AE)	0.781	LAA	0	100	100	72	0	90	
B»FIRSTRATE (84 WG)	0.016	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
11A»TOUCHDOWN TOTAL (4.17AE)	0.781	LAA	0	100	100	42	10	85	
B»HARMONY GT (75WG)	0.004	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
12A»TOUCHDOWN TOTAL (4.17AE)	0.781	LAA	0	100	100	98	0	87	
B RESOURCE (0.86EC)	0.02	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
13A»TOUCHDOWN TOTAL (4.17AE)	0.781	LAA	0	100	100	93	0	85	
B RESOURCE (0.86EC)	0.03	LAA	0						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0						
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSL (0.05)	0.00	0.00	19.00	2.59	7.34
				SIGNIFICANCE OF F	**	**	**	**	**
				STANDARD DEVIATION	0.00	0.00	9.26	1.26	3.57
				COEFFICIENT OF VARIANCE	0.00	0.00	17.00	81.00	5.65
				DAT APPLICATION # 01 TIMINGS (00)	13	13	13	27	27

TITLE: POSTEMERGENCE COMBINATIONS FOR ROUNDUP-READY SOYBEANS

CREATED: 05-08-2006 REVISED: 11-10-2006 COMPLETED: Y  
PROJECT TYPE: HERBICIDE  
LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG  
PLOT AREA: 200.00 SFT

REPS: 03

TRT NUM	TREATMENT COMPONENT	DOSAGE			CON %			VAR 01	
		RATE	UNIT	TM	PL	ALL	PL	ALL	YLD LB PL SD
011	RAW	07-12-06	P	AMBEL	0	0	0	8.5	31.3
012	RAW	07-12-06	P	IPOSS	100	87	100	11.2	41.5
013	RAW	08-07-06	P	AMBEL	100	90	100	12.7	47.0
014	RAW	11-05-06	P	GLXMA	100	90	100	9.8	36.2
014	CALC	11-05-06	P	GLXMA	100	70	98	11.2	41.3
1A	UNTREATED CHECK	0.00	NA	0	0	0	0	8.5	31.3
2A	ROUNDUP WEATHER MAX (4.5AE)	0.773	LAA	0	100	87	100	11.2	41.5
	B SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
3A	ROUNDUP WEATHER MAX (4.5AE)	0.773	LAA	0	100	90	100	12.7	47.0
	B CLASSIC (25WG)	0.005	LAA	0					
	C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
4A	ROUNDUP WEATHER MAX (4.5AE)	0.773	LAA	0	100	90	100	9.8	36.2
	B>FIRSTRATE (84 WG)	0.016	LAA	0					
	C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
5A	ROUNDUP WEATHER MAX (4.5AE)	0.773	LAA	0	100	70	98	11.2	41.3
	B>HARMONY GT (75WG)	0.004	LAA	0					
	C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
6A	ROUNDUP WEATHER MAX (4.5AE)	0.773	LAA	0	100	87	100	10.6	39.1
	B RESOURCE (0.86EC)	0.02	LAA	0					
	C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
7A	ROUNDUP WEATHER MAX (4.5AE)	0.773	LAA	0	100	82	100	12.2	45.0
	B RESOURCE (0.86EC)	0.03	LAA	0					
	C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
8A	TOUCHDOWN TOTAL (4.17AE)	0.781	LAA	0	100	87	100	9.8	36.0
	B SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
9A	TOUCHDOWN TOTAL (4.17AE)	0.781	LAA	0	100	90	98	11.2	41.5
	B CLASSIC (25WG)	0.005	LAA	0					
	C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
10A	TOUCHDOWN TOTAL (4.17AE)	0.781	LAA	0	100	90	100	10.2	37.6
	B>FIRSTRATE (84 WG)	0.016	LAA	0					
	C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
11A	TOUCHDOWN TOTAL (4.17AE)	0.781	LAA	0	100	67	100	10.1	37.4
	B>HARMONY GT (75WG)	0.004	LAA	0					
	C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
12A	TOUCHDOWN TOTAL (4.17AE)	0.781	LAA	0	100	87	98	12.0	44.3
	B RESOURCE (0.86EC)	0.02	LAA	0					
	C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
13A	TOUCHDOWN TOTAL (4.17AE)	0.781	LAA	0	97	87	97	12.0	44.2
	B RESOURCE (0.86EC)	0.03	LAA	0					
	C SURFACTANT - NON-IONIC (SL)	0.25	PMV	0					
14A	UNTREATED CHECK	0.00	NA	0	0	0	0	6.9	25.3
	LSD (0.05)				2.59	8.81	2.59	3.35	12.37
	SIGNIFICANCE OF F				**	**	**	NS	NS
	STANDARD DEVIATION				1.26	4.28	1.26	1.63	6.00
	COEFFICIENT OF VARIANCE				1.81	7.26	1.81	18.83	18.84
	DAT APPLICATION # 01 TIMINGS (00)				27	27	53	143	143

> = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = POSPOS / POSTEMERGENCE 06-15-2006(1)



TITLE: POSTEMERGENCE COMBINATIONS FOR ROUNDUP-READY SOYBEANS

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRTR	SS	NOTE
001	GLXMA	% PHYTO	06-22-2006	01	P	GLXMA		RAW	ALL	PHY	%	----	1.00 PL	NO	0001	0	N
002	DIGSA	CON %	06-22-2006	02	P	DIGSA		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
003	AMBEL	CON %	06-22-2006	03	P	AMBEL		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
004	IPOSS	CON %	06-22-2006	04	P	IPOSS		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
005	GLXMA	% PHYTO	06-28-2006	01	P	GLXMA		RAW	ALL	PHY	%	----	1.00 PL	NO	0001	0	N
006	DIGSA	CON %	06-28-2006	02	P	DIGSA		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
007	AMBEL	CON %	06-28-2006	03	P	AMBEL		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
008	IPOSS	CON %	06-28-2006	04	P	IPOSS		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
009	GLXMA	% PHYTO	07-12-2006	01	P	GLXMA		RAW	ALL	PHY	%	----	1.00 PL	NO	0001	0	N
010	DIGSA	CON %	07-12-2006	02	P	DIGSA		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
011	AMBEL	CON %	07-12-2006	03	P	AMBEL		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
012	IPOSS	CON %	07-12-2006	04	P	IPOSS		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
013	AMBEL	CON %	08-07-2006	03	P	AMBEL		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
014	GLXMA	LB/PLOT	11-05-2006	01	P	GLXMA		RAW	SD	YLD	LB	H	1.00 PL	UDC	0001	0	N
	GLXMA	BU/ACRE						CALC	SD	YLD	BU	H	1.00 A				

\* VARIETY/SPECIE INFO CODES

VAR 01 = PIONEER 93M92

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = PIONEER 93M92

\* USER DEFINED CALCULATIONS

US 003/65/01 001 BH--- 014 -- {RAW} \* (3.69)

US 003/65/01 001 BH--- 014 -- {RAW} \* (3.69)

**TRIAL SUMMARY**  
**GENERAL SITE INFORMATION**

**TRIAL #:** US 003/06/01 001 DH      **ALTERNATE ID#:** HF 30 2006  
**PROTOCOL#:** US 003/06/01      **ALTERNATE ID#:** HAYDEN FARM-06  
**CREATED BY:** US RITTER R  
**CREATED:** 05-15-2006      **REVISED:** 10-30-2006      **COMPLETED:** Y  
**TITLE:** USE OF LIBERTY ON LIBERTY-LINK SOYBEANS  
**COORDINATOR:** US 001 Ron Ritter  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** TO BE SELECTED  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. KEVIN CONOVER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** HAYDEN FARM      **TYPE:** FIELD TRIAL  
**CITY:** LAUREL      **SUBDIVISION:** MARYLAND  
**COUNTY:** PRINCE GEORGE'S      **ZIP:** 20708  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 5280.0 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 76      **TILLAGE:** COT  
**% SILT:** 17      **PH:** 6.9  
**% CLAY:** 7      **CEC:** 14.9  
**TEXTURE:** SL      **% OM:** 2.1  
**SOIL GEN:** C  
**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 10.00 FT  
**PLOT AREA:** 100.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** EFF  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 12      **ACTUAL SUB-BLOCKS:** 12

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/23/2006. Variety - L37335L.
2. Preemergence applications made 05/23/2006.
3. Early post applications made 06/15/2006.
4. Mid-postemergence applications made 06/22/2006.
5. Trial was mowed down after the last rating.

APPL. NUMBER	01	02	03	UNIT
TIMINGS	00	01	02	
TYPE	LIQMIX	LIQMIX	LIQMIX	
APPLICATION DATE	05-23-06	06-15-06	06-22-06	USA
TIME - BEGIN	18:00	12:00	12:30	24H
TIME - END	18:30	12:30	13:00	24H
AIR TEMPERATURE	65	82	82	F
% REL. HUMIDITY	35	60	60	
WIND DIRECTION	WEST	SOUTHWEST	SOUTHWEST	
WIND SPEED	5.0	5.0	5.0	M/H
CLOUD COVER	CLEAR	CLEAR	CLEAR	
DEW	NO	NO	YES	
SOIL MOISTURE	DRY/MOIST	MOIST/MOI	MOIST/MOI	
SOIL CONDITION	FRIABLE	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	70/4.00	80/4.00	80/4.00	F /
METHOD	SPRAY	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	0.03	GPM
NOZZLE NUMBER	6	6	6	
NOZZLE SPACING	20.000	20.000	20.000	IN
SCREEN SIZE				
SCREEN SZ DESC	NA	NA	NA	
SWATH WIDTH	10.0	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	20.0	IN
SPEED	3.00	3.00	3.00	M/H
MIX SIZE	0.560	0.750	0.750	
MIX SIZE UNIT	GAL	GAL	GAL	
SPRAY VOLUME	18.00	26.00	26.00	
SCREEN SIZE	GPA	GPA	GPA	
PRESSURE	20.00	38.00	38.00	PSI
DILUENT	WATER	WATER	WATER	
INC. DATE				USA
INC. START				24H
INC. END				24H
INC. DEPTH				IN
INC. EQUIPMENT	---	---	---	

## \* TIMING CODES

00 = PREPRE / PREEMERGENCE  
01 = POSPOS / EARLY POSTEMERGENCE  
02 = MIDPOS / MID-POSTEMERGENCE

## \* NOZZLE DESCRIPTION

01 = SS-8003  
02 = SS-8003  
03 = SS-8003

01 P GLXMA - SOYBEAN

TARGET: CROP SITE: FG POPULATION: 5.00 FTR PLANTED: 05-23-2006

PLANTING DEPTH: 1.0 IN ROW WIDTH: 15.0 IN

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-23-2006	00	MED	5.00 SFR	.	.	. IN		NA	
05-26-2006	00	MED	5.00 SFR	.	.	. IN		---	
06-15-2006	14	MED	5.00 SFR	4.00	4.00	4.00 IN		TUR	
06-22-2006	15	MED	5.00 SFR	10.00	10.00	10.00 IN		TUR	

02 P XANST - COCKLEBUR, COMMON

TARGET: PEST SITE: FG PLANTED:

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-23-2006	00	NA	IND	.	.	. IN		---	
06-15-2006	14	LOW	1.00 SQY	4.00	4.00	4.00 IN		TUR	
06-22-2006	19	LOW	1.00 SQY	12.00	12.00	12.00 IN		TUR	

03 P AMBEL - RAGWEED, COMMON

TARGET: PEST SITE: FG PLANTED:

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-23-2006	00	NA	0.00 NA	0.00	0.00	0.00 IN		---	
06-15-2006	14	LOW	1.00 SQY	3.00	3.00	3.00 IN		TUR	
06-22-2006	19	LOW	1.00 SQY	12.00	12.00	12.00 IN		TUR	

04 P IPOSS - MORNINGGLORY

TARGET: PEST SITE: FG PLANTED:

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
05-23-2006	00	NA	IND	.	.	. IN		---	
06-15-2006	14	MED	1.00 IF2	2.00	2.00	2.00 IN		TUR	
06-22-2006	19	MED	1.00 IF2	12.00	12.00	12.00 IN		TUR	

05 P ELEIN - GOOSEGRASS

TARGET: PEST SITE: FG PLANTED:

INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP	VIGOR	NOTES
-	-	-	IND	.	.	. IN		---	

## \* STAGE CODE -- GENERAL

00 = DRY SEED; DORMANCY  
 14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED  
 19 = >8 TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED

## \* STAGE CODE -- GENERAL GRASS

--- = TO BE SELECTED

## \* STAGE CODE -- SOYBEAN

00 = DRY SEED  
 14 = 4TH LEAF (2ND TRIFOLIATE LEAF) UNFOLDED, 3 NODES  
 15 = 5TH LEAF (3RD TRIFOLIATE LEAF) UNFOLDED, 4 NODES

TITLE: USE OF LIBERTY ON LIBERTY-LINK SOYBEANS  
 CREATED: 05-15-2006 REVISED: 10-30-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 10.00 FT LONG  
 PLOT AREA: 100.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			PHY %	CON %	CON %	CON %	PHY %
	RATE	UNIT	TM	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL
001 RAW 06-12-06 P GLXMA								
002 RAW 06-21-06 P AMBEL								
003 RAW 06-21-06 P IPOSS								
004 RAW 06-21-06 P XANST								
005 RAW 06-28-06 P GLXMA								
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
2A»DUAL II MAGNUM (7.64EC) B CANOPY (75WG)	1.59 0.188	LAA LAA	0 0	0	57	40	50	0
3A»DUAL II MAGNUM (7.64EC) B»LIBERTY (1.67 EC) C FERTILIZER-21% AMMONIUM SULFATE	1.59 0.31 3.00	LAA LAA LMA	0 2 2	0	0	0	0	0
4A»DUAL II MAGNUM (7.64EC) B»LIBERTY (1.67 EC) C FERTILIZER-21% AMMONIUM SULFATE	1.59 0.42 3.00	LAA LAA LMA	0 2 2	0	0	0	0	0
5A PURSUIT (2SL) B SURFACTANT - NON-IONIC (SL) C FERTILIZER - 28%UAN	0.063 0.25 2.00	LAA PMV QMA	1 1 1	7	37	37	37	0
6A»LIBERTY (1.67 EC)	0.42	LAA	1	0	100	100	100	0
7A»LIBERTY (1.67 EC) B FERTILIZER-21% AMMONIUM SULFATE	0.42 3.00	LAA LMA	1 1	0	100	100	100	0
8A»LIBERTY (1.67 EC)	0.42	LAA	2	0	0	0	0	0
9A»LIBERTY (1.67 EC) B FERTILIZER-21% AMMONIUM SULFATE	0.42 3.00	LAA LMA	2 2	0	0	0	0	0
10A»LIBERTY (1.67 EC) B FERTILIZER-21% AMMONIUM SULFATE C»LIBERTY (1.67 EC) D FERTILIZER-21% AMMONIUM SULFATE	0.31 3.00 0.31 3.00	LAA LMA LAA LMA	1 1 2 2	0	100	100	100	0
11A»LIBERTY (1.67 EC) B FERTILIZER-21% AMMONIUM SULFATE C»LIBERTY (1.67 EC) D FERTILIZER-21% AMMONIUM SULFATE	0.42 3.00 0.42 3.00	LAA LMA LAA LMA	1 1 2 2	0	100	100	100	0
12A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
		LSD (0.05)		2.82	13.16	10.39	10.00	0.00
		SIGNIFICANCE OF F		**	**	**	**	NS
		STANDARD DEVIATION		1.36	6.34	5.00	4.80	0.00
		COEFFICIENT OF VARIANCE		300.00	18.90	15.44	14.50	0.00
		DAT APPLICATION # 01 TIMINGS (00)		20	29	29	29	36
		DAT APPLICATION # 02 TIMINGS (01)		NA	6	6	6	13
		DAT APPLICATION # 03 TIMINGS (02)		NA	NA	NA	NA	6

**TITLE:** USE OF LIBERTY ON LIBERTY-LINK SOYBEANS  
**CREATED:** 05-15-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** HAYDEN FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 10.00 FT LONG  
**PLOT AREA:** 100.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			CON %	CON %	CON %	CON %	CON %
	RATE	UNIT	TM	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL
006 RAW 06-28-06 P AMBEL								
007 RAW 06-28-06 P IPOSS								
008 RAW 06-28-06 P XANST								
009 RAW 07-07-06 P AMBEL								
010 RAW 07-07-06 P IPOSS								
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
2A»DUAL II MAGNUM (7.64EC) B CANOPY (75WG)	1.59 0.188	LAA LAA	0 0	40	10	10	40	10
3A»DUAL II MAGNUM (7.64EC) B»LIBERTY (1.67 EC) C FERTILIZER-21% AMMONIUM SULFATE	1.59 0.31 3.00	LAA LAA LMA	0 2 2	97	92	92	100	83
4A»DUAL II MAGNUM (7.64EC) B»LIBERTY (1.67 EC) C FERTILIZER-21% AMMONIUM SULFATE	1.59 0.42 3.00	LAA LAA LMA	0 2 2	100	93	93	100	87
5A PURSUIT (2SL) B SURFACTANT - NON-IONIC (SL) C FERTILIZER - 28%UAN	0.063 0.25 2.00	LAA PMV QMA	1 1 1	63	60	93	73	75
6A»LIBERTY (1.67 EC)	0.42	LAA	1	100	93	97	100	92
7A»LIBERTY (1.67 EC) B FERTILIZER-21% AMMONIUM SULFATE	0.42 3.00	LAA LMA	1 1	100	93	93	100	90
8A»LIBERTY (1.67 EC)	0.42	LAA	2	67	57	57	100	90
9A»LIBERTY (1.67 EC) B FERTILIZER-21% AMMONIUM SULFATE	0.42 3.00	LAA LMA	2 2	100	95	87	100	95
10A»LIBERTY (1.67 EC) B FERTILIZER-21% AMMONIUM SULFATE C»LIBERTY (1.67 EC) D FERTILIZER-21% AMMONIUM SULFATE	0.31 3.00 0.31 3.00	LAA LMA LAA LMA	1 1 2 2	100	97	97	100	92
11A»LIBERTY (1.67 EC) B FERTILIZER-21% AMMONIUM SULFATE C»LIBERTY (1.67 EC) D FERTILIZER-21% AMMONIUM SULFATE	0.42 3.00 0.42 3.00	LAA LMA LAA LMA	1 1 2 2	100	98	97	100	98
12A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
		LSD (0.05)		37.00	29.84	27.37	23.93	15.42
		SIGNIFICANCE OF F		**	**	**	**	**
		STANDARD DEVIATION		17.85	14.39	13.20	11.54	7.43
		COEFFICIENT OF VARIANCE		30.27	26.82	23.80	18.57	13.46
		DAT APPLICATION # 01 TIMINGS (00)		36	36	36	45	45
		DAT APPLICATION # 02 TIMINGS (01)		13	13	13	22	22
		DAT APPLICATION # 03 TIMINGS (02)		6	6	6	15	15

TITLE: USE OF LIBERTY ON LIBERTY-LINK SOYBEANS  
 CREATED: 05-15-2006 REVISED: 10-30-2006 COMPLETED: Y  
 PROJECT TYPE: HERBICIDE  
 LOCATION: HAYDEN FARM RESEARCHED BY: RITTER AND MENBERE  
 DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN  
 PLOT SIZE: 10.00 FT WIDE X 10.00 FT LONG  
 PLOT AREA: 100.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			CON %	CON %	CON %	CON %	CON %
	RATE	UNIT	TM	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL	1.00 PL ALL
011 RAW 07-07-06 P XANST								
012 RAW 07-07-06 P ELEIN								
013 RAW 07-28-06 P AMBEL								
014 RAW 07-28-06 P IPOSS								
015 RAW 07-28-06 P ELEIN								
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
2A»DUAL II MAGNUM (7.64EC) B CANOPY (75WG)	1.59 0.188	LAA LAA	0 0	10	100	57	57	100
3A»DUAL II MAGNUM (7.64EC) B»LIBERTY (1.67 EC) C FERTILIZER-21% AMMONIUM SULFATE	1.59 0.31 3.00	LAA LAA LMA	0 2 2	93	100	100	97	100
4A»DUAL II MAGNUM (7.64EC) B»LIBERTY (1.67 EC) C FERTILIZER-21% AMMONIUM SULFATE	1.59 0.42 3.00	LAA LAA LMA	0 2 2	90	100	97	93	100
5A PURSUIT (2SL) B SURFACTANT - NON-IONIC (SL) C FERTILIZER - 28%UAN	0.063 0.25 2.00	LAA PMV QMA	1 1 1	93	48	73	97	53
6A»LIBERTY (1.67 EC)	0.42	LAA	1	90	90	100	100	85
7A»LIBERTY (1.67 EC) B FERTILIZER-21% AMMONIUM SULFATE	0.42 3.00	LAA LMA	1 1	87	80	100	97	80
8A»LIBERTY (1.67 EC)	0.42	LAA	2	97	68	100	93	67
9A»LIBERTY (1.67 EC) B FERTILIZER-21% AMMONIUM SULFATE	0.42 3.00	LAA LMA	2 2	93	52	100	100	48
10A»LIBERTY (1.67 EC) B FERTILIZER-21% AMMONIUM SULFATE C»LIBERTY (1.67 EC) D FERTILIZER-21% AMMONIUM SULFATE	0.31 3.00 0.31 3.00	LAA LMA LAA LMA	1 1 2 2	92	93	100	100	95
11A»LIBERTY (1.67 EC) B FERTILIZER-21% AMMONIUM SULFATE C»LIBERTY (1.67 EC) D FERTILIZER-21% AMMONIUM SULFATE	0.42 3.00 0.42 3.00	LAA LMA LAA LMA	1 1 2 2	93	97	100	100	98
12A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
		LSD (0.05)		13.00	22.08	29.39	25.68	13.78
		SIGNIFICANCE OF F		**	**	**	**	**
		STANDARD DEVIATION		6.25	10.65	14.17	12.38	6.64
		COEFFICIENT OF VARIANCE		11.00	18.89	22.48	19.50	11.81
		DAT APPLICATION # 01 TIMINGS (00)		45	45	66	66	66
		DAT APPLICATION # 02 TIMINGS (01)		22	22	43	43	43
		DAT APPLICATION # 03 TIMINGS (02)		15	15	36	36	36

» = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 05-23-2006(1)  
 01 = POSPOS / EARLY POSTEMERGENCE 06-15-2006(2)  
 02 = MIDPOS / MID-POSTEMERGENCE 06-22-2006(3)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
001	GLXMA	% PHYTO	06-12-2006	01	P	GLXMA		RAW	ALL	PHY	%	---	1.00 PL	NO	0001	0	N
002	AMBEL	CON %	06-21-2006	03	P	AMBEL		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N
003	IPOSS	CON %	06-21-2006	04	P	IPOSS		RAW	ALL	CON	%	---	1.00 PL	NO	0001	0	N



## TITLE: USE OF LIBERTY ON LIBERTY-LINK SOYBEANS

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRT	SS	NOTE
004	XANST	CON %	06-21-2006	02	P	XANST		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
005	GLXMA	% PHYTO	06-28-2006	01	P	GLXMA		RAW	ALL	PHY	%	----	1.00 PL	NO	0001	0	N
006	AMBEL	CON %	06-28-2006	03	P	AMBEL		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
007	IPOSS	CON %	06-28-2006	04	P	IPOSS		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
008	XANST	CON %	06-28-2006	02	P	XANST		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
009	AMBEL	CON %	07-07-2006	03	P	AMBEL		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
010	IPOSS	CON %	07-07-2006	04	P	IPOSS		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
011	XANST	CON %	07-07-2006	02	P	XANST		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
012	XANST	CON %	07-07-2006	05	P	ELEIN		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
013	AMBEL	CON %	07-28-2006	03	P	AMBEL		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
014	IPOSS	CON %	07-28-2006	04	P	IPOSS		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
015	XANST	CON %	07-28-2006	05	P	ELEIN		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N

**TRIAL SUMMARY  
GENERAL SITE INFORMATION**

**TRIAL #:** US 007/06/01 001 A1      **ALTERNATE ID#:** CT 01 2006  
**PROTOCOL#:** US 007/06/01      **ALTERNATE ID#:** TOBACCO FARM-06  
**CREATED BY:** US RITTER R  
**CREATED:** 06-03-2006      **REVISED:** 10-30-2006      **COMPLETED:** Y  
**TITLE:** CANADA THISTLE CONTROL IN NO-TILL CORN  
**COORDINATOR:** US 000 Not Applicable  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** TO BE SELECTED  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. RICKY BAUER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** MANOR FARM      **TYPE:** FIELD TRIAL  
**CITY:** CLARKSVILLE      **SUBDIVISION:** MARYLAND  
**COUNTY:** HOWARD      **ZIP:** 21029  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** HF -- HAYDEN FARM      **DISTANCE TO TRIAL:** 105600 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**TRIAL INFORMATION**

<b>% SAND:</b> 70	<b>TILLAGE:</b> NOT	<b>DESIGN:</b> RCB	<b>RESIDUE TRIAL:</b> ---
<b>% SILT:</b> 20	<b>PH:</b> 6.3	<b>ACTUAL REPS:</b> 3	<b>ACTUAL BLOCKS:</b> 1
<b>% CLAY:</b> 10	<b>CEC:</b> 8.0	<b>ACTUAL TRTS:</b> 4	<b>ACTUAL SUB-BLOCKS:</b> 4
<b>TEXTURE:</b> SL	<b>% OM:</b> 2.3		
<b>SOIL GEN:</b> C			
<b>PREVIOUS CROP:</b> ZEAMX - CORN, VOLUNTEER, FIELD			
<b>% RESIDUE:</b> 50			
<b>PLOT WIDTH:</b> 10.00 FT			
<b>PLOT LENGTH:</b> 40.00 FT			
<b>PLOT AREA:</b> 400.00 SFT			

**SUBMITTED BY:** \_\_\_\_\_

**REVIEWED BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/08/2006.
2. Early post applications made 06/06/2006.
3. Study not taken to yield.

APPL. NUMBER	01	UNIT
TIMINGS	00	
TYPE	LIQMIX	
APPLICATION DATE	06-06-06	USA
TIME - BEGIN	17:00	24H
TIME - END	17:30	24H
AIR TEMPERATURE	80	F
% REL. HUMIDITY	65	
WIND DIRECTION	SOUTHWEST	
WIND SPEED	3.0	M/H
CLOUD COVER	PARTCLDY	
DEW	NO	
SOIL MOISTURE	DRY/MOIST	
SOIL CONDITION	FRIABLE	
SOIL TEMP/DEPTH	80/4.00	F /
METHOD	SPRAY	
EQUIPMENT	SPRBAC	
PROPELLANT	COMCO2	
PLACEMENT	BRFOSO	
NOZZLE	FLATFAN	
NOZZLE VOLUME	0.03	GPM
NOZZLE NUMBER	6	
NOZZLE SPACING	20.000	IN
SCREEN SIZE		
SCREEN SZ DESC	NA	
SWATH WIDTH	10.0	FT
BOOM HEIGHT	20.0	IN
SPEED	3.00	M/H
MIX SIZE	0.560	
MIX SIZE UNIT	GAL	
SPRAY VOLUME	18.00	
SCREEN SIZE	GPA	
PRESSURE	20.00	PSI
DILUENT	WATER	
INC. DATE		USA
INC. START		24H
INC. END		24H
INC. DEPTH		IN
INC. EQUIPMENT	---	

\* TIMING CODES  
00 = POSPOS / POSTEMERGENCE

\* NOZZLE DESCRIPTION  
01 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD      VAR/SPC INFO: PIONEER 34B24  
 TARGET: CROP    SITE: FG      POPULATION: 26000.00 IPA      PLANTED: 05-08-2006  
 PLANTING DEPTH: 1.7 IN      ROW WIDTH: 30.0 IN  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-08-2006	00	MED	26000.00 IPA	.	.	. IN	NA	
06-06-2006	14	MED	26000.00 IPA	10.00	10.00	10.00 IN	TUR	

02 P CIRAR - THISTLE, CANADA  
 TARGET: PEST    SITE: FG      PLANTED:  
 INFESTATION DATE: - - METHOD: NA

STAGE ON	STAGE CODE	POP.GEN.	POPULATION	MN SIZE	MX SIZE	AV SIZE	CROP VIGOR	NOTES
05-08-2006	14	MED	1.00 SQY	4.00	4.00	4.00 IN	TUR	
06-06-2006	19	MED	1.00 SQY	6.00	6.00	6.00 IN	TUR	

- \* STAGE CODE -- CORN
- 00 = DRY SEED (CARYOPSIS)
- 14 = 4 LEAVES UNFOLDED
- \* STAGE CODE -- GENERAL
- 14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- 19 = >8 TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED

**TITLE:** CANADA THISTLE CONTROL IN NO-TILL CORN  
**CREATED:** 06-03-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** MANOR FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 40.00 FT LONG  
**PLOT AREA:** 400.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE RATE UNIT TM	001 RAW		002 RAW		003 RAW		004 RAW	
		PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	PL ALL
1A»CALLISTO (4SC)	0.094 LAA 0	35	43	48	45				
B ATRAZINE 4L (SC)	0.25 LAA 0								
C ADJUVANT - COC (EC)	1.00 PMV 0								
D FERTILIZER - 28%UAN	2.50 PMV 0								
2A»IMPACT (2.8SC)	0.016 LAA 0	25	30	33	30				
B ATRAZINE 4L (SC)	0.50 LAA 0								
C ADJUVANT - VEGETABLE OIL	1.00 PMV 0								
D FERTILIZER - 28%UAN	2.50 PMV 0								
3A»AE 0172747 (5.25SC)	0.123 LAA 0	33	58	78	73				
B ATRAZINE 4L (SC)	0.50 LAA 0								
C ADJUVANT - VEGETABLE OIL	1.00 PMV 0								
D FERTILIZER - 28%UAN	1.50 QMA 0								
4A STINGER (3SL)	0.25 LAA 0	50	75	100	100				
B SURFACTANT - NON-IONIC (SL)	0.25 PMV 0								
	LSL (0.05)	6.45	7.26	11.17	14.42				
	SIGNIFICANCE OF F	**	**	**	**				
	STANDARD DEVIATION	2.64	3.00	4.56	5.89				
	COEFFICIENT OF VARIANCE	9.00	7.00	8.60	11.62				
	DAT APPLICATION # 01 TIMINGS (00)	7	15	31	49				

» = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = POSPOS / POSTEMERGENCE 06-06-2006(1)

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR	SS	NOTE
001	CIRAR	CON %	06-13-2006	02	P	CIRAR		RAW	ALL	CON %		---	1.00 PL	NO	0001	0	N
002	CIRAR	CON %	06-21-2006	02	P	CIRAR		RAW	ALL	CON %		---	1.00 PL	NO	0001	0	N
003	CIRAR	CON %	07-07-2006	02	P	CIRAR		RAW	ALL	CON %		---	1.00 PL	NO	0001	0	N
004	CIRAR	CON %	07-25-2006	02	P	CIRAR		RAW	ALL	CON %		---	1.00 PL	NO	0001	0	N

TRIAL SUMMARY  
GENERAL SITE INFORMATION

TRIAL #: US 007/06/01 001 LA      ALTERNATE ID#: LQ 01 2006  
 PROTOCOL#: US 007/06/01      ALTERNATE ID#: OF-2005  
 CREATED BY: US RITTER R      REVISED: 10-30-2006      COMPLETED: Y  
 CREATED: 04-20-2006  
 TITLE: PREEMERGENCE CONTROL OF TRIAZINE-RESISTANT COMMON LAMBSQUARTERS IN NO-TILL CORN  
 COORDINATOR: US 000 Not Applicable  
 TRIAL TYPE: HERBICIDE  
 PROJECT#2:  
 RESEARCHER: RITTER AND MENBERE      CONFIDENCE: HIGH CONFIDENCE IN TRIAL DATA  
 REPORTED BY: US Ron Ritter And Ron Ritter  
 COOPERATOR: MR. CARL SEILER      DATA SOURCE: UNIVERSITY  
 LOCATION: CARL SEILER FARM      TYPE: FIELD TRIAL  
 CITY: WESTMINSTER      SUBDIVISION: MARYLAND  
 COUNTY: CARROLL      ZIP: 21157  
 COUNTRY: UNITED STATES  
 WEATHER SITE: CARROL CO. -- ON-FARM - WESTMINSTER, 1 DISTANCE TO TRIAL: 52800 FT  
 WEEKS PRIOR TO FIRST APPLICATION: 4      WEEKS AFTER LAST APPLICATION: 4  
 EARLY WEATHER: NA      MID WEATHER: NA      LATE WEATHER: NA

SOIL INFORMATION

TRIAL INFORMATION

% SAND: 66	TILLAGE: NOT	DESIGN: RCB	RESIDUE TRIAL: ---
% SILT: 18	PH: 5.2	ACTUAL REPS: 3	ACTUAL BLOCKS: 1
% CLAY: 16	CEC: 6.1	ACTUAL TRTS: 16	ACTUAL SUB-BLOCKS: 16
TEXTURE: SL	% OM: 3.4		
SOIL GEN: C			
PREVIOUS CROP: ZEAMX - CORN, VOLUNTEER, FIELD			
% RESIDUE: 35			
PLOT WIDTH: 10.00 FT			
PLOT LENGTH: 20.00 FT			
PLOT AREA: 200.00 SFT			

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SUBMITTED BY: \_\_\_\_\_      REVIEWED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_      DATE: \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Field planted on 05/02/2006. Variety - Pioneer 33B54.
2. Preemergence applications made 05/04/2006.
3. No injury was noticed on the 05/30/2006 rating date.
4. Study was not taken to yield.



APPL. NUMBER	01	UNIT
TIMINGS	00	
TYPE	LIQMIX	
APPLICATION DATE	05-04-06	USA
TIME - BEGIN	16:00	24H
TIME - END	17:00	24H
AIR TEMPERATURE	70	F
% REL.HUMIDITY	45	
WIND DIRECTION	WEST	
WIND SPEED	3.0	M/H
CLOUD COVER	CLOUDY	
DEW	NO	
SOIL MOISTURE	DRY/DRY	
SOIL CONDITION	FRIABLE	
SOIL TEMP/DEPTH	68/4.00	F /
METHOD	SPRAY	
EQUIPMENT	SPRBAC	
PROPELLANT	COMCO2	
PLACEMENT	BRFOSO	
NOZZLE	FLATFAN	
NOZZLE VOLUME	0.03	GPM
NOZZLE NUMBER	6	
NOZZLE SPACING	20.000	IN
SCREEN SIZE		
SCREEN SZ DESC	NA	
SWATH WIDTH	10.0	FT
BOOM HEIGHT	20.0	IN
SPEED	3.00	M/H
MIX SIZE	0.560	
MIX SIZE UNIT	GAL	
SPRAY VOLUME	18.00	
SCREEN SIZE	GPA	
PRESSURE	20.00	PSI
DILUENT	WATER	
INC. DATE		USA
INC. START		24H
INC. END		24H
INC. DEPTH		IN
INC. EQUIPMENT	---	

## \* TIMING CODES

00 = PREPRE / PREEEMERGENCE

## \* NOZZLE DESCRIPTION

01 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD      VAR/SPC INFO: PIONEER 33B54  
 TARGET: CROP    SITE: FG      POPULATION: 28000.00 IPA      PLANTED: 05-02-2006  
 PLANTING DEPTH: 1.7 IN      ROW WIDTH: 30.0 IN  
 INFESTATION DATE:    - - METHOD: NA  
 STAGE ON    STAGE CODE POP.GEN.    POPULATION MN SIZE    MX SIZE    AV SIZE    CROP VIGOR    NOTES  
 05-02-2006    00      MED    28000.00 IPA      .      .      . IN      NA

02 P CHEAL - LAMBSQUARTERS, COMMON  
 TARGET: PEST    SITE: FG      PLANTED:  
 INFESTATION DATE:    - - METHOD: NA  
 STAGE ON    STAGE CODE POP.GEN.    POPULATION MN SIZE    MX SIZE    AV SIZE    CROP VIGOR    NOTES  
 05-04-2006    00      NA      IND      .      .      . IN      ---

03 P SETFA - FOXTAIL, GIANT  
 TARGET: PEST    SITE: FG      PLANTED:  
 INFESTATION DATE:    - - METHOD: NA  
 STAGE ON    STAGE CODE POP.GEN.    POPULATION MN SIZE    MX SIZE    AV SIZE    CROP VIGOR    NOTES  
 05-04-2006    00      NA      IND      .      .      . IN      ---

\* STAGE CODE -- CORN  
 00    = DRY SEED (CARYOPSIS)  
 \* STAGE CODE -- GENERAL  
 00    = DRY SEED; DORMANCY  
 \* STAGE CODE -- GENERAL GRASS  
 00    = DRY SEED (CARYOPSIS)

**TITLE:** PREEMERGENCE CONTROL OF TRIAZINE-RESISTANT COMMON LAMBSQUARTERS IN NO-TILL CORN  
**CREATED:** 04-20-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** CARL SEILER FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE RATE UNIT TM	001 RAW 002 RAW 003 RAW 004 RAW 005 RAW 05-19-06 05-30-06 05-30-06 06-13-06 06-13-06 P ZEAMX P SETFA P CHEAL P SETFA P CHEAL				
		VAR 01 PHY % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL
1A»BICEP II MAGNUM (5.5SC)	2.89 LAA 0	0	100	63	95	45
2A»LUMAX (3.94 SE)	2.46 LAA 0	0	100	100	98	100
3A»LEXAR (3.7SC)	2.78 LAA 0	0	100	100	95	100
4A»BICEP II MAGNUM (5.5SC) B»BASIS (75 DF)	2.89 LAA 0 0.016 LAA 0	0	100	98	97	97
5A»BICEP II MAGNUM (5.5SC) B»BASIS (75 DF)	2.89 LAA 0 0.023 LAA 0	0	100	100	97	97
6A»BICEP II MAGNUM (5.5SC) B»BALANCE PRO (4SC)	2.89 LAA 0 0.07 LAA 0	3	100	100	98	100
7A»RADIUS (4SC)	0.66 LAA 0	7	100	100	100	100
8A»KEYSTONE (5.25SE)	2.89 LAA 0	0	100	93	97	87
9A»KEYSTONE (5.25SE) B»HORNET (78.5DF)	2.89 LAA 0 0.147 LAA 0	0	100	100	98	100
10A»KEYSTONE (5.25SE) B»PYTHON (80WG)	2.89 LAA 0 0.04 LAA 0	0	100	100	98	100
11A»GUARDSMAN MAX (5L)	2.50 LAA 0	0	100	97	97	87
12A»GUARDSMAN MAX (5L) B»PROWL H2O (3.8CS)	2.50 LAA 0 1.50 LAA 0	0	100	98	97	98
13A»BICEP II MAGNUM (5.5SC) B»RESOLVE (25DF)	2.89 LAA 0 0.016 LAA 0	0	100	98	98	100
14A»PARALLEL PLUS EC (5.5L)	3.09 LAA 0	0	100	60	95	43
15A»PARALLEL PLUS EC (5.5L) B»RESOLVE (25DF)	3.09 LAA 0 0.016 LAA 0	0	100	100	95	97
16A ATRAZINE 4L (SC) B PRINCEP 4L (SC)	1.50 LAA 0 1.50 LAA 0	0	100	40	90	12
LSD (0.05)		3.51	0.00	19.13	6.77	24.73
SIGNIFICANCE OF F		*	NS	**	NS	**
STANDARD DEVIATION		1.72	0.00	9.37	3.32	12.11
COEFFICIENT OF VARIANCE		337.31	0.00	12.67	4.21	17.43
DAT APPLICATION # 01 TIMINGS (00)		15	26	26	40	40

**TITLE:** PREEMERGENCE CONTROL OF TRIAZINE-RESISTANT COMMON LAMBSQUARTERS IN NO-TILL CORN  
**CREATED:** 04-20-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** CARL SEILER FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	009 RAW	010 RAW	
	RATE	UNIT	TM	06-21-06 P SETFA	06-21-06 P CHEAL	07-07-06 P SETFA	07-07-06 P CHEAL	07-25-06 P SETFA	
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	
1A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	90	27	90	12	88	
2A»LUMAX (3.94 SE)	2.46	LAA	0	95	100	90	100	88	
3A»LEXAR (3.7SC)	2.78	LAA	0	92	100	90	100	88	
4A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	93	93	88	93	78	
B»BASIS (75 DF)	0.016	LAA	0						
5A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	95	95	88	93	85	
B»BASIS (75 DF)	0.023	LAA	0						
6A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	97	98	93	98	92	
B»BALANCE PRO (4SC)	0.07	LAA	0						
7A»RADIUS (4SC)	0.66	LAA	0	98	100	93	100	93	
8A»KEYSTONE (5.25SE)	2.89	LAA	0	90	82	82	75	75	
9A»KEYSTONE (5.25SE)	2.89	LAA	0	93	100	92	98	87	
B»HORNET (78.5DF)	0.147	LAA	0						
10A»KEYSTONE (5.25SE)	2.89	LAA	0	93	100	87	100	80	
B»PYTHON (80WG)	0.04	LAA	0						
11A»GUARDSMAN MAX (5L)	2.50	LAA	0	97	78	93	72	92	
12A»GUARDSMAN MAX (5L)	2.50	LAA	0	95	100	95	98	95	
B»PROWL H20 (3.8CS)	1.50	LAA	0						
13A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	95	98	95	97	93	
B»RESOLVE (25DF)	0.016	LAA	0						
14A»PARALLEL PLUS EC (5.5L)	3.09	LAA	0	93	22	93	12	90	
15A»PARALLEL PLUS EC (5.5L)	3.09	LAA	0	93	93	92	92	90	
B»RESOLVE (25DF)	0.016	LAA	0						
16A ATRAZINE 4L (SC)	1.50	LAA	0	83	10	80	10	73	
B PRINCEP 4L (SC)	1.50	LAA	0						
				LSD (0.05)	11.59	21.13	15.12	16.90	20.67
				SIGNIFICANCE OF F	NS	**	NS	**	NS
				STANDARD DEVIATION	5.68	10.35	7.40	8.28	10.12
				COEFFICIENT OF VARIANCE	7.45	15.64	10.06	13.00	14.29
				DAT APPLICATION # 01 TIMINGS (00)	48	48	64	64	82

**TITLE:** PREEMERGENCE CONTROL OF TRIAZINE-RESISTANT COMMON LAMBSQUARTERS IN NO-TILL CORN  
**CREATED:** 04-20-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** CARL SEILER FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			CON %
	RATE	UNIT	TM	PL ALL
1A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	0
2A»LUMAX (3.94 SE)	2.46	LAA	0	100
3A»LEXAR (3.7SC)	2.78	LAA	0	100
4A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	88
B»BASIS (75 DF)	0.016	LAA	0	
5A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	90
B»BASIS (75 DF)	0.023	LAA	0	
6A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	98
B»BALANCE PRO (4SC)	0.07	LAA	0	
7A»RADIUS (4SC)	0.66	LAA	0	98
8A»KEYSTONE (5.25SE)	2.89	LAA	0	60
9A»KEYSTONE (5.25SE)	2.89	LAA	0	98
B»HORNET (78.5DF)	0.147	LAA	0	
10A»KEYSTONE (5.25SE)	2.89	LAA	0	100
B»PYTHON (80WG)	0.04	LAA	0	
11A»GUARDSMAN MAX (5L)	2.50	LAA	0	63
12A»GUARDSMAN MAX (5L)	2.50	LAA	0	95
B»PROWL H20 (3.8CS)	1.50	LAA	0	
13A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	92
B»RESOLVE (25DF)	0.016	LAA	0	
14A»PARALLEL PLUS EC (5.5L)	3.09	LAA	0	0
15A»PARALLEL PLUS EC (5.5L)	3.09	LAA	0	90
B»RESOLVE (25DF)	0.016	LAA	0	
16A ATRAZINE 4L (SC)	1.50	LAA	0	0
B PRINCEP 4L (SC)	1.50	LAA	0	
	LSD (0.05)			15.65
	SIGNIFICANCE OF F			**
	STANDARD DEVIATION			7.66
	COEFFICIENT OF VARIANCE			12.80
	DAT APPLICATION # 01 TIMINGS (00)			82

» = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEEMERGENCE 05-04-2006(1)

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR	SS	NOTE
001	ZEAMK	PHY %	05-19-2006	01	P	ZEAMK		RAW	ALL	PHY	%	H	1.00 PL	NO	0001	0	N
002	SETFA	CON %	05-30-2006	03	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
003	CHEAL	CON %	05-30-2006	02	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
004	SETFA	CON %	06-13-2006	03	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
005	CHEAL	CON %	06-13-2006	02	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N

TITLE: PREEMERGENCE CONTROL OF TRIAZINE-RESISTANT COMMON LAMBSQUARTERS IN NO-TILL CORN

H#	CUSTOM#1	CUSTOM#2	EV. DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTR	SS	NOTE
006	SETFA	CON %	06-21-2006	03	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
007	CHEAL	CON %	06-21-2006	02	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
008	SETFA	CON %	07-07-2006	03	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
009	CHEAL	CON %	07-07-2006	02	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
010	SETFA	CON %	07-25-2006	03	P	SETFA		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N
011	CHEAL	CON %	07-25-2006	02	P	CHEAL		RAW	ALL	CON	%	H	1.00 PL	NO	0001	0	N

## \* VARIETY/SPECIE INFO CODES

VAR 01 = PIONEER 33B54

## \* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = PIONEER 33B54

**TRIAL SUMMARY  
GENERAL SITE INFORMATION**

**TRIAL #:** US 007/06/01 001 LB      **ALTERNATE ID#:** LQ 02 2006  
**PROTOCOL#:** US 007/06/01      **ALTERNATE ID#:** TOBACCO FARM-06  
**CREATED BY:** US RITTER R  
**CREATED:** 04-20-2006      **REVISED:** 10-30-2006      **COMPLETED:** Y  
**TITLE:** POSTEMERGENCE CONTROL OF TRIAZINE-RESISTANT COMMON LAMBSQUARTERS AND GIANT  
 FOXTAIL IN NO-TILL CORN  
**COORDINATOR:** US 000 Not Applicable  
**TRIAL TYPE:** HERBICIDE  
**PROJECT#2:**  
**RESEARCHER:** RITTER AND MENBERE      **CONFIDENCE:** HIGH CONFIDENCE IN TRIAL DATA  
**REPORTED BY:** US Ron Ritter And Ron Ritter  
**COOPERATOR:** MR. CARL SEILER      **DATA SOURCE:** UNIVERSITY  
**LOCATION:** CARL SEILER FARM      **TYPE:** FIELD TRIAL  
**CITY:** WESTMINSTER      **SUBDIVISION:** MARYLAND  
**COUNTY:** CARROLL      **ZIP:** 21157  
**COUNTRY:** UNITED STATES  
**WEATHER SITE:** CARROL CO. -- ON-FARM - WESTMINSTER, I **DISTANCE TO TRIAL:** 52800 FT  
**WEEKS PRIOR TO FIRST APPLICATION:** 4      **WEEKS AFTER LAST APPLICATION:** 4  
**EARLY WEATHER:** NA      **MID WEATHER:** NA      **LATE WEATHER:** NA

**SOIL INFORMATION**

**% SAND:** 66      **TILLAGE:** NOT  
**% SILT:** 18      **PH:** 5.2  
**% CLAY:** 16      **CEC:** 6.1  
**TEXTURE:** SL      **% OM:** 3.4  
**SOIL GEN:** C  
**PREVIOUS CROP:** ZEAMX - CORN, VOLUNTEER, FIELD  
**% RESIDUE:** 0  
**PLOT WIDTH:** 10.00 FT  
**PLOT LENGTH:** 20.00 FT  
**PLOT AREA:** 200.00 SFT

**TRIAL INFORMATION**

**DESIGN:** RCB      **RESIDUE TRIAL:** ---  
**ACTUAL REPS:** 3      **ACTUAL BLOCKS:** 1  
**ACTUAL TRTS:** 14      **ACTUAL SUB-BLOCKS:** 14

SUBMITTED BY: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

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**ABSTRACT**

## A. Trial Initiation

1. Study planted 05/02/2006. Variety - Pioneer 33B54.
2. Preemergence applications made 05/04/2006.
3. Early post applications made 06/01/2006.
4. Mid-post applications made 06/06/2006.
5. Study was not taken to yield.



APPL. NUMBER	01	02	03	UNIT
TIMINGS	00	01	02	
TYPE	LIQMIX	LIQMIX	LIQMIX	
APPLICATION DATE	05-04-06	06-01-06	06-06-06	USA
TIME - BEGIN	16:00	15:00	15:30	24H
TIME - END	17:00	15:30	16:00	24H
AIR TEMPERATURE	70	90	82	F
% REL. HUMIDITY	45	75	75	
WIND DIRECTION	WEST	SOUTHWEST	SOUTHWEST	
WIND SPEED	3.0	3.0	3.0	M/H
CLOUD COVER	CLOUDY	CLOUDY	PARTCLDY	
DEW	NO	NO	NO	
SOIL MOISTURE	DRY/DRY	DRY/MOIST	DRY/MOIST	
SOIL CONDITION	FRIABLE	FRIABLE	FRIABLE	
SOIL TEMP/DEPTH	68/4.00	88/4.00	80/4.00	F /
METHOD	SPRAY	SPRAY	SPRAY	
EQUIPMENT	SPRBAC	SPRBAC	SPRBAC	
PROPELLANT	COMCO2	COMCO2	COMCO2	
PLACEMENT	BRFOSO	BRFOSO	BRFOSO	
NOZZLE	FLATFAN	FLATFAN	FLATFAN	
NOZZLE VOLUME	0.03	0.03	0.03	GPM
NOZZLE NUMBER	6	6	6	
NOZZLE SPACING	20.000	20.000	20.000	IN
SCREEN SIZE				
SCREEN SZ DESC	NA	NA	NA	
SWATH WIDTH	10.0	10.0	10.0	FT
BOOM HEIGHT	20.0	20.0	20.0	IN
SPEED	3.00	3.00	3.00	M/H
MIX SIZE	0.560	0.560	0.560	
MIX SIZE UNIT	GAL	GAL	GAL	
SPRAY VOLUME	18.00	18.00	18.00	
SCREEN SIZE	GPA	GPA	GPA	
PRESSURE	20.00	20.00	20.00	PSI
DILUENT	WATER	WATER	WATER	
INC. DATE				USA
INC. START				24H
INC. END				24H
INC. DEPTH				IN
INC. EQUIPMENT	---	---	---	

## \* TIMING CODES

00 = PREPRE / PREEMERGENCE  
01 = POSPOS / EARLY POSTEMERGENCE  
02 = MIDPOS / MID-POSTEMERGENCE

## \* NOZZLE DESCRIPTION

01 = SS-8003  
02 = SS-8003  
03 = SS-8003

01 P ZEAMX - CORN, VOLUNTEER, FIELD      VAR/SPC INFO: PIONEER 33B54  
**TARGET:** CROP    **SITE:** FG      **POPULATION:** 28000.00 IPA    **PLANTED:** 05-02-2006  
**PLANTING DEPTH:** 1.7 IN      **ROW WIDTH:** 30.0 IN  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON**    **STAGE CODE**    **POP.GEN.**    **POPULATION**    **MN SIZE**    **MX SIZE**    **AV SIZE**    **CROP VIGOR**    **NOTES**  
05-02-2006      00            MED      28000.00 IPA      .            .            . IN            NA  
06-01-2006      14            MED      28000.00 IPA      12.00      12.00      12.00 IN      TUR  
06-06-2006      15            MED      28000.00 IPA      14.00      14.00      14.00 IN      TUR

02 P CHEAL - LAMBSQUARTERS, COMMON  
**TARGET:** PEST    **SITE:** FG      **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON**    **STAGE CODE**    **POP.GEN.**    **POPULATION**    **MN SIZE**    **MX SIZE**    **AV SIZE**    **CROP VIGOR**    **NOTES**  
05-04-2006      00            NA            .            IND            .            . IN            ---  
06-01-2006      14            LOW          1.00 SQY      2.00          2.00          2.00 IN      TUR  
06-06-2006      14            LOW          1.00 SQY      2.00          2.00          2.00 IN      TUR

03 P SETFA - FOXTAIL, GIANT  
**TARGET:** PEST    **SITE:** FG      **PLANTED:**  
**INFESTATION DATE:** - - **METHOD:** NA  
**STAGE ON**    **STAGE CODE**    **POP.GEN.**    **POPULATION**    **MN SIZE**    **MX SIZE**    **AV SIZE**    **CROP VIGOR**    **NOTES**  
05-04-2006      00            NA            .            IND            .            . IN            ---  
06-01-2006      13            MED          3.00 IF2      3.00          4.00          3.50 IN      TUR  
06-06-2006      14            LOW          1.00 SQY      3.00          3.00          3.00 IN      TUR

- \* **STAGE CODE -- CORN**
- 00 = DRY SEED (CARYOPSIS)
- 14 = 4 LEAVES UNFOLDED
- 15 = 5 LEAVES UNFOLDED
- \* **STAGE CODE -- GENERAL**
- 00 = DRY SEED; DORMANCY
- 14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
- \* **STAGE CODE -- GENERAL GRASS**
- 00 = DRY SEED (CARYOPSIS)
- 13 = 3 LEAVES UNFOLDED
- 14 = 4 LEAVES UNFOLDED

**TITLE:** POSTEMERGENCE CONTROL OF TRIAZINE-RESISTANT COMMON LAMBSQUARTERS AND GIANT FOXTAIL IN NO-TILL CORN  
**CREATED:** 04-20-2006 **REVISED:** 10-30-2006 **COMPLETED:** Y  
**PROJECT TYPE:** HERBICIDE  
**LOCATION:** CARL SEILER FARM **RESEARCHED BY:** RITTER AND MENBERE  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**PLOT AREA:** 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			PL ALL	PL ALL	PL ALL	PL ALL	PL ALL
	RATE	UNIT	TM					
				001 RAW 06-06-06 P ZEAMX 15 VAR 01 PHY % 1.00	002 RAW 06-06-06 P SETFA 14 CON % 1.00	003 RAW 06-06-06 P CHEAL 14 CON % 1.00	004 RAW 06-13-06 P SETFA CON % 1.00	005 RAW 06-13-06 P CHEAL CON % 1.00
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
2A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	0	90	57	92	40
3A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	0	90	53	85	83
B»CALLISTO (4SC)	0.094	LAA	2					
C ATRAZINE 4L (SC)	0.25	LAA	2					
D ADJUVANT - COC (EC)	1.00	PMV	2					
E FERTILIZER - 28%UAN	2.50	PMV	2					
4A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	0	90	57	100	83
B»IMPACT (2.8SC)	0.016	LAA	2					
C ATRAZINE 4L (SC)	0.50	LAA	2					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	2					
E FERTILIZER - 28%UAN	2.50	PMV	2					
5A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	0	83	47	95	92
B»AE 0172747 (5.25SC)	0.123	LAA	2					
C ATRAZINE 4L (SC)	0.50	LAA	2					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	2					
E FERTILIZER - 28%UAN	1.50	QMA	2					
6A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	0	90	67	97	87
B»DICAM (4SL)	0.50	LAA	2					
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
7A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	0	90	80	90	87
B»DISTINCT (70WG)	0.175	LAA	2					
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
D FERTILIZER - 28%UAN	1.25	PMV	2					
8A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	0	90	57	98	87
B»BAS 799 (56WG)	0.175	LAA	2					
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
D FERTILIZER - 28%UAN	1.25	PMV	2					
9A»CALLISTO (4SC)	0.094	LAA	1	0	30	63	67	90
B ACCENT (75WG)	0.031	LAA	1					
C ATRAZINE 4L (SC)	0.25	LAA	1					
D ADJUVANT - COC (EC)	1.00	PMV	1					
E FERTILIZER - 28%UAN	2.50	PMV	1					
10A»IMPACT (2.8SC)	0.016	LAA	1	0	40	63	87	88
B ACCENT (75WG)	0.031	LAA	1					
C ATRAZINE 4L (SC)	0.50	LAA	1					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	1					
E FERTILIZER - 28%UAN	2.50	PMV	1					
11A»AE 0172747 (5.25SC)	0.123	LAA	1	0	30	60	83	90
B ACCENT (75WG)	0.031	LAA	1					
C ATRAZINE 4L (SC)	0.50	LAA	1					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	1					
E FERTILIZER - 28%UAN	1.50	QMA	1					
12A»DISTINCT (70WG)	0.175	LAA	1	0	30	70	72	87
B ACCENT (75WG)	0.031	LAA	1					
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1					
D FERTILIZER - 28%UAN	1.25	PMV	1					

TITLE: POSTEMERGENCE CONTROL OF TRIAZINE-RESISTANT COMMON LAMBSQUARTERS AND GIANT FOXTAIL IN NO-TILL CORN

TRT TREATMENT NUM COMPONENT	DOSAGE		TM	001 RAW	002 RAW	003 RAW	004 RAW	005 RAW	
	RATE	UNIT		06-06-06	06-06-06	06-06-06	06-13-06	06-13-06	
				P ZEAMX 15	P SETFA 14	P CHEAL 14	P SETFA	P CHEAL	
				VAR 01 PHY % 1.00	CON % 1.00	CON % 1.00	CON % 1.00	CON % 1.00	
				PL ALL	PL ALL	PL ALL	PL ALL	PL ALL	
13A»BAS 799 (56WG)	0.175	LAA	1	0	30	80	80	88	
B ACCENT (75WG)	0.031	LAA	1						
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1						
D FERTILIZER - 28%UAN	1.25	PMV	1						
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0	
				LSD (0.05)	0.00	9.17	30.63	8.61	21.32
				SIGNIFICANCE OF F	NS	**	**	**	**
				STANDARD DEVIATION	0.00	4.46	14.90	4.19	10.37
				COEFFICIENT OF VARIANCE	0.00	9.77	33.91	6.87	17.75
				DAT APPLICATION # 01 TIMINGS (00)	33	33	33	40	40
				DAT APPLICATION # 02 TIMINGS (01)	5	5	5	12	12
				DAT APPLICATION # 03 TIMINGS (02)	0	0	0	7	7

TITLE: POSTEMERGENCE CONTROL OF TRIAZINE-RESISTANT COMMON LAMBSQUARTERS AND GIANT FOXTAIL IN NO-TILL CORN

CREATED: 04-20-2006 REVISED: 10-30-2006

COMPLETED: Y

PROJECT TYPE: HERBICIDE

LOCATION: CARL SEILER FARM

RESEARCHED BY: RITTER AND MENBERE

DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN

PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG

PLOT AREA: 200.00 SFT

REPS: 03

TRT TREATMENT NUM COMPONENT	DOSAGE			006 RAW	007 RAW	008 RAW	009 RAW	010 RAW
	RATE	UNIT	TM	06-21-06 P SETFA	06-21-06 P CHEAL	07-07-06 P SETFA	07-07-06 P CHEAL	07-25-06 P SETFA
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL
1A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
2A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	88	30	87	30	87
3A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	85	100	77	100	70
B»CALLISTO (4SC)	0.094	LAA	2					
C ATRAZINE 4L (SC)	0.25	LAA	2					
D ADJUVANT - COC (EC)	1.00	PMV	2					
E FERTILIZER - 28%UAN	2.50	PMV	2					
4A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	100	98	97	100	95
B»IMPACT (2.8SC)	0.016	LAA	2					
C ATRAZINE 4L (SC)	0.50	LAA	2					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	2					
E FERTILIZER - 28%UAN	2.50	PMV	2					
5A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	97	100	93	100	92
B»AE 0172747 (5.25SC)	0.123	LAA	2					
C ATRAZINE 4L (SC)	0.50	LAA	2					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	2					
E FERTILIZER - 28%UAN	1.50	QMA	2					
6A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	90	95	83	100	80
B»DICAM (4SL)	0.50	LAA	2					
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
7A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	95	98	90	98	87
B»DISTINCT (70WG)	0.175	LAA	2					
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
D FERTILIZER - 28%UAN	1.25	PMV	2					
8A»BICEP II MAGNUM (5.5SC)	2.89	LAA	0	98	95	93	100	93
B»BAS 799 (56WG)	0.175	LAA	2					
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2					
D FERTILIZER - 28%UAN	1.25	PMV	2					
9A»CALLISTO (4SC)	0.094	LAA	1	87	100	83	100	77
B ACCENT (75WG)	0.031	LAA	1					
C ATRAZINE 4L (SC)	0.25	LAA	1					
D ADJUVANT - COC (EC)	1.00	PMV	1					
E FERTILIZER - 28%UAN	2.50	PMV	1					
10A»IMPACT (2.8SC)	0.016	LAA	1	97	88	90	92	90
B ACCENT (75WG)	0.031	LAA	1					
C ATRAZINE 4L (SC)	0.50	LAA	1					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	1					
E FERTILIZER - 28%UAN	2.50	PMV	1					
11A»AE 0172747 (5.25SC)	0.123	LAA	1	92	100	88	100	85
B ACCENT (75WG)	0.031	LAA	1					
C ATRAZINE 4L (SC)	0.50	LAA	1					
D ADJUVANT - VEGETABLE OIL	1.00	PMV	1					
E FERTILIZER - 28%UAN	1.50	QMA	1					
12A»DISTINCT (70WG)	0.175	LAA	1	90	97	82	98	78
B ACCENT (75WG)	0.031	LAA	1					
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1					
D FERTILIZER - 28%UAN	1.25	PMV	1					

TITLE: POSTEMERGENCE CONTROL OF TRIAZINE-RESISTANT COMMON LAMBSQUARTERS AND GIANT FOXTAIL IN NO-TILL CORN

TRT TREATMENT NUM COMPONENT	DOSAGE		TM	006 RAW	007 RAW	008 RAW	009 RAW	010 RAW
	RATE	UNIT		06-21-06 P SETFA	06-21-06 P CHEAL	07-07-06 P SETFA	07-07-06 P CHEAL	07-25-06 P SETFA
				CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL	CON % 1.00 PL ALL
13A»BAS 799 (56WG)	0.175	LAA	1	92	100	85	98	78
B ACCENT (75WG)	0.031	LAA	1					
C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1					
D FERTILIZER - 28%UAN	1.25	PMV	1					
14A UNTREATED CHECK	0.00	NA	0	0	0	0	0	0
		LSD (0.05)		7.66	24.19	11.67	23.50	13.61
		SIGNIFICANCE OF F		**	**	**	**	**
		STANDARD DEVIATION		3.73	11.76	5.67	11.43	6.62
		COEFFICIENT OF VARIANCE		5.76	18.31	9.28	17.55	11.22
		DAT APPLICATION # 01 TIMINGS (00)		48	48	64	64	82
		DAT APPLICATION # 02 TIMINGS (01)		20	20	36	36	54
		DAT APPLICATION # 03 TIMINGS (02)		15	15	31	31	49

TITLE: POSTEMERGENCE CONTROL OF TRIAZINE-RESISTANT COMMON LAMBSQUARTERS AND GIANT FOXTAIL IN NO-TILL CORN

CREATED: 04-20-2006 REVISED: 10-30-2006

COMPLETED: Y

PROJECT TYPE: HERBICIDE

LOCATION: CARL SEILER FARM

RESEARCHED BY: RITTER AND MENBERE

DESIGN: RANDOMIZED COMPLETE BLOCK DESIGN

PLOT SIZE: 10.00 FT WIDE X 20.00 FT LONG

PLOT AREA: 200.00 SFT

REPS: 03

011 RAW  
07-25-06  
P CHEAL

TRT NUM	TREATMENT COMPONENT	DOSAGE			CON %
		RATE	UNIT	TM	PL ALL
1A	UNTREATED CHECK	0.00	NA	0	0
2A	BICEP II MAGNUM (5.5SC)	2.89	LAA	0	28
3A	BICEP II MAGNUM (5.5SC)	2.89	LAA	0	100
	B>CALLISTO (4SC)	0.094	LAA	2	
	C ATRAZINE 4L (SC)	0.25	LAA	2	
	D ADJUVANT - COC (EC)	1.00	PMV	2	
	E FERTILIZER - 28%UAN	2.50	PMV	2	
4A	BICEP II MAGNUM (5.5SC)	2.89	LAA	0	97
	B>IMPACT (2.8SC)	0.016	LAA	2	
	C ATRAZINE 4L (SC)	0.50	LAA	2	
	D ADJUVANT - VEGETABLE OIL	1.00	PMV	2	
	E FERTILIZER - 28%UAN	2.50	PMV	2	
5A	BICEP II MAGNUM (5.5SC)	2.89	LAA	0	100
	B>AE 0172747 (5.25SC)	0.123	LAA	2	
	C ATRAZINE 4L (SC)	0.50	LAA	2	
	D ADJUVANT - VEGETABLE OIL	1.00	PMV	2	
	E FERTILIZER - 28%UAN	1.50	QMA	2	
6A	BICEP II MAGNUM (5.5SC)	2.89	LAA	0	100
	B>DICAM (4SL)	0.50	LAA	2	
	C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2	
7A	BICEP II MAGNUM (5.5SC)	2.89	LAA	0	98
	B>DISTINCT (70WG)	0.175	LAA	2	
	C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2	
	D FERTILIZER - 28%UAN	1.25	PMV	2	
8A	BICEP II MAGNUM (5.5SC)	2.89	LAA	0	100
	B>BAS 799 (56WG)	0.175	LAA	2	
	C SURFACTANT - NON-IONIC (SL)	0.25	PMV	2	
	D FERTILIZER - 28%UAN	1.25	PMV	2	
9A	CALLISTO (4SC)	0.094	LAA	1	100
	B ACCENT (75WG)	0.031	LAA	1	
	C ATRAZINE 4L (SC)	0.25	LAA	1	
	D ADJUVANT - COC (EC)	1.00	PMV	1	
	E FERTILIZER - 28%UAN	2.50	PMV	1	
10A	IMPACT (2.8SC)	0.016	LAA	1	83
	B ACCENT (75WG)	0.031	LAA	1	
	C ATRAZINE 4L (SC)	0.50	LAA	1	
	D ADJUVANT - VEGETABLE OIL	1.00	PMV	1	
	E FERTILIZER - 28%UAN	2.50	PMV	1	
11A	AE 0172747 (5.25SC)	0.123	LAA	1	98
	B ACCENT (75WG)	0.031	LAA	1	
	C ATRAZINE 4L (SC)	0.50	LAA	1	
	D ADJUVANT - VEGETABLE OIL	1.00	PMV	1	
	E FERTILIZER - 28%UAN	1.50	QMA	1	
12A	DISTINCT (70WG)	0.175	LAA	1	97
	B ACCENT (75WG)	0.031	LAA	1	
	C SURFACTANT - NON-IONIC (SL)	0.25	PMV	1	
	D FERTILIZER - 28%UAN	1.25	PMV	1	

TITLE: POSTEMERGENCE CONTROL OF TRIAZINE-RESISTANT COMMON LAMBSQUARTERS AND GIANT FOXTAIL IN NO-TILL CORN

TRT TREATMENT NUM COMPONENT	DOSAGE RATE UNIT TM	CON % 1.00 PL ALL
13A»BAS 799 (56WG)	0.175 LAA 1	98
B ACCENT (75WG)	0.031 LAA 1	
C SURFACTANT - NON-IONIC (SL)	0.25 PMV 1	
D FERTILIZER - 28%UAN	1.25 PMV 1	
14A UNTREATED CHECK	0.00 NA 0	0
	LSD (0.05)	22.39
	SIGNIFICANCE OF F	**
	STANDARD DEVIATION	10.89
	COEFFICIENT OF VARIANCE	17.00
	DAT APPLICATION # 01 TIMINGS (00)	82
	DAT APPLICATION # 02 TIMINGS (01)	54
	DAT APPLICATION # 03 TIMINGS (02)	49

» = SUPPLEMENTAL CHEMICAL

\* TIMING CODES

00 = PREPRE / PREEMERGENCE 05-04-2006(1)  
01 = POSPOS / EARLY POSTEMERGENCE 06-01-2006(2)  
02 = MIDPOS / MID-POSTEMERGENCE 06-06-2006(3)

H#	CUSTOM#1	CUSTOM#2	EV.DATE	S#	TYP	SPECIE	STAGE	RAW	PRT	SYM	MTH	CNF	BASIS	C.M	CTRTR	SS	NOTE
001	ZEAMX	% PHYTO	06-06-2006	01	P	ZEAMX	15	RAW	ALL	PHY	%	----	1.00 PL	NO	0001	0	N
002	SETFA	CON %	06-06-2006	03	P	SETFA	14	RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
003	CHEAL	CON %	06-06-2006	02	P	CHEAL	14	RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
004	SETFA	CON %	06-13-2006	03	P	SETFA		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
005	CHEAL	CON %	06-13-2006	02	P	CHEAL		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
006	SETFA	CON %	06-21-2006	03	P	SETFA		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
007	CHEAL	CON %	06-21-2006	02	P	CHEAL		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
008	SETFA	CON %	07-07-2006	03	P	SETFA		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
009	CHEAL	CON %	07-07-2006	02	P	CHEAL		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
010	SETFA	CON %	07-25-2006	03	P	SETFA		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N
011	CHEAL	CON %	07-25-2006	02	P	CHEAL		RAW	ALL	CON	%	----	1.00 PL	NO	0001	0	N

\* VARIETY/SPECIE INFO CODES

VAR 01 = PIONEER 33B54

\* SPECIES COMMON NAME - VARIETY/SPECIE INFO (IF APPLICABLE)

01 = PIONEER 33B54

\* STAGE CODE

14 = 4 LEAVES UNFOLDED  
14 = 4TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED  
15 = 5 LEAVES UNFOLDED





**SITE NAME:** WREC - WYE RESEARCH AND EDUCATION CENTER  
**PRECIPITATION UNIT:** IN - INCHES  
**TEMPERATURE UNIT:** F - DEGREES FAHRENHEIT  
**DEPTH UNIT:** IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
05-01-2006	23:59	AUT	M	69	41	55	M	M
05-02-2006	23:59	AUT	M	74	40	57	M	M
05-03-2006	23:59	AUT	M	73	47	60	M	M
05-04-2006	23:59	AUT	M	78	47	63	M	M
05-05-2006	23:59	AUT	M	79	58	69	M	M
05-06-2006	23:59	AUT	0.06	78	56	67	M	M
05-07-2006	23:59	AUT	M	67	47	57	M	M
05-08-2006	23:59	AUT	M	60	50	55	M	M
05-09-2006	23:59	AUT	M	71	50	61	M	M
05-10-2006	23:59	AUT	M	76	45	61	M	M
05-11-2006	23:59	AUT	0.35	70	53	62	M	M
05-12-2006	23:59	AUT	M	70	52	61	M	M
05-13-2006	23:59	AUT	0.02	71	53	62	M	M
05-14-2006	23:59	AUT	0.07	65	54	60	M	M
05-15-2006	23:59	AUT	0.05	70	53	62	M	M
05-16-2006	23:59	AUT	0.05	67	54	60	M	M
05-17-2006	23:59	AUT	0.02	72	51	61	M	M
05-18-2006	23:59	AUT	0.11	73	54	64	M	M
05-19-2006	23:59	AUT	M	64	53	58	M	M
05-20-2006	23:59	AUT	M	73	54	64	M	M
05-21-2006	23:59	AUT	M	73	47	60	M	M
05-22-2006	23:59	AUT	M	69	49	59	M	M
05-23-2006	23:59	AUT	M	67	44	56	M	M
05-24-2006	23:59	AUT	M	71	46	58	M	M
05-25-2006	23:59	AUT	M	75	57	66	M	M
05-26-2006	23:59	AUT	0.07	80	64	72	M	M
05-27-2006	23:59	AUT	M	82	63	73	M	M
05-28-2006	23:59	AUT	M	85	61	73	M	M
05-29-2006	23:59	AUT	M	86	60	73	M	M
05-30-2006	23:59	AUT	M	91	70	80	M	M
05-31-2006	23:59	AUT	M	85	63	74	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			0.80	74	53	64	***	

**SITE NAME:** WREC - WYE RESEARCH AND EDUCATION CENTER  
**PRECIPITATION UNIT:** IN - INCHES  
**TEMPERATURE UNIT:** F - DEGREES FAHRENHEIT  
**DEPTH UNIT:** IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
06-01-2006	23:59	AUT	1.67	88	68	78	M	M
06-02-2006	23:59	AUT	0.85	83	67	75	M	M
06-03-2006	23:59	AUT	M	74	65	70	M	M
06-04-2006	23:59	AUT	M	75	56	66	M	M
06-05-2006	23:59	AUT	M	74	59	67	M	M
06-06-2006	23:59	AUT	M	76	58	67	M	M
06-07-2006	23:59	AUT	M	79	85	69	M	M
06-08-2006	23:59	AUT	0.25	78	60	69	M	M
06-09-2006	23:59	AUT	0.12	80	60	70	M	M
06-10-2006	23:59	AUT	M	71	61	66	M	M
06-11-2006	23:59	AUT	M	72	57	65	M	M
06-12-2006	23:59	AUT	0.29	68	57	62	M	M
06-13-2006	23:59	AUT	0.01	78	55	67	M	M
06-14-2006	23:59	AUT	0.01	70	62	66	M	M
06-15-2006	23:59	AUT	M	81	60	71	M	M
06-16-2006	23:59	AUT	M	83	55	69	M	M
06-17-2006	23:59	AUT	M	84	63	73	M	M
06-18-2006	23:59	AUT	M	88	69	79	M	M
06-19-2006	23:59	AUT	1.16	87	68	78	M	M
06-20-2006	23:59	AUT	M	84	69	77	M	M
06-21-2006	23:59	AUT	M	86	65	76	M	M
06-22-2006	23:59	AUT	M	88	72	80	M	M
06-23-2006	23:59	AUT	0.69	84	70	77	M	M
06-24-2006	23:59	AUT	0.17	84	69	77	M	M
06-25-2006	23:59	AUT	2.80	80	70	75	M	M
06-26-2006	23:59	AUT	2.05	80	72	76	M	M
06-27-2006	23:59	AUT	1.23	80	72	76	M	M
06-28-2006	23:59	AUT	0.45	80	71	76	M	M
06-29-2006	23:59	AUT	M	85	68	77	M	M
06-30-2006	23:59	AUT	M	81	66	74	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			11.75	80	65	73	***	

**SITE NAME:** WREC - WYE RESEARCH AND EDUCATION CENTER  
**PRECIPITATION UNIT:** IN - INCHES  
**TEMPERATURE UNIT:** F - DEGREES FAHRENHEIT  
**DEPTH UNIT:** IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
07-01-2006	23:59	AUT		M 84	65	75	M	M
07-02-2006	23:59	AUT	0.25	90	68	79	M	M
07-03-2006	23:59	AUT		M 88	70	79	M	M
07-04-2006	23:59	AUT	0.04	90	71	81	M	M
07-05-2006	23:59	AUT	0.30	84	72	78	M	M
07-06-2006	23:59	AUT	1.78	76	62	69	M	M
07-07-2006	23:59	AUT		M 78	61	70	M	M
07-08-2006	23:59	AUT		M 81	61	71	M	M
07-09-2006	23:59	AUT		M 82	62	72	M	M
07-10-2006	23:59	AUT		M 84	72	78	M	M
07-11-2006	23:59	AUT		M 88	75	82	M	M
07-12-2006	23:59	AUT	0.45	89	73	81	M	M
07-13-2006	23:59	AUT		M 85	74	80	M	M
07-14-2006	23:59	AUT		M 87	72	80	M	M
07-15-2006	23:59	AUT	1.30	87	72	80	M	M
07-16-2006	23:59	AUT		M 89	71	80	M	M
07-17-2006	23:59	AUT		M 93	71	82	M	M
07-18-2006	23:59	AUT		M 94	72	83	M	M
07-19-2006	23:59	AUT		M 89	69	79	M	M
07-20-2006	23:59	AUT		M 86	70	78	M	M
07-21-2006	23:59	AUT		M 88	78	83	M	M
07-22-2006	23:59	AUT	0.53	85	72	79	M	M
07-23-2006	23:59	AUT	0.16	80	65	73	M	M
07-24-2006	23:59	AUT		M 84	64	74	M	M
07-25-2006	23:59	AUT		M 84	70	77	M	M
07-26-2006	23:59	AUT		M 86	71	79	M	M
07-27-2006	23:59	AUT		M 93	74	84	M	M
07-28-2006	23:59	AUT	0.38	92	76	84	M	M
07-29-2006	23:59	AUT		M 89	73	81	M	M
07-30-2006	23:59	AUT		M 90	74	82	M	M
07-31-2006	23:59	AUT		M 96	74	85	M	M

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<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>
5.19	87	70	79	***

**SITE NAME:** WREC - WYE RESEARCH AND EDUCATION CENTER  
**PRECIPITATION UNIT:** IN - INCHES  
**TEMPERATURE UNIT:** F - DEGREES FAHRENHEIT  
**DEPTH UNIT:** IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
08-01-2006	23:59	AUT		M 93	78	86	M	M
08-02-2006	23:59	AUT		M 95	80	88	M	M
08-03-2006	23:59	AUT		M 96	79	88	M	M
08-04-2006	23:59	AUT		M 91	71	81	M	M
08-05-2006	23:59	AUT		M 87	66	77	M	M
08-06-2006	23:59	AUT		M 88	64	76	M	M
08-07-2006	23:59	AUT	1.19	M 89	73	81	M	M
08-08-2006	23:59	AUT		M 85	68	77	M	M
08-09-2006	23:59	AUT		M 83	63	73	M	M
08-10-2006	23:59	AUT		M 78	69	74	M	M
08-11-2006	23:59	AUT		M 80	61	71	M	M
08-12-2006	23:59	AUT		M 78	57	68	M	M
08-13-2006	23:59	AUT		M 80	55	68	M	M
08-14-2006	23:59	AUT		M 85	63	74	M	M
08-15-2006	23:59	AUT		M 84	69	77	M	M
08-16-2006	23:59	AUT		M 86	65	76	M	M
08-17-2006	23:59	AUT		M 86	63	75	M	M
08-18-2006	23:59	AUT		M 84	63	74	M	M
08-19-2006	23:59	AUT		M 86	71	79	M	M
08-20-2006	23:59	AUT	0.26	M 89	72	81	M	M
08-21-2006	23:59	AUT		M 83	65	74	M	M
08-22-2006	23:59	AUT		M 85	65	75	M	M
08-23-2006	23:59	AUT		M 87	67	77	M	M
08-24-2006	23:59	AUT		M 86	66	76	M	M
08-25-2006	23:59	AUT		M 89	68	79	M	M
08-26-2006	23:59	AUT		M 86	70	78	M	M
08-27-2006	23:59	AUT		M 86	75	81	M	M
08-28-2006	23:59	AUT		M 89	75	82	M	M
08-29-2006	23:59	AUT	0.25	M 90	73	82	M	M
08-30-2006	23:59	AUT	0.05	M 75	67	71	M	M
08-31-2006	23:59	AUT	0.00	M 73	63	68	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			1.75	86	68	77	***	

**SITE NAME:** WREC - WYE RESEARCH AND EDUCATION CENTER  
**PRECIPITATION UNIT:** IN - INCHES  
**TEMPERATURE UNIT:** F - DEGREES FAHRENHEIT  
**DEPTH UNIT:** IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
09-01-2006	23:59	AUT	1.94	65	61	63	M	M
09-02-2006	23:59	AUT	0.58	70	63	67	M	M
09-03-2006	23:59	AUT	M	75	61	68	M	M
09-04-2006	23:59	AUT	M	78	61	70	M	M
09-05-2006	23:59	AUT	1.90	68	62	65	M	M
09-06-2006	23:59	AUT	M	73	60	67	M	M
09-07-2006	23:59	AUT	M	77	59	68	M	M
09-08-2006	23:59	AUT	M	80	61	71	M	M
09-09-2006	23:59	AUT	M	81	64	73	M	M
09-10-2006	23:59	AUT	M	81	62	72	M	M
09-11-2006	23:59	AUT	M	71	54	63	M	M
09-12-2006	23:59	AUT	M	71	53	62	M	M
09-13-2006	23:59	AUT	0.04	70	56	63	M	M
09-14-2006	23:59	AUT	1.19	73	65	69	M	M
09-15-2006	23:59	AUT	2.10	70	64	67	M	M
09-16-2006	23:59	AUT	0.33	74	62	68	M	M
09-17-2006	23:59	AUT	M	77	60	69	M	M
09-18-2006	23:59	AUT	M	82	60	71	M	M
09-19-2006	23:59	AUT	M	80	63	72	M	M
09-20-2006	23:59	AUT	M	69	57	63	M	M
09-21-2006	23:59	AUT	M	68	51	60	M	M
09-22-2006	23:59	AUT	M	72	49	61	M	M
09-23-2006	23:59	AUT	M	80	65	73	M	M
09-24-2006	23:59	AUT	M	82	69	76	M	M
09-25-2006	23:59	AUT	M	74	58	66	M	M
09-26-2006	23:59	AUT	M	74	53	64	M	M
09-27-2006	23:59	AUT	M	75	52	64	M	M
09-28-2006	23:59	AUT	0.98	79	56	68	M	M
09-29-2006	23:59	AUT	0.13	66	48	57	M	M
09-30-2006	23:59	AUT	M	69	46	58	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			9.19	74	59	67	***	

**SITE NAME:** WREC - WYE RESEARCH AND EDUCATION CENTER  
**PRECIPITATION UNIT:** IN - INCHES  
**TEMPERATURE UNIT:** F - DEGREES FAHRENHEIT  
**DEPTH UNIT:** IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
10-01-2006	23:59	AUT	0.20	71	54	63	M	M
10-02-2006	23:59	AUT	M	72	51	62	M	M
10-03-2006	23:59	AUT	M	79	58	69	M	M
10-04-2006	23:59	AUT	M	81	65	73	M	M
10-05-2006	23:59	AUT	0.23	73	55	64	M	M
10-06-2006	23:59	AUT	2.25	55	51	53	M	M
10-07-2006	23:59	AUT	0.07	60	50	55	M	M
10-08-2006	23:59	AUT	M	70	51	61	M	M
10-09-2006	23:59	AUT	M	73	48	61	M	M
10-10-2006	23:59	AUT	M	78	53	66	M	M
10-11-2006	23:59	AUT	0.06	71	58	65	M	M
10-12-2006	23:59	AUT	0.01	71	47	59	M	M
10-13-2006	23:59	AUT	M	55	38	45	M	M
10-14-2006	23:59	AUT	M	61	38	50	M	M
10-15-2006	23:59	AUT	M	60	37	49	M	M
10-16-2006	23:59	AUT	M	65	38	52	M	M
10-17-2006	23:59	AUT	0.50	64	54	59	M	M
10-18-2006	23:59	AUT	M	73	59	66	M	M
10-19-2006	23:59	AUT	0.01	70	59	65	M	M
10-20-2006	23:59	AUT	0.39	69	50	60	M	M
10-21-2006	23:59	AUT	M	60	43	52	M	M
10-22-2006	23:59	AUT	M	61	42	52	M	M
10-23-2006	23:59	AUT	M	56	41	49	M	M
10-24-2006	23:59	AUT	M	52	40	46	M	M
10-25-2006	23:59	AUT	M	56	41	49	M	M
10-26-2006	23:59	AUT	M	54	39	47	M	M
10-27-2006	23:59	AUT	0.54	56	41	49	M	M
10-28-2006	23:59	AUT	0.70	67	46	57	M	M
10-29-2006	23:59	AUT	M	60	40	50	M	M
10-30-2006	23:59	AUT	M	65	37	51	M	M
10-31-2006	23:59	AUT	M	72	51	62	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			4.96	65	48	57	***	

SITE NAME: HF - HAYDEN FARM  
 PRECIPITATION UNIT: IN - INCHES  
 TEMPERATURE UNIT: F - DEGREES FAHRENHEIT  
 DEPTH UNIT: IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
10-01-2005	23:59	AUT	M	77	40	59	M	M
10-02-2005	23:59	AUT	M	81	47	64	M	M
10-03-2005	23:59	AUT	M	78	47	63	M	M
10-04-2005	23:59	AUT	M	74	58	66	M	M
10-05-2005	23:59	AUT	0.01	78	60	69	M	M
10-06-2005	23:59	AUT	0.01	78	60	69	M	M
10-07-2005	23:59	AUT	2.37	75	66	71	M	M
10-08-2005	23:59	AUT	3.99	73	56	65	M	M
10-09-2005	23:59	AUT	M	61	55	58	M	M
10-10-2005	23:59	AUT	M	65	58	62	M	M
10-11-2005	23:59	AUT	0.17	64	61	63	M	M
10-12-2005	23:59	AUT	0.02	64	55	60	M	M
10-13-2005	23:59	AUT	0.14	63	55	59	M	M
10-14-2005	23:59	AUT	0.01	71	60	66	M	M
10-15-2005	23:59	AUT	M	77	54	66	M	M
10-16-2005	23:59	AUT	M	67	50	59	M	M
10-17-2005	23:59	AUT	M	68	46	57	M	M
10-18-2005	23:59	AUT	M	78	45	62	M	M
10-19-2005	23:59	AUT	M	76	43	60	M	M
10-20-2005	23:59	AUT	M	61	53	57	M	M
10-21-2005	23:59	AUT	0.34	54	49	52	M	M
10-22-2005	23:59	AUT	0.60	57	50	54	M	M
10-23-2005	23:59	AUT	M	63	44	54	M	M
10-24-2005	23:59	AUT	0.26	57	46	52	M	M
10-25-2005	23:59	AUT	0.60	47	41	44	M	M
10-26-2005	23:59	AUT	0.01	56	40	48	M	M
10-27-2005	23:59	AUT	M	56	34	45	M	M
10-28-2005	23:59	AUT	M	53	33	43	M	M
10-29-2005	23:59	AUT	0.01	52	31	42	M	M
10-30-2005	23:59	AUT	M	66	37	52	M	M
10-31-2005	23:59	AUT	M	74	32	53	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			8.54	67	49	58	32	



SITE NAME: HF - HAYDEN FARM  
 PRECIPITATION UNIT: IN - INCHES  
 TEMPERATURE UNIT: F - DEGREES FAHRENHEIT  
 DEPTH UNIT: IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
11-01-2005	23:59	AUT		M 70	38	54	M	M
11-02-2005	23:59	AUT		M 61	37	49	M	M
11-03-2005	23:59	AUT		M 68	32	50	M	M
11-04-2005	23:59	AUT		M 70	40	55	M	M
11-05-2005	23:59	AUT		M 76	45	61	M	M
11-06-2005	23:59	AUT		M 78	45	62	M	M
11-07-2005	23:59	AUT		M 65	40	53	M	M
11-08-2005	23:59	AUT	0.02	68	38	53	M	M
11-09-2005	23:59	AUT	0.01	72	51	62	M	M
11-10-2005	23:59	AUT		M 72	42	57	M	M
11-11-2005	23:59	AUT		M 55	32	44	M	M
11-12-2005	23:59	AUT		M 63	30	47	M	M
11-13-2005	23:59	AUT		M 70	39	55	M	M
11-14-2005	23:59	AUT		M 68	55	62	M	M
11-15-2005	23:59	AUT		M 72	50	61	M	M
11-16-2005	23:59	AUT	0.53	75	45	60	M	M
11-17-2005	23:59	AUT	0.01	46	31	39	M	M
11-18-2005	23:59	AUT		M 42	26	34	M	M
11-19-2005	23:59	AUT		M 52	21	37	M	M
11-20-2005	23:59	AUT		M 62	29	46	M	M
11-21-2005	23:59	AUT	0.58	50	38	44	M	M
11-22-2005	23:59	AUT	0.17	50	38	44	M	M
11-23-2005	23:59	AUT		M 41	31	36	M	M
11-24-2005	23:59	AUT	0.06	51	24	38	M	M
11-25-2005	23:59	AUT		M 35	20	28	M	M
11-26-2005	23:59	AUT		M 47	19	33	M	M
11-27-2005	23:59	AUT		M 55	30	43	M	M
11-28-2005	23:59	AUT	0.01	69	48	59	M	M
11-29-2005	23:59	AUT	0.42	69	54	62	M	M
11-30-2005	23:59	AUT		M 54	34	44	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			1.81	61	37	49	***	

SITE NAME: HF - HAYDEN FARM  
 PRECIPITATION UNIT: IN - INCHES  
 TEMPERATURE UNIT: F - DEGREES FAHRENHEIT  
 DEPTH UNIT: IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
12-01-2005	23:59	AUT		M 45	29	37	M	M
12-02-2005	23:59	AUT		M 42	28	35	M	M
12-03-2005	23:59	AUT		M 37	26	32	M	M
12-04-2005	23:59	AUT	0.24	50	34	42	M	M
12-05-2005	23:59	AUT	0.10	38	30	34	M	M
12-06-2005	23:59	AUT	0.04	37	24	31	M	M
12-07-2005	23:59	AUT		M 36	22	29	M	M
12-08-2005	23:59	AUT		M 37	19	28	M	M
12-09-2005	23:59	AUT	0.57	39	27	33	M	M
12-10-2005	23:59	AUT		M 41	20	31	M	M
12-11-2005	23:59	AUT		M 46	23	35	M	M
12-12-2005	23:59	AUT		M 39	28	34	M	M
12-13-2005	23:59	AUT		M 30	17	24	M	M
12-14-2005	23:59	AUT		M 26	11	19	M	M
12-15-2005	23:59	AUT	1.03	46	24	35	M	M
12-16-2005	23:59	AUT	0.21	47	32	40	M	M
12-17-2005	23:59	AUT		M 46	29	38	M	M
12-18-2005	23:59	AUT		M 46	29	38	M	M
12-19-2005	23:59	AUT		M 41	23	32	M	M
12-20-2005	23:59	AUT		M 38	21	30	M	M
12-21-2005	23:59	AUT		M 37	21	29	M	M
12-22-2005	23:59	AUT		M 41	21	31	M	M
12-23-2005	23:59	AUT		M 55	29	42	M	M
12-24-2005	23:59	AUT		M 58	29	44	M	M
12-25-2005	23:59	AUT	0.77	44	27	36	M	M
12-26-2005	23:59	AUT	0.01	47	39	43	M	M
12-27-2005	23:59	AUT		M 47	35	41	M	M
12-28-2005	23:59	AUT		M 55	30	43	M	M
12-29-2005	23:59	AUT	0.22	50	45	48	M	M
12-30-2005	23:59	AUT		M 48	34	41	M	M
12-31-2005	23:59	AUT		M 47	35	41	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			3.19	43	27	35	***	

SITE NAME: HF - HAYDEN FARM  
 PRECIPITATION UNIT: IN - INCHES  
 TEMPERATURE UNIT: F - DEGREES FAHRENHEIT  
 DEPTH UNIT: IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
01-01-2006	23:59	AUT		M 50	33	42	M	M
01-02-2006	23:59	AUT	0.23	45	27	36	M	M
01-03-2006	23:59	AUT	0.11	45	40	43	M	M
01-04-2006	23:59	AUT		M 45	39	42	M	M
01-05-2006	23:59	AUT		M 56	42	49	M	M
01-06-2006	23:59	AUT		M 43	30	37	M	M
01-07-2006	23:59	AUT		M 39	21	30	M	M
01-08-2006	23:59	AUT		M 51	34	43	M	M
01-09-2006	23:59	AUT		M 65	42	54	M	M
01-10-2006	23:59	AUT	0.19	53	34	44	M	M
01-11-2006	23:59	AUT		M 52	37	45	M	M
01-12-2006	23:59	AUT		M 53	39	46	M	M
01-13-2006	23:59	AUT		M 63	35	49	M	M
01-14-2006	23:59	AUT	0.50	62	33	48	M	M
01-15-2006	23:59	AUT		M 40	27	34	M	M
01-16-2006	23:59	AUT		M 41	29	35	M	M
01-17-2006	23:59	AUT		M 56	34	45	M	M
01-18-2006	23:59	AUT	0.73	64	34	49	M	M
01-19-2006	23:59	AUT		M 56	29	43	M	M
01-20-2006	23:59	AUT		M 64	39	52	M	M
01-21-2006	23:59	AUT		M 64	39	52	M	M
01-22-2006	23:59	AUT	0.20	45	28	37	M	M
01-23-2006	23:59	AUT	0.75	44	36	40	M	M
01-24-2006	23:59	AUT	0.06	49	30	40	M	M
01-25-2006	23:59	AUT		M 43	34	39	M	M
01-26-2006	23:59	AUT		M 39	27	33	M	M
01-27-2006	23:59	AUT		M 48	21	35	M	M
01-28-2006	23:59	AUT		M 62	33	48	M	M
01-29-2006	23:59	AUT	0.03	61	35	48	M	M
01-30-2006	23:59	AUT		M 65	39	52	M	M
01-31-2006	23:59	AUT	0.15	51	41	46	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			2.95	52	34	43	***	

SITE NAME: HF - HAYDEN FARM  
 PRECIPITATION UNIT: IN - INCHES  
 TEMPERATURE UNIT: F - DEGREES FAHRENHEIT  
 DEPTH UNIT: IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
02-01-2006	23:59	AUT		M 47	35	41	M	M
02-02-2006	23:59	AUT	0.03	57	30	44	M	M
02-03-2006	23:59	AUT	0.40	64	44	54	M	M
02-04-2006	23:59	AUT	0.79	60	45	53	M	M
02-05-2006	23:59	AUT		M 46	33	40	M	M
02-06-2006	23:59	AUT		M 47	31	39	M	M
02-07-2006	23:59	AUT		M 42	29	36	M	M
02-08-2006	23:59	AUT		M 38	26	32	M	M
02-09-2006	23:59	AUT		M 39	24	32	M	M
02-10-2006	23:59	AUT		M 43	27	35	M	M
02-11-2006	23:59	AUT	0.31	39	31	35	M	M
02-12-2006	23:59	AUT	0.23	34	23	29	M	M
02-13-2006	23:59	AUT		M 37	17	27	M	M
02-14-2006	23:59	AUT		M 45	20	33	M	M
02-15-2006	23:59	AUT		M 59	26	43	M	M
02-16-2006	23:59	AUT		M 67	32	50	M	M
02-17-2006	23:59	AUT		M 62	37	50	M	M
02-18-2006	23:59	AUT		M 38	18	28	M	M
02-19-2006	23:59	AUT		M 29	13	21	M	M
02-20-2006	23:59	AUT		M 42	26	34	M	M
02-21-2006	23:59	AUT		M 50	22	36	M	M
02-22-2006	23:59	AUT	0.12	39	29	34	M	M
02-23-2006	23:59	AUT	0.01	52	34	43	M	M
02-24-2006	23:59	AUT		M 44	27	36	M	M
02-25-2006	23:59	AUT		M 58	23	41	M	M
02-26-2006	23:59	AUT		M 35	24	30	M	M
02-27-2006	23:59	AUT		M 38	19	29	M	M
02-28-2006	23:59	AUT		M 43	29	36	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			1.89	46	28	37	***	

SITE NAME: HF - HAYDEN FARM  
 PRECIPITATION UNIT: IN - INCHES  
 TEMPERATURE UNIT: F - DEGREES FAHRENHEIT  
 DEPTH UNIT: IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
03-01-2006	23:59	AUT		M 53	29	41	M	M
03-02-2006	23:59	AUT	0.01	47	35	41	M	M
03-03-2006	23:59	AUT		M 43	30	37	M	M
03-04-2006	23:59	AUT		M 46	28	37	M	M
03-05-2006	23:59	AUT		M 51	30	41	M	M
03-06-2006	23:59	AUT		M 47	36	42	M	M
03-07-2006	23:59	AUT		M 49	29	39	M	M
03-08-2006	23:59	AUT		M 54	23	39	M	M
03-09-2006	23:59	AUT		M 68	41	55	M	M
03-10-2006	23:59	AUT		M 78	53	66	M	M
03-11-2006	23:59	AUT		M 74	43	59	M	M
03-12-2006	23:59	AUT		M 71	54	63	M	M
03-13-2006	23:59	AUT		M 84	48	66	M	M
03-14-2006	23:59	AUT	0.02	74	36	55	M	M
03-15-2006	23:59	AUT		M 51	38	45	M	M
03-16-2006	23:59	AUT		M 56	36	46	M	M
03-17-2006	23:59	AUT		M 52	40	46	M	M
03-18-2006	23:59	AUT		M 46	29	38	M	M
03-19-2006	23:59	AUT		M 53	27	40	M	M
03-20-2006	23:59	AUT		M 48	26	37	M	M
03-21-2006	23:59	AUT		M 40	28	34	M	M
03-22-2006	23:59	AUT		M 46	30	38	M	M
03-23-2006	23:59	AUT		M 50	26	38	M	M
03-24-2006	23:59	AUT		M 52	32	42	M	M
03-25-2006	23:59	AUT		M 52	31	42	M	M
03-26-2006	23:59	AUT		M 51	34	43	M	M
03-27-2006	23:59	AUT		M 58	36	47	M	M
03-28-2006	23:59	AUT		M 61	35	48	M	M
03-29-2006	23:59	AUT		M 64	41	53	M	M
03-30-2006	23:59	AUT		M 70	36	53	M	M
03-31-2006	23:59	AUT		M 78	46	62	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			0.03	57	35	46	***	

SITE NAME: HF - HAYDEN FARM  
 PRECIPITATION UNIT: IN - INCHES  
 TEMPERATURE UNIT: F - DEGREES FAHRENHEIT  
 DEPTH UNIT: IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
04-01-2006	23:59	AUT	0.03	73	55	64	M	M
04-02-2006	23:59	AUT	M	70	49	60	M	M
04-03-2006	23:59	AUT	0.57	68	50	59	M	M
04-04-2006	23:59	AUT	0.01	58	45	52	M	M
04-05-2006	23:59	AUT	M	53	38	46	M	M
04-06-2006	23:59	AUT	M	65	41	53	M	M
04-07-2006	23:59	AUT	0.15	79	44	62	M	M
04-08-2006	23:59	AUT	0.59	66	37	52	M	M
04-09-2006	23:59	AUT	M	56	31	44	M	M
04-10-2006	23:59	AUT	M	65	31	48	M	M
04-11-2006	23:59	AUT	M	74	36	55	M	M
04-12-2006	23:59	AUT	M	74	42	58	M	M
04-13-2006	23:59	AUT	0.03	78	55	67	M	M
04-14-2006	23:59	AUT	M	77	52	65	M	M
04-15-2006	23:59	AUT	M	83	63	73	M	M
04-16-2006	23:59	AUT	M	72	47	60	M	M
04-17-2006	23:59	AUT	0.12	64	46	55	M	M
04-18-2006	23:59	AUT	M	69	40	55	M	M
04-19-2006	23:59	AUT	M	75	43	59	M	M
04-20-2006	23:59	AUT	M	82	41	62	M	M
04-21-2006	23:59	AUT	0.27	64	51	58	M	M
04-22-2006	23:59	AUT	0.76	66	54	60	M	M
04-23-2006	23:59	AUT	0.04	70	51	61	M	M
04-24-2006	23:59	AUT	0.02	73	52	63	M	M
04-25-2006	23:59	AUT	0.03	78	45	62	M	M
04-26-2006	23:59	AUT	0.02	62	42	52	M	M
04-27-2006	23:59	AUT	M	74	36	55	M	M
04-28-2006	23:59	AUT	M	66	45	56	M	M
04-29-2006	23:59	AUT	M	66	36	51	M	M
04-30-2006	23:59	AUT	M	68	34	51	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			2.64	70	44	57	***	

SITE NAME: HF - HAYDEN FARM  
 PRECIPITATION UNIT: IN - INCHES  
 TEMPERATURE UNIT: F - DEGREES FAHRENHEIT  
 DEPTH UNIT: IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
05-01-2006	23:59	AUT	M	70	36	53	M	M
05-02-2006	23:59	AUT	M	80	41	61	M	M
05-03-2006	23:59	AUT	M	77	54	66	M	M
05-04-2006	23:59	AUT	M	84	46	65	M	M
05-05-2006	23:59	AUT	M	81	58	70	M	M
05-06-2006	23:59	AUT	M	81	52	67	M	M
05-07-2006	23:59	AUT	0.11	66	42	54	M	M
05-08-2006	23:59	AUT	0.06	56	50	53	M	M
05-09-2006	23:59	AUT	M	72	48	60	M	M
05-10-2006	23:59	AUT	M	81	44	63	M	M
05-11-2006	23:59	AUT	1.44	67	56	62	M	M
05-12-2006	23:59	AUT	0.01	73	48	61	M	M
05-13-2006	23:59	AUT	0.15	73	51	62	M	M
05-14-2006	23:59	AUT	0.11	62	55	59	M	M
05-15-2006	23:59	AUT	0.13	71	53	62	M	M
05-16-2006	23:59	AUT	M	67	51	59	M	M
05-17-2006	23:59	AUT	M	73	45	59	M	M
05-18-2006	23:59	AUT	0.11	72	49	61	M	M
05-19-2006	23:59	AUT	0.04	63	51	57	M	M
05-20-2006	23:59	AUT	M	74	50	62	M	M
05-21-2006	23:59	AUT	M	74	42	58	M	M
05-22-2006	23:59	AUT	M	69	45	57	M	M
05-23-2006	23:59	AUT	M	68	40	54	M	M
05-24-2006	23:59	AUT	M	74	41	58	M	M
05-25-2006	23:59	AUT	M	77	50	64	M	M
05-26-2006	23:59	AUT	0.18	82	57	70	M	M
05-27-2006	23:59	AUT	M	82	63	73	M	M
05-28-2006	23:59	AUT	M	88	58	73	M	M
05-29-2006	23:59	AUT	M	92	58	75	M	M
05-30-2006	23:59	AUT	M	94	66	80	M	M
05-31-2006	23:59	AUT	M	87	66	77	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			2.34	75	51	63	***	

SITE NAME: HF - HAYDEN FARM  
 PRECIPITATION UNIT: IN - INCHES  
 TEMPERATURE UNIT: F - DEGREES FAHRENHEIT  
 DEPTH UNIT: IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
06-01-2006	23:59	AUT	0.01	92	66	79	M	M
06-02-2006	23:59	AUT	0.34	87	69	78	M	M
06-03-2006	23:59	AUT	0.10	75	58	67	M	M
06-04-2006	23:59	AUT	M	77	53	65	M	M
06-05-2006	23:59	AUT	M	74	56	65	M	M
06-06-2006	23:59	AUT	M	78	53	66	M	M
06-07-2006	23:59	AUT	0.01	83	54	69	M	M
06-08-2006	23:59	AUT	M	84	60	72	M	M
06-09-2006	23:59	AUT	0.02	84	60	72	M	M
06-10-2006	23:59	AUT	M	72	55	64	M	M
06-11-2006	23:59	AUT	M	75	45	60	M	M
06-12-2006	23:59	AUT	0.37	74	57	66	M	M
06-13-2006	23:59	AUT	M	85	53	69	M	M
06-14-2006	23:59	AUT	0.02	72	59	66	M	M
06-15-2006	23:59	AUT	M	82	58	70	M	M
06-16-2006	23:59	AUT	M	86	52	69	M	M
06-17-2006	23:59	AUT	M	89	56	73	M	M
06-18-2006	23:59	AUT	M	94	64	79	M	M
06-19-2006	23:59	AUT	0.88	90	70	80	M	M
06-20-2006	23:59	AUT	0.02	87	66	77	M	M
06-21-2006	23:59	AUT	M	90	61	76	M	M
06-22-2006	23:59	AUT	M	93	67	80	M	M
06-23-2006	23:59	AUT	0.22	86	69	78	M	M
06-24-2006	23:59	AUT	1.41	86	71	79	M	M
06-25-2006	23:59	AUT	2.84	78	69	74	M	M
06-26-2006	23:59	AUT	2.78	81	69	75	M	M
06-27-2006	23:59	AUT	0.78	82	73	78	M	M
06-28-2006	23:59	AUT	0.09	89	71	80	M	M
06-29-2006	23:59	AUT	0.03	87	66	77	M	M
06-30-2006	23:59	AUT	M	83	60	72	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			9.92	83	61	72	***	



**SITE NAME:** HF - HAYDEN FARM  
**PRECIPITATION UNIT:** IN - INCHES  
**TEMPERATURE UNIT:** F - DEGREES FAHRENHEIT  
**DEPTH UNIT:** IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
07-01-2006	23:59	AUT		M 86	61	74	M	M
07-02-2006	23:59	AUT	0.92	92	70	81	M	M
07-03-2006	23:59	AUT		M 91	70	81	M	M
07-04-2006	23:59	AUT	0.55	93	71	82	M	M
07-05-2006	23:59	AUT	0.22	85	72	79	M	M
07-06-2006	23:59	AUT	1.20	79	62	71	M	M
07-07-2006	23:59	AUT	0.01	79	56	68	M	M
07-08-2006	23:59	AUT		M 81	58	70	M	M
07-09-2006	23:59	AUT		M 84	60	72	M	M
07-10-2006	23:59	AUT		M 86	66	76	M	M
07-11-2006	23:59	AUT		M 91	75	83	M	M
07-12-2006	23:59	AUT	0.19	91	73	82	M	M
07-13-2006	23:59	AUT	0.01	85	73	79	M	M
07-14-2006	23:59	AUT		M 87	71	79	M	M
07-15-2006	23:59	AUT		M 89	73	81	M	M
07-16-2006	23:59	AUT		M 93	68	81	M	M
07-17-2006	23:59	AUT		M 97	69	83	M	M
07-18-2006	23:59	AUT	0.28	98	70	84	M	M
07-19-2006	23:59	AUT		M 90	67	79	M	M
07-20-2006	23:59	AUT		M 91	69	80	M	M
07-21-2006	23:59	AUT		M 93	74	84	M	M
07-22-2006	23:59	AUT	0.57	89	73	81	M	M
07-23-2006	23:59	AUT	0.02	83	65	74	M	M
07-24-2006	23:59	AUT		M 88	60	74	M	M
07-25-2006	23:59	AUT		M 85	67	76	M	M
07-26-2006	23:59	AUT		M 88	69	79	M	M
07-27-2006	23:59	AUT		M 93	73	83	M	M
07-28-2006	23:59	AUT		M 93	73	83	M	M
07-29-2006	23:59	AUT		M 92	71	82	M	M
07-30-2006	23:59	AUT		M 94	73	84	M	M
07-31-2006	23:59	AUT		M 95	73	84	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			3.97	89	69	79	***	

SITE NAME: HF - HAYDEN FARM  
 PRECIPITATION UNIT: IN - INCHES  
 TEMPERATURE UNIT: F - DEGREES FAHRENHEIT  
 DEPTH UNIT: IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
08-01-2006	23:59	AUT	M	98	75	87	M	M
08-02-2006	23:59	AUT	M	99	75	87	M	M
08-03-2006	23:59	AUT	M	100	76	88	M	M
08-04-2006	23:59	AUT	M	91	69	80	M	M
08-05-2006	23:59	AUT	M	91	63	77	M	M
08-06-2006	23:59	AUT	M	90	63	77	M	M
08-07-2006	23:59	AUT	0.28	95	71	83	M	M
08-08-2006	23:59	AUT	M	90	66	78	M	M
08-09-2006	23:59	AUT	M	87	59	73	M	M
08-10-2006	23:59	AUT	M	80	65	73	M	M
08-11-2006	23:59	AUT	M	82	60	71	M	M
08-12-2006	23:59	AUT	M	83	53	68	M	M
08-13-2006	23:59	AUT	M	86	52	69	M	M
08-14-2006	23:59	AUT	M	90	61	76	M	M
08-15-2006	23:59	AUT	M	89	73	81	M	M
08-16-2006	23:59	AUT	M	89	62	76	M	M
08-17-2006	23:59	AUT	M	87	60	74	M	M
08-18-2006	23:59	AUT	M	86	59	73	M	M
08-19-2006	23:59	AUT	M	86	66	76	M	M
08-20-2006	23:59	AUT	0.01	92	75	84	M	M
08-21-2006	23:59	AUT	M	86	60	73	M	M
08-22-2006	23:59	AUT	M	89	61	75	M	M
08-23-2006	23:59	AUT	M	90	62	76	M	M
08-24-2006	23:59	AUT	M	91	64	78	M	M
08-25-2006	23:59	AUT	M	95	66	81	M	M
08-26-2006	23:59	AUT	M	86	69	78	M	M
08-27-2006	23:59	AUT	M	89	74	82	M	M
08-28-2006	23:59	AUT	M	91	73	82	M	M
08-29-2006	23:59	AUT	M	95	74	85	M	M
08-30-2006	23:59	AUT	M	77	69	73	M	M
08-31-2006	23:59	AUT	M	73	66	70	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			0.29	89	66	78	***	

SITE NAME: HF - HAYDEN FARM  
 PRECIPITATION UNIT: IN - INCHES  
 TEMPERATURE UNIT: F - DEGREES FAHRENHEIT  
 DEPTH UNIT: IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
09-01-2006	23:59	AUT	2.30	66	60	63	M	M
09-02-2006	23:59	AUT	1.42	69	58	64	M	M
09-03-2006	23:59	AUT	M	80	59	70	M	M
09-04-2006	23:59	AUT	0.02	79	62	71	M	M
09-05-2006	23:59	AUT	1.80	66	62	64	M	M
09-06-2006	23:59	AUT	0.10	77	61	69	M	M
09-07-2006	23:59	AUT	0.10	81	56	69	M	M
09-08-2006	23:59	AUT	0.00	82	59	71	M	M
09-09-2006	23:59	AUT	M	86	61	74	M	M
09-10-2006	23:59	AUT	0.00	81	59	70	M	M
09-11-2006	23:59	AUT	0.05	68	61	65	M	M
09-12-2006	23:59	AUT	M	69	55	62	M	M
09-13-2006	23:59	AUT	M	68	58	63	M	M
09-14-2006	23:59	AUT	0.87	68	61	65	M	M
09-15-2006	23:59	AUT	0.01	74	58	66	M	M
09-16-2006	23:59	AUT	0.13	74	65	70	M	M
09-17-2006	23:59	AUT	0.01	83	58	71	M	M
09-18-2006	23:59	AUT	0.00	85	58	72	M	M
09-19-2006	23:59	AUT	M	78	59	69	M	M
09-20-2006	23:59	AUT	M	69	50	60	M	M
09-21-2006	23:59	AUT	0.01	69	43	56	M	M
09-22-2006	23:59	AUT	M	72	44	58	M	M
09-23-2006	23:59	AUT	M	81	64	73	M	M
09-24-2006	23:59	AUT	0.01	83	67	75	M	M
09-25-2006	23:59	AUT	0.01	76	54	65	M	M
09-26-2006	23:59	AUT	M	76	48	62	M	M
09-27-2006	23:59	AUT	M	76	50	63	M	M
09-28-2006	23:59	AUT	1.26	79	51	65	M	M
09-29-2006	23:59	AUT	0.01	67	46	57	M	M
09-30-2006	23:59	AUT	0.01	67	42	55	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			8.12	75	56	66	***	

**SITE NAME:** HF - HAYDEN FARM  
**PRECIPITATION UNIT:** IN - INCHES  
**TEMPERATURE UNIT:** F - DEGREES FAHRENHEIT  
**DEPTH UNIT:** IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
10-01-2006	23:59	AUT	0.20	72	51	62	M	M
10-02-2006	23:59	AUT	M	76	45	61	M	M
10-03-2006	23:59	AUT	M	82	56	69	M	M
10-04-2006	23:59	AUT	M	83	60	72	M	M
10-05-2006	23:59	AUT	0.29	75	57	66	M	M
10-06-2006	23:59	AUT	1.41	57	51	54	M	M
10-07-2006	23:59	AUT	0.08	56	48	52	M	M
10-08-2006	23:59	AUT	M	70	50	60	M	M
10-09-2006	23:59	AUT	M	79	45	62	M	M
10-10-2006	23:59	AUT	M	81	51	66	M	M
10-11-2006	23:59	AUT	0.01	69	54	62	M	M
10-12-2006	23:59	AUT	0.06	72	45	59	M	M
10-13-2006	23:59	AUT	M	56	31	44	M	M
10-14-2006	23:59	AUT	M	62	30	46	M	M
10-15-2006	23:59	AUT	M	62	30	46	M	M
10-16-2006	23:59	AUT	M	65	34	50	M	M
10-17-2006	23:59	AUT	0.71	65	55	60	M	M
10-18-2006	23:59	AUT	M	79	62	71	M	M
10-19-2006	23:59	AUT	0.04	69	60	65	M	M
10-20-2006	23:59	AUT	0.55	69	45	57	M	M
10-21-2006	23:59	AUT	M	61	41	51	M	M
10-22-2006	23:59	AUT	M	62	35	49	M	M
10-23-2006	23:59	AUT	M	53	40	47	M	M
10-24-2006	23:59	AUT	M	52	39	46	M	M
10-25-2006	23:59	AUT	M	55	37	46	M	M
10-26-2006	23:59	AUT	M	55	36	46	M	M
10-27-2006	23:59	AUT	0.64	54	42	48	M	M
10-28-2006	23:59	AUT	1.26	64	45	55	M	M
10-29-2006	23:59	AUT	M	61	35	48	M	M
10-30-2006	23:59	AUT	M	70	32	51	M	M
10-31-2006	23:59	AUT	M	75	39	57	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			5.25	66	45	56	32	



SITE NAME: CARROL CO. - ON-FARM - WESTMINSTER, MD  
 PRECIPITATION UNIT: IN - INCHES  
 TEMPERATURE UNIT: F - DEGREES FAHRENHEIT  
 DEPTH UNIT: IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
05-01-2006	23:59	AUT	M	71	38	55	M	M
05-02-2006	23:59	AUT	M	77	40	59	M	M
05-03-2006	23:59	AUT	M	75	50	63	M	M
05-04-2006	23:59	AUT	M	79	45	62	M	M
05-05-2006	23:59	AUT	M	78	59	69	M	M
05-06-2006	23:59	AUT	M	75	52	64	M	M
05-07-2006	23:59	AUT	M	68	38	53	M	M
05-08-2006	23:59	AUT	0.14	59	46	53	M	M
05-09-2006	23:59	AUT	M	71	47	59	M	M
05-10-2006	23:59	AUT	M	78	42	60	M	M
05-11-2006	23:59	AUT	0.18	77	51	64	M	M
05-12-2006	23:59	AUT	1.10	69	44	57	M	M
05-13-2006	23:59	AUT	0.08	68	49	59	M	M
05-14-2006	23:59	AUT	M	63	52	58	M	M
05-15-2006	23:59	AUT	0.52	61	49	55	M	M
05-16-2006	23:59	AUT	0.08	60	46	53	M	M
05-17-2006	23:59	AUT	0.08	67	47	57	M	M
05-18-2006	23:59	AUT	M	69	47	58	M	M
05-19-2006	23:59	AUT	0.06	64	47	56	M	M
05-20-2006	23:59	AUT	0.02	66	47	57	M	M
05-21-2006	23:59	AUT	M	68	42	55	M	M
05-22-2006	23:59	AUT	M	63	43	53	M	M
05-23-2006	23:59	AUT	M	65	39	52	M	M
05-24-2006	23:59	AUT	M	71	42	57	M	M
05-25-2006	23:59	AUT	M	71	54	63	M	M
05-26-2006	23:59	AUT	0.01	76	57	67	M	M
05-27-2006	23:59	AUT	M	79	62	71	M	M
05-28-2006	23:59	AUT	M	83	57	70	M	M
05-29-2006	23:59	AUT	M	88	87	88	M	M
05-30-2006	23:59	AUT	M	92	68	80	M	M
05-31-2006	23:59	AUT	M	90	65	78	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			2.27	72	50	61	***	

**SITE NAME:** CARROL CO. - ON-FARM - WESTMINSTER, MD  
**PRECIPITATION UNIT:** IN - INCHES  
**TEMPERATURE UNIT:** F - DEGREES FAHRENHEIT  
**DEPTH UNIT:** IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
06-01-2006	23:59	AUT		M 87	65	76	M	M
06-02-2006	23:59	AUT	0.02	83	67	75	M	M
06-03-2006	23:59	AUT	1.50	75	60	68	M	M
06-04-2006	23:59	AUT		M 72	52	62	M	M
06-05-2006	23:59	AUT	0.01	72	52	62	M	M
06-06-2006	23:59	AUT		M 76	51	64	M	M
06-07-2006	23:59	AUT		M 75	55	65	M	M
06-08-2006	23:59	AUT		M 77	58	68	M	M
06-09-2006	23:59	AUT	0.40	76	54	65	M	M
06-10-2006	23:59	AUT		M 68	53	61	M	M
06-11-2006	23:59	AUT		M 68	48	58	M	M
06-12-2006	23:59	AUT		M 72	54	63	M	M
06-13-2006	23:59	AUT		M 78	55	67	M	M
06-14-2006	23:59	AUT		M 78	56	67	M	M
06-15-2006	23:59	AUT		M 78	58	68	M	M
06-16-2006	23:59	AUT		M 82	50	66	M	M
06-17-2006	23:59	AUT		M 84	59	72	M	M
06-18-2006	23:59	AUT		M 89	62	76	M	M
06-19-2006	23:59	AUT	0.07	88	66	77	M	M
06-20-2006	23:59	AUT	0.21	82	63	73	M	M
06-21-2006	23:59	AUT		M 84	58	71	M	M
06-22-2006	23:59	AUT	0.07	88	66	77	M	M
06-23-2006	23:59	AUT	0.02	87	67	77	M	M
06-24-2006	23:59	AUT		M 81	68	75	M	M
06-25-2006	23:59	AUT	0.10	74	67	71	M	M
06-26-2006	23:59	AUT	2.42	80	66	73	M	M
06-27-2006	23:59	AUT	0.38	80	70	75	M	M
06-28-2006	23:59	AUT	0.43	84	68	76	M	M
06-29-2006	23:59	AUT	0.13	82	62	72	M	M
06-30-2006	23:59	AUT	0.10	80	59	70	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			5.86	79	60	70	***	

**SITE NAME:** CARROL CO. - ON-FARM - WESTMINSTER, MD  
**PRECIPITATION UNIT:** IN - INCHES  
**TEMPERATURE UNIT:** F - DEGREES FAHRENHEIT  
**DEPTH UNIT:** IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
07-01-2006	23:59	AUT		M 82	57	70	M	M
07-02-2006	23:59	AUT		M 89	66	78	M	M
07-03-2006	23:59	AUT	0.21	86	66	76	M	M
07-04-2006	23:59	AUT		M 86	70	78	M	M
07-05-2006	23:59	AUT	0.19	83	68	76	M	M
07-06-2006	23:59	AUT	0.40	75	62	69	M	M
07-07-2006	23:59	AUT		M 77	56	67	M	M
07-08-2006	23:59	AUT		M 78	57	68	M	M
07-09-2006	23:59	AUT		M 81	57	69	M	M
07-10-2006	23:59	AUT		M 83	61	72	M	M
07-11-2006	23:59	AUT		M 87	67	77	M	M
07-12-2006	23:59	AUT	0.25	85	72	79	M	M
07-13-2006	23:59	AUT	1.32	83	69	76	M	M
07-14-2006	23:59	AUT		M 85	64	75	M	M
07-15-2006	23:59	AUT		M 86	69	78	M	M
07-16-2006	23:59	AUT		M 87	67	77	M	M
07-17-2006	23:59	AUT		M 92	67	80	M	M
07-18-2006	23:59	AUT		M 92	72	82	M	M
07-19-2006	23:59	AUT	0.36	86	64	75	M	M
07-20-2006	23:59	AUT		M 86	66	76	M	M
07-21-2006	23:59	AUT		M 86	71	79	M	M
07-22-2006	23:59	AUT		M 85	69	77	M	M
07-23-2006	23:59	AUT	0.51	80	63	72	M	M
07-24-2006	23:59	AUT		M 82	58	70	M	M
07-25-2006	23:59	AUT		M 83	64	74	M	M
07-26-2006	23:59	AUT		M 85	67	76	M	M
07-27-2006	23:59	AUT	0.03	88	68	78	M	M
07-28-2006	23:59	AUT	0.15	86	69	78	M	M
07-29-2006	23:59	AUT		M 88	68	78	M	M
07-30-2006	23:59	AUT		M 89	70	80	M	M
07-31-2006	23:59	AUT		M 89	69	79	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			3.42	85	66	76	***	



SITE NAME: CARROL CO. - ON-FARM - WESTMINSTER, MD  
 PRECIPITATION UNIT: IN - INCHES  
 TEMPERATURE UNIT: F - DEGREES FAHRENHEIT  
 DEPTH UNIT: IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
08-01-2006	23:59	AUT		M 93	73	83	M	M
08-02-2006	23:59	AUT		M 93	74	84	M	M
08-03-2006	23:59	AUT		M 94	72	83	M	M
08-04-2006	23:59	AUT		M 92	73	83	M	M
08-05-2006	23:59	AUT		M 88	60	74	M	M
08-06-2006	23:59	AUT		M 86	59	73	M	M
08-07-2006	23:59	AUT		M 91	66	79	M	M
08-08-2006	23:59	AUT		M 87	70	79	M	M
08-09-2006	23:59	AUT		M 82	53	68	M	M
08-10-2006	23:59	AUT	0.03	80	62	71	M	M
08-11-2006	23:59	AUT	0.02	79	60	70	M	M
08-12-2006	23:59	AUT		M 78	53	66	M	M
08-13-2006	23:59	AUT		M 80	48	64	M	M
08-14-2006	23:59	AUT		M 85	58	72	M	M
08-15-2006	23:59	AUT		M 85	72	79	M	M
08-16-2006	23:59	AUT		M 85	59	72	M	M
08-17-2006	23:59	AUT		M 84	62	73	M	M
08-18-2006	23:59	AUT		M 83	58	71	M	M
08-19-2006	23:59	AUT		M 84	65	75	M	M
08-20-2006	23:59	AUT		M 85	68	77	M	M
08-21-2006	23:59	AUT		M 83	60	72	M	M
08-22-2006	23:59	AUT		M 86	55	71	M	M
08-23-2006	23:59	AUT		M 86	58	72	M	M
08-24-2006	23:59	AUT		M 86	58	72	M	M
08-25-2006	23:59	AUT		M 88	62	75	M	M
08-26-2006	23:59	AUT	0.20	86	66	76	M	M
08-27-2006	23:59	AUT	0.29	79	68	74	M	M
08-28-2006	23:59	AUT	0.01	81	68	75	M	M
08-29-2006	23:59	AUT		M 88	68	78	M	M
08-30-2006	23:59	AUT		M 86	64	75	M	M
08-31-2006	23:59	AUT		M 73	62	68	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			0.55	85	63	74	***	

**SITE NAME:** CARROL CO. - ON-FARM - WESTMINSTER, MD  
**PRECIPITATION UNIT:** IN - INCHES  
**TEMPERATURE UNIT:** F - DEGREES FAHRENHEIT  
**DEPTH UNIT:** IN - INCHES

DATE	TIME	SRC	PRECIP.	MAX TEMP	MIN TEMP	AVE TEMP	SOIL TEMP	SOIL DEPTH
09-01-2006	23:59	AUT	0.13	67	56	62	M	M
09-02-2006	23:59	AUT	1.52	66	53	60	M	M
09-03-2006	23:59	AUT	0.03	71	54	63	M	M
09-04-2006	23:59	AUT	M	77	57	67	M	M
09-05-2006	23:59	AUT	0.06	72	58	65	M	M
09-06-2006	23:59	AUT	M	74	57	66	M	M
09-07-2006	23:59	AUT	M	77	52	65	M	M
09-08-2006	23:59	AUT	0.14	77	56	67	M	M
09-09-2006	23:59	AUT	M	81	55	68	M	M
09-10-2006	23:59	AUT	M	79	57	68	M	M
09-11-2006	23:59	AUT	0.39	74	56	65	M	M
09-12-2006	23:59	AUT	M	65	54	60	M	M
09-13-2006	23:59	AUT	0.05	62	50	56	M	M
09-14-2006	23:59	AUT	1.08	64	57	61	M	M
09-15-2006	23:59	AUT	0.24	66	58	62	M	M
09-16-2006	23:59	AUT	0.05	71	60	66	M	M
09-17-2006	23:59	AUT	M	79	56	68	M	M
09-18-2006	23:59	AUT	M	81	56	69	M	M
09-19-2006	23:59	AUT	M	77	60	69	M	M
09-20-2006	23:59	AUT	M	73	53	63	M	M
09-21-2006	23:59	AUT	M	64	41	53	M	M
09-22-2006	23:59	AUT	M	67	43	55	M	M
09-23-2006	23:59	AUT	M	77	57	67	M	M
09-24-2006	23:59	AUT	0.03	77	66	72	M	M
09-25-2006	23:59	AUT	M	70	53	62	M	M
09-26-2006	23:59	AUT	M	71	47	59	M	M
09-27-2006	23:59	AUT	M	73	49	61	M	M
09-28-2006	23:59	AUT	0.20	74	52	63	M	M
09-29-2006	23:59	AUT	0.77	63	47	55	M	M
09-30-2006	23:59	AUT	M	60	39	50	M	M
			<b>TOTAL</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	<b>AVERAGE</b>	
			4.69	72	54	63	***	



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## CROP AND WEED REFERENCE

### CROPS

<b>BAYER*</b>	<b>COMMON NAME</b>	<b>VARIETY</b>	<b>SCIENTIFIC NAME</b>
<b>MEDSA</b>	<b>alfalfa</b>	<b>Numerous</b>	<b>Medicago sativa L.</b>
<b>HORVW</b>	<b>barley</b>	<b>Numerous</b>	<b>Hordeum vulgare L.</b>
<b>ZEAMX</b>	<b>corn</b>	<b>Numerous</b>	<b>Zea mays L.</b>
<b>SECCE</b>	<b>rye</b>	<b>Numerous</b>	<b>Secale cereale L.</b>
<b>GLXMA</b>	<b>soybean</b>	<b>Numerous</b>	<b>Glycine max (L.) Merr.</b>
<b>TTLWI</b>	<b>triticale</b>	<b>Numerous</b>	
<b>NIOTA</b>	<b>tobacco</b>	<b>MD-609</b>	<b>Nicotiana tabacum L.</b>
<b>TRZAW</b>	<b>wheat</b>	<b>Numerous</b>	<b>Triticum aestivum L.</b>

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### WEEDS

<b>ABUTH</b>	<b>velvetleaf</b>	<b>-----</b>	<b>Abutilon theophrasti Medic.</b>
<b>ALLVI</b>	<b>garlic</b>	<b>wild</b>	<b>Allium vineale L.</b>
<b>AMACH</b>	<b>pigweed</b>	<b>smooth</b>	<b>Amaranthus hybridus L.</b>
<b>AMARE</b>	<b>pigweed</b>	<b>redroot</b>	<b>Amaranthus retroflexus L.</b>

<b>AMBEL</b>	<b>ragweed</b>	<b>common</b>	<b>Ambrosia artemisiifolia L.</b>
<b>AMBTR</b>	<b>ragweed</b>	<b>giant</b>	<b>Ambrosia trifida L.</b>
<b>ANVCR</b>	<b>anoda</b>	<b>spurred</b>	<b>Anoda cristata (L.) Schlecht.</b>
<b>APCCA</b>	<b>dogbane</b>	<b>hemp</b>	<b>Apocynum cannabinum L.</b>
<b>ARREB</b>	<b>oatgrass</b>	<b>bulbous</b>	<b>Arrhenatherum elatius var. bulbosus</b>
<b>ARFLA</b>	<b>burdock</b>	<b>great</b>	<b>Arctium lappa L.</b>
<b>BROTE</b>	<b>brome</b>	<b>downy</b>	<b>Bromus tectorum L.</b>
<b>CARHI</b>	<b>bittercress</b>	<b>hairy</b>	<b>Cardamine hirsuta L.</b>
<b>CHEAL</b>	<b>lambsquarters</b>	<b>common</b>	<b>Chenopodium album L.</b>
<b>CIRAR</b>	<b>thistle</b>	<b>Canada</b>	<b>Cirsium arvense (L.) Scop.</b>
<b>CYPES</b>	<b>nutsedge</b>	<b>yellow</b>	<b>Cyperus esculentus L.</b>
<b>DATST</b>	<b>jimsonweed</b>	-----	<b>Datura stramonium L.</b>
<b>DIGSA</b>	<b>crabgrass</b>	<b>large (tall)</b>	<b>Digitaria sanguinalis (L.) Scop.</b>
<b>ELEIN</b>	<b>goosegrass</b>	-----	<b>Eleusine indica (L.) Gaerth.</b>
<b>ERIAN</b>	<b>fleabane</b>	<b>annual</b>	<b>Erigeron annuus (L.) Pers.</b>
<b>ERICA</b>	<b>horseweed</b>	-----	<b>Conyza canadensis (L.) Cronq.</b>

<b>FESAR</b>	<b>fescue</b>	<b>tall</b>	<b>Festuca arundinacea Schreb.</b>
<b>IPOHE</b>	<b>morningglory</b>	<b>ivyleaf</b>	<b>Ipomoea hederacea (L.) Jacq.</b>
<b>IPOLA</b>	<b>morningglory</b>	<b>pitted</b>	<b>Ipomoea lacunosa L.</b>
<b>LAMAM</b>	<b>henbit</b>	<b>-----</b>	<b>Lamium aplexicaule L.</b>
<b>LOLMU</b>	<b>ryegrass</b>	<b>annual</b>	<b>Lolium multiflorum Lam.</b>
<b>MOLVE</b>	<b>carpetweed</b>	<b>-----</b>	<b>Mollugo verticulatta L.</b>
<b>PANDI</b>	<b>panicum</b>	<b>fall</b>	<b>Panicum dichotomiflorum (L.) Michx.</b>
<b>PANTE</b>	<b>panicum</b>	<b>Texas</b>	<b>Panicum texanum Buckl.</b>
<b>PHTAM</b>	<b>pokeweed</b>	<b>common</b>	<b>Phytolacca americana L.</b>
<b>PLALA</b>	<b>plantain</b>	<b>buckhorn</b>	<b>Plantago lanceolata L.</b>
<b>POAAN</b>	<b>bluegrass</b>	<b>annual</b>	<b>Poa annua L.</b>
<b>POATR</b>	<b>bluegrass</b>	<b>roughstalk</b>	<b>Poa trivialis L.</b>
<b>POLPY</b>	<b>smartweed</b>	<b>Pennsylvania</b>	<b>Polygonum pensylvanicum L.</b>
<b>RANAC</b>	<b>buttercup</b>	<b>tall</b>	<b>Ranunculus acris L.</b>
<b>RUBCA</b>	<b>dewberry</b>	<b>common</b>	<b>Rubus caesius L.</b>
<b>SETFA</b>	<b>foxtail</b>	<b>giant</b>	<b>Setaria faberi Herrm.</b>
<b>SIYAN</b>	<b>burcucumber</b>	<b>-----</b>	<b>Sicyos angulatus L.</b>
<b>SOLCA</b>	<b>horsenettle</b>	<b>Carolina</b>	<b>Solanum carolinense L.</b>

<b>SOLNI</b>	<b>nightshade</b>	<b>black</b>	<b>Solanum nigrum L.</b>
<b>SORHA</b>	<b>johnsongrass</b>	-----	<b>Sorghum halepense (L.) Pers.</b>
<b>SORVU</b>	<b>shattercane</b>	-----	<b>Sorghum bicolor (L.) Moench</b>
<b>STEME</b>	<b>chickweed</b>	<b>common</b>	<b>Stellaria media (L.) Vill.</b>
<b>VICVI</b>	<b>vetch</b>	<b>hairy</b>	<b>Vicia villosa Roth.</b>
<b>XANST</b>	<b>cocklebur</b>	<b>common</b>	<b>Xanthium strumarium L.</b>

**\*BAYER CODE is a Weed Science Society of America approved computer code from "Important Weeds of the World," 3<sup>rd</sup> ed., 1983. Available from the WSSA, 810 East 10<sup>th</sup> Street, P. O. Box 1897, Lawrence, KS 66044-8897.**

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