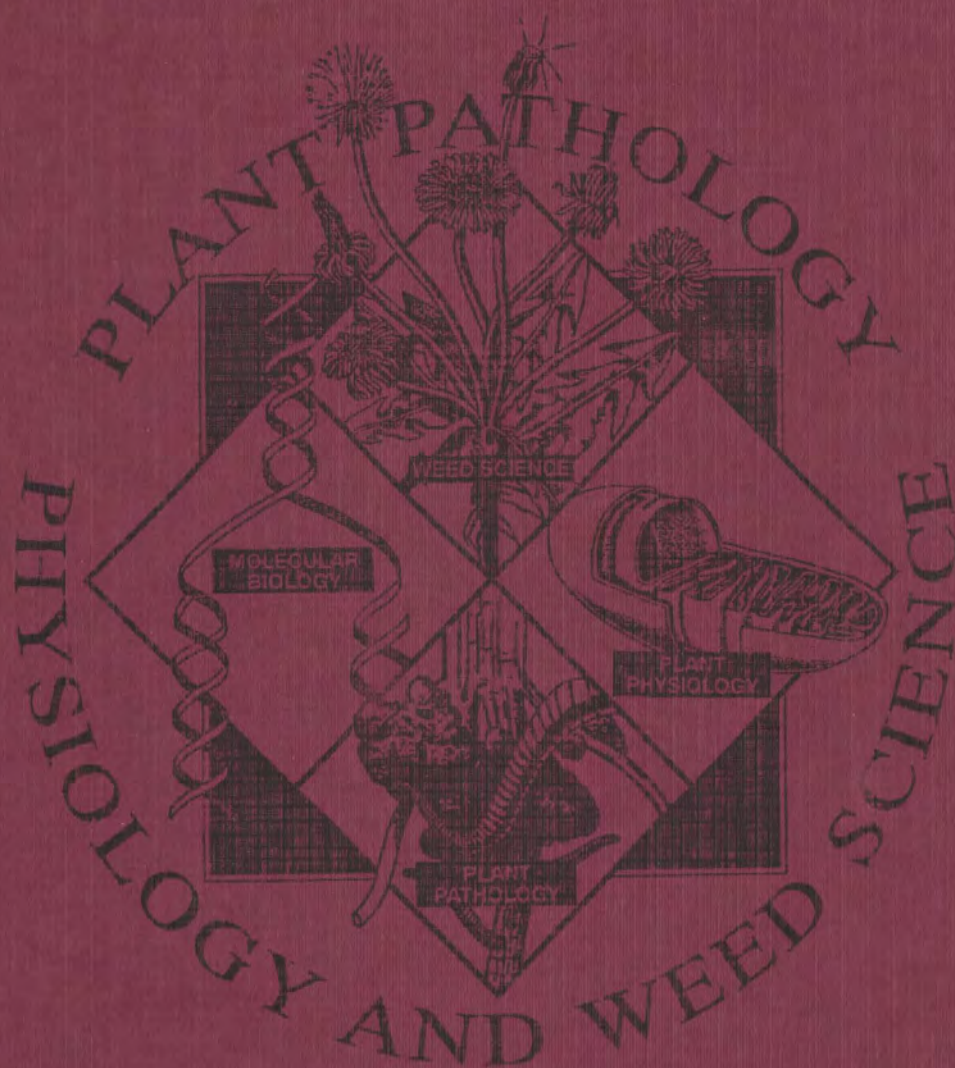
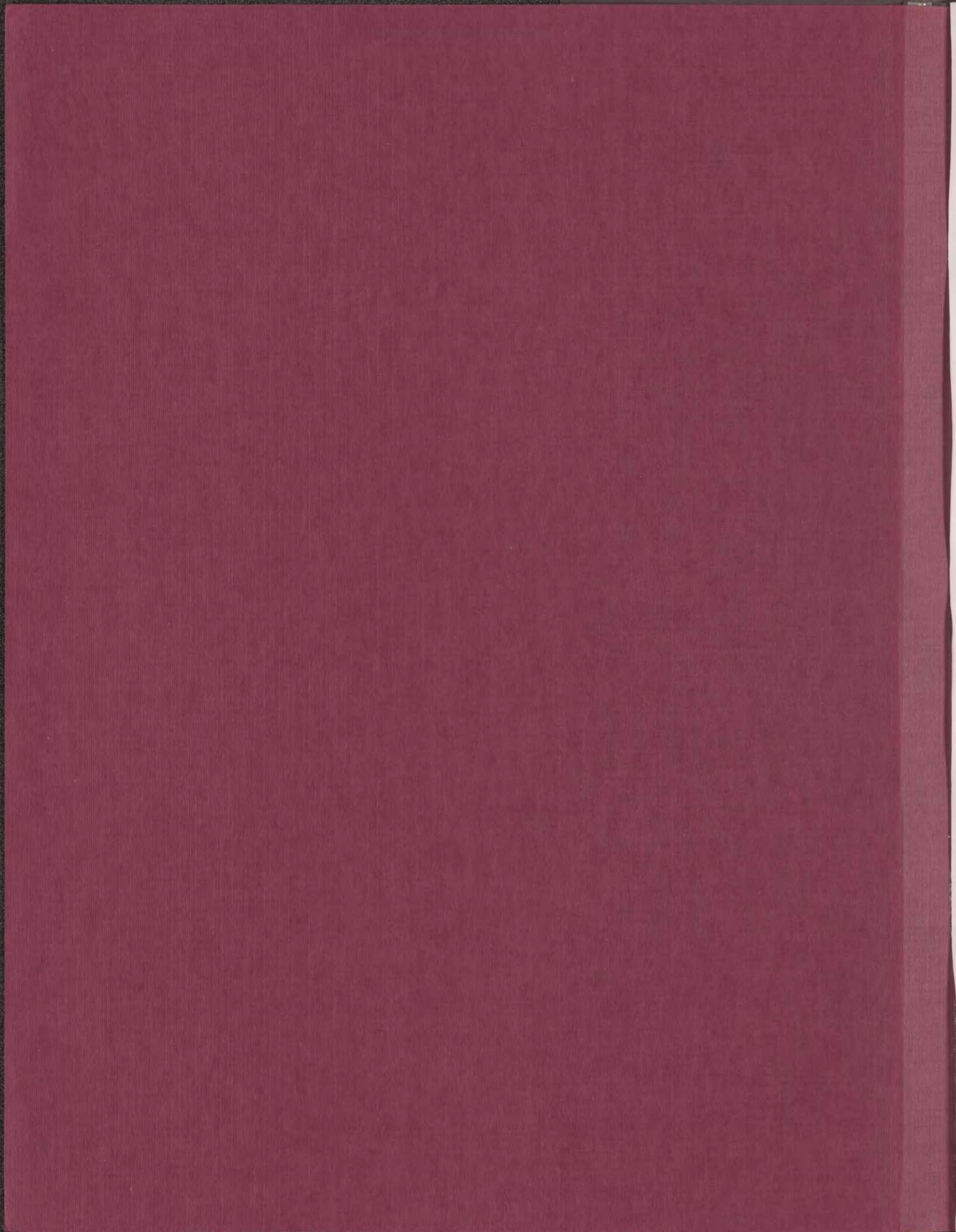


SUMMARY OF 1999 WEED CONTROL TRIALS FOR AGRONOMIC CROPS



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INFORMATION NOTE VTW-99
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Claude Kenley

This publication contains a summary of selected research trials conducted in 1999 in the area of agronomic crop weed control. It is intended as a means of sharing preliminary information with industry cooperators, academic peers, extension agents, and other agriservice professionals. No publication or other use of this information should be made without the consent of the author.

The plot work from which these results are drawn was conducted with the assistance of Claude Kenley, Kevin Bradley, Steve King, Ivan Morozov, and Peter Sforza. The work was conducted on university land in Blacksburg and on the university farm as Whitethorne. Work was also conducted in cooperation with Paul Davis (New Kent), Reuben Blanton (Amelia), Archie Ruffin (Charles City), Jim Riddell (Louisa), Jim Saunders (Nelson), Chris Bates (Clarke), and Arthur Duke (Charles City). Appreciation is extended to these individuals for their help with land and equipment.

For each experiment, an experiment description form precedes the data tables for that experiment. Weed control and crop response data are presented on a percent basis.

Ample rainfall for preemergence herbicide activation was received. Postemergence herbicide applications for both corn and soybeans were generally made to vigorous, actively growing weeds. Essentially no rain was received during the latter half of June and the month of July, and this drought stress coupled with competition from uncontrolled weeds produced severe effects on later crop growth and yield in many studies. A summary of daily temperatures and rainfall for both Blacksburg and Whitethorne is contained at the back of this publication. An index of experiments is contained on the following page. Any questions regarding this publication can be directed to:

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Department of Plant Pathology, Physiology and Weed Science Information Note
VTW-99, November, 1999.

Claude Kenley

TABLE OF CONTENTS

CORN

BASF CONVENTIONAL CORN	1
BAYER RR CORN	11
BAYER FIELD CORN	18
DOW CORN HERBICIDES	26
DUPONT CONVENTIONAL CORN	33
FMC CONVENTIONAL CORN	45
MONSANTO RR CORN TIMING AND WEED COMPETITION	53
MONSANTO RR CORN SYSTEMS	60
MONSANTO RR CORN CROP SAFETY	70
NOVARTIS BICEP MAGNUM TR IN FIELD CORN	80
NOVARTIS SOLUTIONS IN CORN	86
NOVARTIS ROUNDUP READY SEQUENTIAL	93
DUPONT NO TILL CORN	100
NO-TILL CORN - ZENECA UPPER	106
NO-TILL CORN - ZENECA LOWER	111
EVALUATION OF POST CORN HERBICIDES FOR THE CONTROL OF CANADATHISTLE	116
EVALUATION OF POST HERBICIDES FOR THE CONTROL OF TRUMPETCREEPER	121
EVALUATION OF POST HERBICIDES FOR THE CONTROL OF HONEYVINE MILKWEED	131

SOYBEANS

AGREVO LL SOYBEANS	141
BAYER SOYBEANS	147
DOW AGROSCIENCES SOYBEAN HERBICIDE LIST	156
CLASSIC + FIRSTRATE TANKMIXES: IMPACT OF POAST PLUS	168
DUPONT CONVENTIONAL SOYBEANS	184
NOVARTIS BROADSTRIKE/DUAL MAGNUM SOYBEANS	200

SMALL GRAINS

CONTROL OF BULBOUS TALL OATGRASS IN WHEAT	214
CONTROL OF ROUGHSTALK BLUEGRASS IN BARLEY WITH POSTEMERGENCE HERBICIDES	219
PERENNIAL WEED CONTROL NON-CROP	
USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL HERBICIDES	227
EVALUATION OF CUT-STUMP TREATMENTS VS. 3 DIFFERENT GROWTH STAGE TREATMENTS FOR THE CONTROL OF MUGWORT (<i>Artemisia vulgaris</i>)	246
EVALUATION OF SEQUENTIAL HERBICIDE TREATMENTS FOR THE CONTROL OF MUGWORT	262
EFFECT OF SEQUENTIAL MOWINGS AND HERBICIDE TREATMENTS ON MUGWORT CONTROL	276
CONTROL OF HEMP DOGBANE WITH SELECTED POST HERBICIDES	296
EVALUATION OF PRICKLY PEAR CONTROL WITH HERBICIDES AND SIMULATED ROTARY HOEING	306

WEATHER DATA

307

TABLE OF CONTENTS

1	WEATHER DATA
11	WINDATED ROTARY HERBICIDES
12	EVALUATION OF BRICKLY PEAR CONTROL WITH HERBICIDES AND
13	CONTROL OF HEAVY DOBSON WITH SELECTED POST HERBICIDES
14	MIDWORT CONTROL
15	EFFECT OF SEQUENTIAL MOWING AND HERBICIDE TREATMENTS ON
16	OF MIDWORT
17	EVALUATION OF SEQUENTIAL HERBICIDE TREATMENTS FOR THE CONTROL
18	(Asteraceae spp.)
19	STAGE TREATMENTS FOR THE CONTROL OF MIDWORT
20	EVALUATION OF CUT STUMP TREY TREMS VS. PREVENT CROWTH
21	WITH SEVERAL HERBICIDES
22	USE OF A LOGARITHMIC SPRAYER TO EVALUATE MIDWORT CONTROL
23	PERENNIAL WOOD CONTROL MONITORING
24	HERBICIDES
25	CONTROL OF ROUGHLEAF BLEEDER IN BARNY WITH STEEPER
26	CONTROL OF BUTTWOOD TAIL GRASS IN WHEAT
27	SMALL GRAINS
28	NOVARTIS BROODSTRIE GRASS MACHINERY
29	DUPOINT CONVENTIONAL CORN
30	CLASSIC + FIRST FLY - MACHINERY - DUBOIS
31	DOW AGRONOMIC MACHINERY HERBICIDE LIST
32	BAYER ROYAL
33	ARVOLE ROYAL
34	ROYALS
35	MILKWEED
36	EVALUATION OF POST HERBICIDES FOR THE CONTROL OF HONEY VINE
37	EVALUATION OF POST HERBICIDES FOR THE CONTROL OF HONEY VINE
38	CANADIAN
39	EVALUATION OF POST OWN HERBICIDES FOR THE CONTROL OF
40	NO-TILL CORN - SYMBIOSE
41	NO-TILL CORN - SYMBIOSE
42	DUPOINT NO-TILL CORN
43	NOVARTIS ROUNDUP READY SEQUENTIAL
44	NOVARTIS SOLUTIONS IN CORN
45	NOVARTIS BICEP MAGNUM TR IN FIELD CORN
46	NOVARTIS RR CORN SAFETY
47	NOVARTIS RR CORN SYSTEMS
48	MONSANTO RR CORN TILING AND WEED COMPETITION
49	TRIC CONVENTIONAL CORN
50	DUPOINT CONVENTIONAL CORN
51	DOW CORN HERBICIDES
52	SAV FOR FIELD CORN
53	BAYER RR CORN
54	BAR CONVENTIONAL CORN

BASF CONVENTIONAL CORN

Trial ID: 1999 BASF CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-13-99 Country: USA
City: BLACKSBURG, VA. State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1. _____ 2. _____ 3. _____
4. _____ 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: CORN Variety: DK 626 RR Planting Date: 5-10-99
Planting Method: ROWS Rate: 28000 ACRE Depth: 1.50 IN
Perennial Age: _____ Row Spacing: 30 INCH Seed Bed: _____
Soil Temperature: 61 F Soil Moisture: DRY/MOIST Emergence Date: 5-17-99

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4
Site Type: _____
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: SPRING DISK
Trial Initiation Comments: _____

Previous: Crops Pesticides Year
1. _____
2. _____
3. _____

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: _____ % Silt: _____ % Clay: _____
pH: 6.2 CEC: _____ Soil Name: GROSECLOSE Fertility Level: _____

BASF CONVENTIONAL CORN

Trial ID: 1999 BASF CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA. Distance: 12 Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-10-99	6-1-99	6-18-99			
Time of Day:	10 AM	11:30 AM	11-12 AM			
Application Method:	BROADCAST	BROADCAST	BROADCAST			
Application Timing:	PRE	E-POST	L-POST			
Applic. Placement:	SOIL	FOLIAGE	FOLIAGE			
Air Temp., Unit:	70 F	82 F	79 F			
% Relative Humidity:	35	70	40			
Wind Velocity, Unit:	5 MPH	4 MPH	4 MPH			
Dew Presence (Y/N):	N	N	N			
Water Hardness:						
Soil Temp., Unit:	62 F	64 F	68 F			
Soil Moisture:	DRY/MOIST	DRY	MOIST			
% Cloud Cover:	15	5	5			

BASF CONVENTIONAL CORN

Trial ID: 1999 BASF CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 CORN Stage:	PRE	E-POST	L-POST			
Stage Scale:		5 LEAF	9-10 LEAF			
Height, Unit:		4 INCH	16 INCH			
Crop 2 Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 Stage:	NONE	CYPES	CYPES			
Stage Scale:		8 LF 2 IN	12 LF 4 I			
Density, Unit:		40 M2	40 M2			
Weed 2 Stage:	NONE	CHEAL	CHEAL			
Stage Scale:		8 LF 2 IN	8 LF 2 IN			
Density, Unit:		25 M2	20 M2			
Weed 3 Stage:	NONE	AMARE	AMARE			
Stage Scale:		4 LF 1 IN	5 LF 1 IN			
Density, Unit:		10 M2	8 M2			
Weed 4 Stage:	NONE	SORHA	MOLVE			
Stage Scale:		4 LF	ROSETTE			
Density, Unit:		7 M2	3 M2			
Weed 5 Stage:	NONE	NONE	DATST			
Stage Scale:			7 LF 10IN			
Density, Unit:			1 M2			
Weed 6 Stage:	NONE	NONE	IPOLA			
Stage Scale:			5 LF 2 IN			
Density, Unit:			2 M2			
Weed 7 Stage:						
Stage Scale:						
Density, Unit:						
Weed 8 Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 Stage:						
Stage Scale:						
Density, Unit:						

BASF CONVENTIONAL CORN

Trial ID: 1999 BASF CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK			
Operating Pressure:	34 PSI	34 PSI	34 PSI			
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN			
Nozzle Size:	8003	8003	8003			
Nozzle Spacing, Unit:	18 INCH	18 INCH	18 INCH			
Nozzles/Row:	4	4	4			
Band Width, Unit:						
Boom Length, Unit:	72 INCH	72 INCH	72 INCH			
Boom Height, Unit:	20 INCH	20 INCH	20 INCH			
Ground Speed, Unit:	3.1 MPH	3.1 MPH	3.1 MPH			
Incorporation Equip.:						
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER	WATER	WATER			
Spray Volume, Unit:	22.5 GPA	22.5 GPA	22.5 GPA			
Spray pH:						
Propellant:	CO/2	CO/2	CO/2			
Tank Mix (Y/N):	Y	Y	Y			

Trt No Treatment Application Comment

---	_____
---	_____
---	_____

BASF CONVENTIONAL CORN

Trial ID: 1999 BASF CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	CHEAL	CYPES	AMARE	HIBTR	SIDSP	INJURY
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	5-20-99	6-14-99	6-14-99	6-14-99	6-14-99	6-14-99	6-25-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg	INJURY	CHEAL	CYPES	AMARE	HIBTR	SIDSP	INJURY
1	CONTROL				0.0 a	0.0 a	0.0 e	0.0 e	0.0 d	0.0 d	0.0 a
2	FRONTIER	1.00	LB A/A	PRE	0.0 a	0.0 a	87.5 b	92.5 a	97.5 ab	97.5 ab	96.3 ab
2	ACCENT	.031	LB A/A	E-POST							0.0 a
2	BANVEL	.263	LB A/A	E-POST							
2	NIS	.500	% V/V	E-POST							
3	GUARDSMAN	2.50	LB A/A	PRE	0.0 a	0.0 a	97.5 a	85.0 a	100.0 a	100.0 a	100.0 a
3	ACCENT	.031	LB A/A	E-POST							0.0 a
3	BANVEL	.263	LB A/A	E-POST							
3	ATRAZINE	1.00	LB A/A	E-POST							
3	NIS	.500	% V/V	E-POST							
4	ACCENT	.031	LB A/A	E-POST	0.0 a	0.0 a	91.3 ab	63.8 b	96.3 ab	96.3 abc	98.8 ab
4	BANVEL	.263	LB A/A	E-POST							0.0 a
4	ATRAZINE	.75	LB A/A	E-POST							
4	NIS	.500	% V/V	E-POST							
5	ACCENT	.031	LB A/A	E-POST	0.0 a	0.0 a	77.5 c	42.5 c	92.5 bc	92.5 bc	92.5 bc
5	BANVEL	.263	LB A/A	E-POST							0.0 a
5	NIS	.500	% V/V	E-POST							
5	LADDOK S-12	.75	LB A/A	L-POST							
5	COC	1.00	% V/V	L-POST							
6	DISTINCT	.13	LB A/A	E-POST	0.0 a	0.0 a	62.5 d	30.0 cd	90.0 c	92.5 bc	92.5 bc
6	NIS	.250	% V/V	E-POST							0.0 a
6	UAN	1.25	% V/V	E-POST							
7	DISTINCT	.175	LB A/A	E-POST	0.0 a	0.0 a	62.5 d	0.0 e	87.5 c	91.3 c	88.8 c
7	NIS	.250	% V/V	E-POST							0.0 a
7	UAN	1.25	% V/V	E-POST							
8	DISTINCT	.263	LB A/A	E-POST	0.0 a	0.0 a	60.0 d	20.0 d	90.0 c	92.5 bc	92.5 bc
8	NIS	.250	% V/V	E-POST							0.0 a
8	UAN	1.25	% V/V	E-POST							
9	DISTINCT	.13	LB A/A	L-POST	0.0 a	0.0 a	0.0 e	0.0 e	0.0 d	0.0 d	0.0 d
9	NIS	.250	% V/V	L-POST							0.0 a
9	UAN	1.25	% V/V	L-POST							

BASF CONVENTIONAL CORN

Trial ID: 1999 BASF CORN
Location: SMITHFIELD, VA.

Investigator: E.S. HAGOOD
Study Dir.: Scott Hagood

Weed Code	INJURY	INJURY	CHEAL	CYPES	AMARE	HIBTR	SIDSP	INJURY
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated								
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	5-20-99	6-14-99	6-14-99	6-14-99	6-14-99	6-14-99	6-14-99	6-25-99
Footnote Number								
Trt-Eval Interval								
PRM Data Type								
# Subsamples, Dec.								

Trt No.	Treatment Name	Rate	Unit	Grow Stg							
10	DISTINCT	.18	LB A/A	L-POST	0.0 a	0.0 a	0.0 e	0.0 e	0.0 d	0.0 d	0.0 d 0.0 a
10	NIS	.250	% V/V	L-POST							
10	UAN	1.25	LB A/A	L-POST							
LSD (P=.05)					0.00	0.00	8.75	18.90	6.22	6.24	7.01 0.00
Standard Deviation					0.00	0.00	6.03	13.03	4.29	4.30	4.83 0.00
CV					0.0	0.0	11.19	39.03	6.56	6.5	7.3 0.0
Replicate F					0.000	0.000	1.025	1.840	3.566	3.375	2.887 0.000
Replicate Prob(F)					1.0000	1.0000	0.3969	0.1637	0.0271	0.0328	0.0539 1.0000
Treatment F					0.000	0.000	169.667	30.938	445.438	453.000	359.133 0.000
Treatment Prob(F)					1.0000	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001 1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

BASF CONVENTIONAL CORN

Trial ID: 1999 BASF CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	CHEAL	CYPES	AMARE	HIBTR	INJURY	CHEAL	AMARE	HIBTR
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated								
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-25-99	6-25-99	6-25-99	6-25-99	7-30-99	7-30-99	7-30-99	7-30-99
Footnote Number								
Trt-Eval Interval								
PRM Data Type								
# Subsamples, Dec.								

Trt No.	Treatment Name	Rate	Unit	Grow Stg	CHEAL	CYPES	AMARE	HIBTR	INJURY	CHEAL	AMARE	HIBTR
1	CONTROL				0.0 d	0.0 e	0.0 a	0.0 d	0.0 a	0.0 b	0.0 b	0.0 b
2	FRONTIER	1.00	LB A/A	PRE	97.8 a	90.0 a	0.0 a	97.0 ab	0.0 a	100.0 a	100.0 a	100.0 a
2	ACCENT	.031	LB A/A	E-POST								
2	BANVEL	.263	LB A/A	E-POST								
2	NIS	.500	% V/V	E-POST								
3	GUARDSMAN	2.50	LB A/A	PRE	100.0 a	82.5 a	0.0 a	100.0 a	0.0 a	97.5 a	100.0 a	100.0 a
3	ACCENT	.031	LB A/A	E-POST								
3	BANVEL	.263	LB A/A	E-POST								
3	ATRAZINE	1.00	LB A/A	E-POST								
3	NIS	.500	% V/V	E-POST								
4	ACCENT	.031	LB A/A	E-POST	98.8 a	21.3 cd	0.0 a	100.0 a	0.0 a	97.5 a	100.0 a	100.0 a
4	BANVEL	.263	LB A/A	E-POST								
4	ATRAZINE	.75	LB A/A	E-POST								
4	NIS	.500	% V/V	E-POST								
5	ACCENT	.031	LB A/A	E-POST	98.8 a	42.5 b	0.0 a	98.8 a	0.0 a	98.8 a	100.0 a	98.8 a
5	BANVEL	.263	LB A/A	E-POST								
5	NIS	.500	% V/V	E-POST								
5	LADDOK S-12	.75	LB A/A	L-POST								
5	COC	1.00	% V/V	L-POST								
6	DISTINCT	.13	LB A/A	E-POST	97.5 ab	27.5 c	0.0 a	98.8 a	0.0 a	96.3 a	98.8 a	100.0 a
6	NIS	.250	% V/V	E-POST								
6	UAN	1.25	% V/V	E-POST								
7	DISTINCT	.175	LB A/A	E-POST	92.5 b	8.8 de	0.0 a	92.5 b	0.0 a	97.5 a	100.0 a	100.0 a
7	NIS	.250	% V/V	E-POST								
7	UAN	1.25	% V/V	E-POST								
8	DISTINCT	.263	LB A/A	E-POST	97.0 ab	22.5 cd	0.0 a	98.8 a	0.0 a	95.0 a	97.5 a	100.0 a
8	NIS	.250	% V/V	E-POST								
8	UAN	1.25	% V/V	E-POST								
9	DISTINCT	.13	LB A/A	L-POST	56.3 c	12.5 de	0.0 a	60.0 c	0.0 a	96.3 a	97.5 a	96.3 a
9	NIS	.250	% V/V	L-POST								
9	UAN	1.25	% V/V	L-POST								

BASF CONVENTIONAL CORN

Trial ID: 1999 BASF CORN
Location: SMITHFIELD, VA.

Investigator: E.S. HAGOOD
Study Dir.: Scott Hagood

Weed Code	CHEAL	CYPES	AMARE	HIBTR	INJURY	CHEAL	AMARE	HIBTR
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated								
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-25-99	6-25-99	6-25-99	6-25-99	7-30-99	7-30-99	7-30-99	7-30-99
Footnote Number								
Trt-Eval Interval								
PRM Data Type								
# Subsamples, Dec.								

Trt No.	Treatment Name	Rate	Unit	Grow Stg								
10	DISTINCT	.18	LB A/A	L-POST	58.8 c	13.8 cde	0.0 a	63.8 c	0.0 a	95.0 a	100.0 a	97.5 a
10	NIS	.250	% V/V	L-POST								
10	UAN	1.25	LB A/A	L-POST								
LSD (P=.05)					5.01	14.89	0.00	5.02	0.00	7.12	3.33	4.14
Standard Deviation					3.45	10.26	0.00	3.46	0.00	4.90	2.29	2.85
CV					4.33	31.95	0.0	4.28	0.0	5.61	2.56	3.2
Replicate F					2.331	1.066	0.000	1.232	0.000	1.135	1.705	1.739
Replicate Prob(F)					0.0966	0.3799	1.0000	0.3175	1.0000	0.3527	0.1896	0.1828
Treatment F					356.884	35.980	0.000	346.802	0.000	157.158	751.520	483.614
Treatment Prob(F)					0.0001	0.0001	1.0000	0.0001	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

BASF CONVENTIONAL CORN

Trial ID: 1999 BASF CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code SETFA
Crop Code CORN
Part Rated
Rating Data Type VISUAL
Rating Unit 0-100
Rating Date 7-30-99
Footnote Number
Trt-Eval Interval
PRM Data Type
Subsamples, Dec.

Trt No.	Treatment Name	Rate	Unit	Grow Stg	
1	CONTROL			0.0 d	
2	FRONTIER	1.00	LB A/A	PRE	93.8 a
2	ACCENT	.031	LB A/A	E-POST	
2	BANVEL	.263	LB A/A	E-POST	
2	NIS	.500	% V/V	E-POST	
3	GUARDSMAN	2.50	LB A/A	PRE	97.5 a
3	ACCENT	.031	LB A/A	E-POST	
3	BANVEL	.263	LB A/A	E-POST	
3	ATRAZINE	1.00	LB A/A	E-POST	
3	NIS	.500	% V/V	E-POST	
4	ACCENT	.031	LB A/A	E-POST	91.3 a
4	BANVEL	.263	LB A/A	E-POST	
4	ATRAZINE	.75	LB A/A	E-POST	
4	NIS	.500	% V/V	E-POST	
5	ACCENT	.031	LB A/A	E-POST	90.0 ab
5	BANVEL	.263	LB A/A	E-POST	
5	NIS	.500	% V/V	E-POST	
5	LADDOK S-12	.75	LB A/A	L-POST	
5	COC	1.00	% V/V	L-POST	
6	DISTINCT	.13	LB A/A	E-POST	66.3 c
6	NIS	.250	% V/V	E-POST	
6	UAN	1.25	% V/V	E-POST	
7	DISTINCT	.175	LB A/A	E-POST	75.0 bc
7	NIS	.250	% V/V	E-POST	
7	UAN	1.25	% V/V	E-POST	
8	DISTINCT	.263	LB A/A	E-POST	71.3 c
8	NIS	.250	% V/V	E-POST	
8	UAN	1.25	% V/V	E-POST	
9	DISTINCT	.13	LB A/A	L-POST	71.3 c
9	NIS	.250	% V/V	L-POST	
9	UAN	1.25	% V/V	L-POST	

BASF CONVENTIONAL CORN

Trial ID: 1999 BASF CORN
Location: SMITHFIELD, VA.

Investigator: E.S. HAGOOD
Study Dir.: Scott Hagood

Weed Code SETFA
Crop Code CORN
Part Rated
Rating Data Type VISUAL
Rating Unit 0-100
Rating Date 7-30-99
Footnote Number
Trt-Eval Interval
PRM Data Type
Subsamples, Dec.

Trt	Treatment	Rate	Unit	Grow	Stg
10	DISTINCT	.18	LB A/A	L-POST	66.3 c
10	NIS	.250	% V/V	L-POST	
10	UAN	1.25	LB A/A	L-POST	

LSD (P=.05) 15.48
Standard Deviation 10.67
CV 14.77

Replicate F 2.817
Replicate Prob(F) 0.0580
Treatment F 27.620
Treatment Prob(F) 0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

BAYER RR CORN

Trial ID: 99 BAYER CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-12-99 Country: USA
City: BLACKSBURG, VA. State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1.CHEAL COMMON LAMBSQTR 2.AMARE REDROOT PIGWEED 3.CYPES YELLOW NUTSEDGE
4.ABUTH VELVETLEAF 5.HIBTR VENICE MALLOW 6.
7. 8. 9.

Crop 1: CORN Variety: DK 626 RR Planting Date: 5-10-99
Planting Method: ROWS Rate: 28000 ACRE Depth: 1.50 IN
Perennial Age: Row Spacing: 30 INCH Seed Bed:
Soil Temperature: Soil Moisture: DRY/MOIST Emergence Date: 5-17-99

Crop 2: Variety: Planting Date:
Planting Method: Rate: Depth:
Perennial Age: Row Spacing: Seed Bed:
Soil Temperature: Soil Moisture: Emergence Date:

Crop 3: Variety: Planting Date:
Planting Method: Rate: Depth:
Perennial Age: Row Spacing: Seed Bed:
Soil Temperature: Soil Moisture: Emergence Date:

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4

Site Type:
Tillage Type: Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: SPRING DISK
Trial Initiation Comments:

Previous: Crops	Pesticides	Year
1.		
2.		
3.		

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: % Silt: % Clay:
pH: 6.2 CEC: Soil Name: GROSECLOSE Fertility Level:

BAYER RR CORN

Trial ID: 99 BAYER CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA.

Distance: 2

Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-10-99	6-1-99	6-18-99			
Time of Day:	1:30 PM	11:30 AM	12:00 PM			
Application Method:	BROADCAST	BROADCAST	BROADCAST			
Application Timing:	PRE	E-POST	L-POST			
Applic. Placement:	SOIL	FOLIAGE	FOLIAGE			
Air Temp., Unit:	77 F	83 F	78 F			
% Relative Humidity:	35	70	40			
Wind Velocity, Unit:	5 MPH	3.5 MPH	4 MPH			
Dew Presence (Y/N):	N	N	N			
Water Hardness:	N	N	N			
Soil Temp., Unit:	60 F	60 F	71 F			
Soil Moisture:	DRY/MOIST	DRY/DAMP	MOIST			
% Cloud Cover:	15	25	5			

BAYER RR CORN

Trial ID: 99 BAYER CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 CORN Stage:	PRE	E-POST	L-POST			
Stage Scale:		4-5 LEAF	10 LEAF			
Height, Unit:		3.5 INCH	15 INCH			
Crop 2 _____ Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 _____ Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 CHEAL Stage:	NONE	4-8 LEAF	12 LEAF			
Stage Scale:		0.5-1.5"	3 INCH			
Density, Unit:		45 M2	30 M2			
Weed 2 AMARE Stage:	NONE	2-4 LEAF	5 LEAF			
Stage Scale:		.5-1 INCH	1 INCH			
Density, Unit:		3-6 M2	3 M2			
Weed 3 CYPES Stage:	NONE	4-8 LEAF	12 LEAF			
Stage Scale:		1.5-2.5"	5 INCH			
Density, Unit:		30 M2	15 M2			
Weed 4 ABUTH Stage:	NONE	2-3 LEAF	NONE			
Stage Scale:		3/4-1.5"				
Density, Unit:		3-5 M2				
Weed 5 HIBTR Stage:	NONE	2-3 LEAF	NONE			
Stage Scale:		.5-1 INCH				
Density, Unit:		17.5 M2				
Weed 6 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 7 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 8 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 _____ Stage:						
Stage Scale:						
Density, Unit:						

BAYER RR CORN

Trial ID: 99 BAYER CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK			
Operating Pressure:	34 PSI	34 PSI	34 PSI			
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN			
Nozzle Size:	8003	8003	8003			
Nozzle Spacing, Unit:	18 INCH	18 INCH	18 INCH			
Nozzles/Row:	4	4	4			
Band Width, Unit:						
Boom Length, Unit:	72 INCH	72 INCH	72 INCH			
Boom Height, Unit:	20 INCH	20 INCH	20 INCH			
Ground Speed, Unit:	3.1 MPH	3.1 MPH	3.1 MPH			
Incorporation Equip.:						
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER	WATER	WATER			
Spray Volume, Unit:	22.5 GPA	22.5 GPA	22.5 GPA			
Spray pH:						
Propellant:	CO/2	CO/2	CO/2			
Tank Mix (Y/N):	Y	Y	Y			

Trt No Treatment Application Comment

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BAYER RR CORN

Trial ID: 99 BAYER CORN
Location: SMITHFIELD, VA.

Investigator: E.S. HAGOOD
Study Dir.: Scott Hagood

Weed Code	Crop Code	Part Rated	Rating Data Type	Rating Unit	Rating Date	Footnote Number	Trt-Eval Interval	PRM Data Type	# Subsamples, Dec.
INJURY	CORN		VISUAL	O-100	5-20-99				
INJURY	CORN		VISUAL	0-100	6-7-99				
CHEAL	CORN		VISUAL	0-100	6-7-99				
CYPES	CORN		VISUAL	0-100	6-7-99				
ECHCG	CORN		VISUAL	0-100	6-7-99				
AMARE	CORN		VISUAL	0-100	6-7-99				
ABUTH	CORN		VISUAL	0-100	6-7-99				
INJURY	CORN		VISUAL	0-100	6-19-99				

Trt No.	Treatment Name	Rate	Unit	Grow Stg	INJURY	INJURY	CHEAL	CYPES	ECHCG	AMARE	ABUTH	INJURY
1	CONTROL				0.0 a	0.0 a	0.0 d	0.0 c	0.0 d	0.0 c	0.0 c	0.0 a
2	AXIOM	.319	LB A/A	PRE	0.0 a	0.0 a	95.0 a	73.8 a	100.0 a	100.0 a	100.0 a	0.0 a
2	ROUNDUP ULTRA	1.00	LB A/A	E-POST								
3	AXIOM	.319	LB A/A	PRE	0.0 a	0.0 a	97.5 a	85.0 a	100.0 a	100.0 a	100.0 a	0.0 a
3	ATRAZINE	1.10	LB A/A	PRE								
3	ROUNDUP ULTRA	.75	LB A/A	E-POST								
4	ROUNDUP ULTRA	1.00	LB A/A	E-POST	0.0 a	0.0 a	78.8 b	73.8 a	93.8 b	100.0 a	97.5 a	0.0 a
5	ROUNDUP ULTRA	1.00	LB A/A	E-POST	0.0 a	0.0 a	91.3 ab	72.5 a	100.0 a	100.0 a	96.3 a	0.0 a
5	ROUNDUP ULTRA	1.00	LB A/A	L-POST								
6	AXIOM	.319	LB A/A	E-POST	0.0 a	0.0 a	0.0 d	0.0 c	0.0 d	0.0 c	0.0 c	0.0 a
6	ROUNDUP ULTRA	1.00	LB A/A	L-POST								
7	AXIOM	.319	LB A/A	E-POST	0.0 a	0.0 a	46.3 c	48.8 b	48.8 c	85.0 b	85.0 b	0.0 a
7	ATRAZINE	1.10	LB A/A	E-POST								
7	ROUNDUP ULTRA	.75	LB A/A	L-POST								
LSD (P=.05)					0.00	0.00	12.73	15.00	4.56	0.00	5.19	0.00
Standard Deviation					0.00	0.00	8.57	10.10	3.07	0.00	3.49	0.00
CV					0.0	0.0	14.67	19.98	4.86	0.0	5.11	0.0
Replicate F					0.000	0.000	0.726	0.803	0.632	0.000	0.659	0.000
Replicate Prob(F)					1.0000	1.0000	0.5498	0.5086	0.6041	1.0000	0.5881	1.0000
Treatment F					0.000	0.000	102.892	51.374	933.253	0.000	724.024	0.000
Treatment Prob(F)					1.0000	1.0000	0.0001	0.0001	0.0001	1.0000	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

BAYER RR CORN

Trial ID: 99 BAYER CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	CHEAL	CYPES	ECHCG	AMARE	ABUTH	INJURY	CHEAL
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-19-99	6-19-99	6-19-99	6-19-99	6-19-99	7-30-99	7-30-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg							
1	CONTROL				0.0 d	0.0 b	0.0 c	0.0 c	0.0 c	0.0 a	0.0 c
2	AXIOM	.319	LB A/A	PRE	92.5 a	65.0 a	97.5 a	100.0 a	97.5 a	0.0 a	91.3 a
2	ROUNDUP ULTRA	1.00	LB A/A	E-POST							
3	AXIOM	.319	LB A/A	PRE	99.5 a	72.5 a	100.0 a	100.0 a	100.0 a	0.0 a	92.5 a
3	ATRAZINE	1.10	LB A/A	PRE							
3	ROUNDUP ULTRA	.75	LB A/A	E-POST							
4	ROUNDUP ULTRA	1.00	LB A/A	E-POST	90.0 a	68.8 a	100.0 a	100.0 a	100.0 a	0.0 a	77.5 b
5	ROUNDUP ULTRA	1.00	LB A/A	E-POST	90.0 a	70.0 a	100.0 a	100.0 a	97.5 a	0.0 a	92.5 a
5	ROUNDUP ULTRA	1.00	LB A/A	L-POST							
6	AXIOM	.319	LB A/A	E-POST	52.5 c	2.5 b	70.0 b	12.5 b	10.0 b	0.0 a	100.0 a
6	ROUNDUP ULTRA	1.00	LB A/A	L-POST							
7	AXIOM	.319	LB A/A	E-POST	72.5 b	53.8 a	78.8 b	100.0 a	100.0 a	0.0 a	100.0 a
7	ATRAZINE	1.10	LB A/A	E-POST							
7	ROUNDUP ULTRA	.75	LB A/A	L-POST							
LSD (P=.05)					15.18	21.58	15.88	2.81	4.08	0.00	8.92
Standard Deviation					10.22	14.53	10.69	1.89	2.75	0.00	6.00
CV					14.39	30.58	13.69	2.58	3.81	0.0	7.59
Replicate F					1.756	0.931	1.864	1.000	0.632	0.000	0.884
Replicate Prob(F)					0.1916	0.4461	0.1720	0.4155	0.6041	1.0000	0.4679
Treatment F					47.162	19.618	46.595	2358.333	1121.211	0.000	141.430
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001	0.0001	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

BAYER RR CORN

Trial ID: 99 BAYER CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	AMARE	DATST	ABUTH	SETFA	IPOLA
Crop Code	CORN	CORN	CORN	CORN	CORN
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	7-30-99	7-30-99	7-30-99	7-30-99	7-30-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg					
1	CONTROL				0.0 c	0.0 c	0.0 c	0.0 c	0.0 c
2	AXIOM	.319	LB A/A	PRE	95.0 b	93.8 b	93.8 b	92.5 ab	90.0 b
2	ROUNDUP ULTRA	1.00	LB A/A	E-POST					
3	AXIOM	.319	LB A/A	PRE	100.0 a	100.0 a	100.0 a	97.5 ab	96.3 ab
3	ATRAZINE	1.10	LB A/A	PRE					
3	ROUNDUP ULTRA	.75	LB A/A	E-POST					
4	ROUNDUP ULTRA	1.00	LB A/A	E-POST	97.5 ab	96.3 ab	97.5 ab	91.3 b	92.5 ab
5	ROUNDUP ULTRA	1.00	LB A/A	E-POST	100.0 a	100.0 a	100.0 a	96.3 ab	100.0 a
5	ROUNDUP ULTRA	1.00	LB A/A	L-POST					
6	AXIOM	.319	LB A/A	E-POST	100.0 a	100.0 a	100.0 a	100.0 a	97.5 ab
6	ROUNDUP ULTRA	1.00	LB A/A	L-POST					
7	AXIOM	.319	LB A/A	E-POST	100.0 a	100.0 a	97.5 ab	96.3 ab	98.8 a
7	ATRAZINE	1.10	LB A/A	E-POST					
7	ROUNDUP ULTRA	.75	LB A/A	L-POST					
LSD (P=.05)					3.62	4.79	6.23	8.08	8.38
Standard Deviation					2.44	3.23	4.19	5.44	5.64
CV					2.88	3.83	4.98	6.63	6.87
Replicate F					1.000	1.600	0.051	0.836	0.673
Replicate Prob(F)					0.4155	0.2244	0.9844	0.4918	0.5797
Treatment F					938.600	532.771	314.492	177.926	166.346
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

BAYER FIELD CORN

Trial ID: BAYER CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-13-99 Country: USA
City: BLACKSBURG, VA. State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1.CHEAL COMMON LAMBSQTR 2.CYPES YELLOW NUTSEEDGE 3.DATST JIMSONWEED
4.ECHCG BARNYARDGRASS 5.SORHA JOHNSONGRASS 6.ABUTH VELVETLEAF
7. _____ 8. _____ 9. _____

Crop 1: CORN _____ Variety: DK 626 RR Planting Date: 5-10-99
Planting Method: ROWS Rate: 28000 ACRE Depth: 1.50 IN
Perennial Age: _____ Row Spacing: 30 IN Seed Bed: _____
Soil Temperature: _____ Soil Moisture: DRY/OIST Emergence Date: 5-17-99

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4
Site Type: _____
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: SPRING DISK
Trial Initiation Comments: _____

Previous:	Crops	Pesticides	Year
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: _____ % Silt: _____ % Clay: _____
pH: 6.2 CEC: _____ Soil Name: GROSECLOSE Fertility Level: _____

VPI & SU

BAYER FIELD CORN

Trial ID: BAYER CORN
 Location: SMITHFIELD, VA.

Investigator: E.S. HAGOOD
 Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA.

Distance: 2

Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-10-99	5-17-99	5-25-99	6-1-99		
Time of Day:	10 AM	10 AM	4:00 PM	10:30 AM		
Application Method:	BROADCAST	BROADCAST	BROADCAST	BROADCAST		
Application Timing:	PRE	SPIKE	3 LEAF	5 LEAF		
Applic. Placement:	SOIL	FOLIAGE	FOLIAGE	FOLIAGE		
Air Temp., Unit:	77 F	72 F	70 F	72 F		
% Relative Humidity:	35	25	30	85		
Wind Velocity, Unit:	3 MPH	3 MPH	6 MPH	7 MPH		
Dew Presence (Y/N):	N	N	N	N		
Water Hardness:	N	N	N	N		
Soil Temp., Unit:	60 F	63 F	61 F	65 F		
Soil Moisture:	DRY/MOIST	MOIST	DRY/MOIST	DRY		
% Cloud Cover:	20	15	40	5		

BAYER FIELD CORN

Trial ID: BAYER CORN
Location: SMITHFIELD, VA.

Investigator: E.S. HAGOOD
Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 CORN Stage:	PRE	SPIKE	3 LEAF	5 LEAF		
Stage Scale:		EMERGING	3 LEAF	5 LEAF		
Height, Unit:		.50 INCH	3 INCH	5 INCH		
Crop 2 Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 CHEAL Stage:	NONE	NONE	3-4 LEAF	8 LEAF		
Stage Scale:			1/4-1/2"	2 INCH		
Density, Unit:			10 M2	25 M2		
Weed 2 CYPES Stage:	NONE	3 LEAF	2-3 LEAF	5 LEAF		
Stage Scale:		2 INCH	2-3 INCH	4 INCH		
Density, Unit:		5 M2	9 M2	9 M2		
Weed 3 DATST Stage:	NONE	NONE	COTY-2 LF	4 LEAF		
Stage Scale:			1-2 INCH	2 INCH		
Density, Unit:			1 M2	1 M2		
Weed 4 ECHCG Stage:	NONE	NONE	1-2 LEAF	3 LEAF		
Stage Scale:			1/4-1/2"	1 INCH		
Density, Unit:			1 M2	1 M2		
Weed 5 SORHA Stage:	NONE	NONE	2-4 LEAF	6 LEAF		
Stage Scale:			2-4 INCH	6 INCH		
Density, Unit:			2 M2	2 M2		
Weed 6 ABUTH Stage:	NONE	NONE	2 LEAF	3 LEAF		
Stage Scale:			1/2-1"	2 INCH		
Density, Unit:			1 M2	1 M2		
Weed 7 Stage:						
Stage Scale:						
Density, Unit:						
Weed 8 Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 Stage:						
Stage Scale:						
Density, Unit:						

10-5-99 (BAYERFRN)
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AOV Means Table Page 1 of 4

BAYER FIELD CORN

Trial ID: BAYER CORN
Location: SMITHFIELD, VA.

Investigator: E.S. HAGOOD
Study Dir.: Scott Hagood

Weed Code	INJURY	CORN	CORN	CHEAL	CORN	CYPES	ECHCG	AMARE	INJURY
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated									
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	5-20-99	6-7-99	6-7-99	6-7-99	6-7-99	6-7-99	6-7-99	6-7-99	7-30-99
Footnote Number									
Trt-Eval Interval									
PRM Data Type									
# Subsamples, Dec.									

Trt No.	Treatment Name	Rate	Unit	Grow Stg							
1	ATRAZINE	1.50	LB A/A SPIKE	0.0 b	0.0 a	91.3 ab	91.3 abc	100.0 a	100.0 a	0.0 a	
1	FRONTIER	1.20	LB A/A SPIKE								
2	ATRAZINE	1.50	LB A/A SPIKE	0.0 b	0.0 a	91.3 ab	83.8 a-d	100.0 a	100.0 a	0.0 a	
2	AXIOM	.638	LB A/A SPIKE								
3	ATRAZINE	1.50	LB A/A 3 LF	0.0 b	0.0 a	61.3 de	78.8 bcd	92.5 a	90.0 bc	0.0 a	
3	FRONTIER	1.20	LB A/A 3 LF								
4	ATRAZINE	1.50	LB A/A 3 LF	0.0 b	0.0 a	82.5 bc	75.0 cd	97.5 a	97.5 ab	0.0 a	
4	AXIOM	.638	LB A/A 3 LF								
5	ATRAZINE	1.50	LB A/A 5 LF	0.0 b	2.5 a	52.5 e	47.5 e	92.5 a	87.5 cd	0.0 a	
5	FRONTIER	1.20	LB A/A 5 LF								
6	ATRAZINE	1.50	LB A/A 5 LF	0.0 b	0.0 a	72.5 cd	71.3 d	80.0 b	80.0 d	0.0 a	
6	AXIOM	.638	LB A/A 5 LF								
7	AXIOM	.638	LB A/A PRE	0.0 b	0.0 a	82.5 bc	83.8 a-d	100.0 a	100.0 a	0.0 a	
8	DUAL II MAGNUM	1.30	LB A/A PRE	2.5 ab	0.0 a	60.0 de	92.5 ab	100.0 a	100.0 a	0.0 a	
9	AXIOM	.638	LB A/A PRE	0.0 b	0.0 a	97.5 a	85.0 a-d	100.0 a	100.0 a	0.0 a	
9	SENCOR	.10	LB A/A 5 LF								
9	BANVEL	.250	LB A/A 5 LF								
10	AXIOM	.638	LB A/A PRE	1.3 ab	2.5 a	100.0 a	78.8 bcd	100.0 a	100.0 a	0.0 a	
10	ATRAZINE	.638	LB A/A PRE								
10	PROWL	1.25	LB A/A PRE								
11	AXIOM	.638	LB A/A PRE	3.8 a	0.0 a	100.0 a	92.5 ab	100.0 a	100.0 a	0.0 a	
11	BALANCE	.059	LB A/A PRE								
12	AXIOM	.638	LB A/A PRE	0.0 b	0.0 a	91.3 ab	72.5 d	100.0 a	100.0 a	0.0 a	
12	BASIS	.023	LB A/A PRE								
13	AXIOM	.638	LB A/A PRE	0.0 b	0.0 a	100.0 a	77.5 bcd	100.0 a	100.0 a	0.0 a	
13	PYTHON	.05	LB A/A PRE								

10-5-99 (BAYERFRN)
VPI & SU

AOV Means Table Page 2 of 4

BAYER FIELD CORN

Trial ID: BAYER CORN
Location: SMITHFIELD, VA.

Investigator: E.S. HAGOOD
Study Dir.: Scott Hagood

Weed Code	INJURY	INJURY	CHEAL	CYPES	ECHCG	AMARE	INJURY
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	5-20-99	6-7-99	6-7-99	6-7-99	6-7-99	6-7-99	7-30-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Grow							
		Rate Unit	Stg							
14	AXIOM	.638 LB A/A	PRE	0.0 b	0.0 a	97.5 a	93.8 ab	100.0 a	100.0 a	0.0 a
14	PERMIT	.031 LB A/A	5 LF							
14	BANVEL	.125 LB A/A	5 LF							
14	COC	1.00 % V/V	5 LF							
15	AXIOM	.638 LB A/A	PRE	3.8 a	0.0 a	100.0 a	91.3 abc	100.0 a	100.0 a	0.0 a
15	BALANCE	.059 LB A/A	PRE							
15	ATRAZINE	1.00 LB A/A	PRE							
16	AXIOM	.638 LB A/A	PRE	0.0 b	2.5 a	100.0 a	90.0 abc	100.0 a	100.0 a	0.0 a
16	PYTHON	.05 LB A/A	PRE							
16	ATRAZINE	1.00 LB A/A	PRE							
17	AXIOM	.638 LB A/A	PRE	1.3 ab	0.0 a	93.8 ab	82.5 bcd	100.0 a	97.5 ab	0.0 a
17	ATRAZINE	1.00 LB A/A	PRE							
18	BICEP II MAGNUM	2.88 LB A/A	PRE	1.3 ab	0.0 a	82.5 bc	90.0 abc	100.0 a	100.0 a	0.0 a
19	BICEP II MAGNUM	2.88 LB A/A	PRE	0.0 b	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a	0.0 a
19	PYTHON	.05 LB A/A	PRE							
20	CONTROL			0.0 b	0.0 a	0.0 f	0.0 f	0.0 c	0.0 e	0.0 a
LSD (P=.05)				2.70	2.79	13.07	16.68	8.34	9.48	0.00
Standard Deviation				1.91	1.97	9.24	11.79	5.90	6.70	0.00
CV				277.73	525.38	11.16	14.95	6.33	7.24	0.0
Replicate F				1.000	0.322	0.599	0.536	0.420	0.473	0.000
Replicate Prob(F)				0.3995	0.8094	0.6182	0.6593	0.7397	0.7024	1.0000
Treatment F				1.710	0.864	28.132	13.644	57.984	44.889	0.000
Treatment Prob(F)				0.0615	0.6250	0.0001	0.0001	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

BAYER FIELD CORN

Trial ID: BAYER CORN
Location: SMITHFIELD, VA.

Investigator: E.S. HAGOOD
Study Dir.: Scott Hagood

Weed Code	CHEAL	AMARE	SETFA
Crop Code	CORN	CORN	CORN
Part Rated			
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	7-30-99	7-30-99	7-30-99
Footnote Number			
Trt-Eval Interval			
PRM Data Type			
# Subsamples, Dec.			

Trt No.	Treatment Name	Rate	Unit	Grow Stg			
1	ATRAZINE	1.50	LB A/A	SPIKE	72.5	b-e	99.5 ab
1	FRONTIER	1.20	LB A/A	SPIKE			95.0 abc
2	ATRAZINE	1.50	LB A/A	SPIKE	76.3	bcd	95.0 a-d
2	AXIOM	.638	LB A/A	SPIKE			95.0 abc
3	ATRAZINE	1.50	LB A/A	3 LF	62.5	de	92.5 a-d
3	FRONTIER	1.20	LB A/A	3 LF			97.5 ab
4	ATRAZINE	1.50	LB A/A	3 LF	57.5	ef	90.0 cd
4	AXIOM	.638	LB A/A	3 LF			92.5 abc
5	ATRAZINE	1.50	LB A/A	5 LF	62.5	de	90.0 cd
5	FRONTIER	1.20	LB A/A	5 LF			90.0 bc
6	ATRAZINE	1.50	LB A/A	5 LF	46.3	fg	87.5 d
6	AXIOM	.638	LB A/A	5 LF			95.0 abc
7	AXIOM	.638	LB A/A	PRE	66.3	cde	95.0 a-d
							92.5 abc
8	DUAL II MAGNUM	1.30	LB A/A	PRE	37.5	g	90.0 cd
							100.0 a
9	AXIOM	.638	LB A/A	PRE	97.5	a	100.0 a
9	SENCOR	.10	LB A/A	5 LF			
9	BANVEL	.250	LB A/A	5 LF			
10	AXIOM	.638	LB A/A	PRE	86.3	ab	97.5 abc
10	ATRAZINE	.638	LB A/A	PRE			97.5 ab
10	PROWL	1.25	LB A/A	PRE			
11	AXIOM	.638	LB A/A	PRE	97.5	a	100.0 a
11	BALANCE	.059	LB A/A	PRE			100.0 a
12	AXIOM	.638	LB A/A	PRE	77.5	bcd	90.0 cd
12	BASIS	.023	LB A/A	PRE			95.0 abc
13	AXIOM	.638	LB A/A	PRE	96.3	a	100.0 a
13	PYTHON	.05	LB A/A	PRE			100.0 a

BAYER FIELD CORN

Trial ID: BAYER CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	CHEAL	AMARE	SETFA
Crop Code	CORN	CORN	CORN
Part Rated			
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	7-30-99	7-30-99	7-30-99
Footnote Number			
Trt-Eval Interval			
PRM Data Type			
# Subsamples, Dec.			

Trt No.	Treatment Name	Rate	Unit	Grow Stg			
14	AXIOM	.638	LB A/A	PRE	97.5 a	100.0 a	100.0 a
14	PERMIT	.031	LB A/A	5 LF			
14	BANVEL	.125	LB A/A	5 LF			
14	COC	1.00	% V/V	5 LF			
15	AXIOM	.638	LB A/A	PRE	97.5 a	100.0 a	100.0 a
15	BALANCE	.059	LB A/A	PRE			
15	ATRAZINE	1.00	LB A/A	PRE			
16	AXIOM	.638	LB A/A	PRE	100.0 a	100.0 a	100.0 a
16	PYTHON	.05	LB A/A	PRE			
16	ATRAZINE	1.00	LB A/A	PRE			
17	AXIOM	.638	LB A/A	PRE	77.5 bcd	91.3 bcd	88.8 c
17	ATRAZINE	1.00	LB A/A	PRE			
18	BICEP II MAGNUM	2.88	LB A/A	PRE	78.8 bc	100.0 a	100.0 a
19	BICEP II MAGNUM	2.88	LB A/A	PRE	98.8 a	100.0 a	100.0 a
19	PYTHON	.05	LB A/A	PRE			
20	CONTROL				0.0 h	0.0 e	0.0 d
	LSD (P=.05)				16.21	8.35	8.05
	Standard Deviation				11.46	5.90	5.69
	CV				15.42	6.49	6.19
	Replicate F				0.554	1.528	2.786
	Replicate Prob(F)				0.6474	0.2169	0.0489
	Treatment F				19.825	54.923	59.431
	Treatment Prob(F)				0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

DOW CORN HERBICIDES

Trial ID: 1999 DOW CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-13-99 Country: USA
City: BLACKSBURG, VA. State/Prov.: USA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1. _____ 2. _____ 3. _____
4. _____ 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: CORN Variety: DK 626 RR Planting Date: 5-10-99
Planting Method: ROWS Rate: 28000 ACRE Depth: 1.50 IN
Perennial Age: _____ Row Spacing: 30 INCH Seed Bed: _____
Soil Temperature: 61 F Soil Moisture: DRY/MOIST Emergence Date: 5-17-99

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4
Site Type: _____
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: SPRING DISK
Trial Initiation Comments: _____

Previous:	Crops	Pesticides	Year
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: _____ % Silt: _____ % Clay: _____
pH: 6.2 CEC: _____ Soil Name: GROSECLOSE Fertility Level: _____

DOW CORN HERBICIDES

Trial ID: 1999 DOW CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA. Distance: 2 Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-10-99	6-1-99				
Time of Day:	6-7 PM	11-12NOON				
Application Method:	BROADCAST	BROADCAST				
Application Timing:	PRE	E-POST				
Applic. Placement:	SOIL	FOLIAGE				
Air Temp., Unit:	80 F	82 F				
% Relative Humidity:	30	85				
Wind Velocity, Unit:	5 MPH	7 MPH				
Dew Presence (Y/N):	N	N				
Water Hardness:						
Soil Temp., Unit:	65 F	65 F				
Soil Moisture:	DRY/MOIST	DRY				
% Cloud Cover:	30	5				

DOW CORN HERBICIDES

Trial ID: 1999 DOW CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 CORN Stage:	PRE	E-POST				
Stage Scale:		4 LEAF				
Height, Unit:		4 INCH				
Crop 2 Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 Stage:	PRE	DATST				
Stage Scale:		4 LF 1 IN				
Density, Unit:		1 M2				
Weed 2 Stage:		CIRAR				
Stage Scale:		ROSETTE				
Density, Unit:		3 M2				
Weed 3 Stage:		IPOHE				
Stage Scale:		5 LF 1 IN				
Density, Unit:		2 M2				
Weed 4 Stage:		CYPES				
Stage Scale:		4 LF 2 IN				
Density, Unit:		3 M2				
Weed 5 Stage:						
Stage Scale:						
Density, Unit:						
Weed 6 Stage:						
Stage Scale:						
Density, Unit:						
Weed 7 Stage:						
Stage Scale:						
Density, Unit:						
Weed 8 Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 Stage:						
Stage Scale:						
Density, Unit:						

DOW CORN HERBICIDES

Trial ID: 1999 DOW CORN Investigator: E. S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

	APPLICATION EQUIPMENT					
	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK				
Operating Pressure:	34 PSI	34 PSI				
Nozzle Type:	FLAT FAN	FLAT FAN				
Nozzle Size:	8003	8003				
Nozzle Spacing, Unit:	18 INCH	18 INCH				
Nozzles/Row:	4	4				
Band Width, Unit:						
Boom Length, Unit:	72 INCH	72 INCH				
Boom Height, Unit:	20 INCH	20 INCH				
Ground Speed, Unit:	3.1 MPH	3.1 MPH				
Incorporation Equip.:						
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER	WATER				
Spray Volume, Unit:	22.5 GPA	22.5 GPA				
Spray pH:						
Propellant:	CO/2	CO/2				
Tank Mix (Y/N):	Y	Y				

Trt No	Treatment	Application	Comment
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DOW CORN HERBICIDES

Trial ID: 1999 DOW CORN
Location: SMITHFIELD, VA.

Investigator: E.S. HAGOOD
Study Dir.: Scott Hagood

Weed Code	INJURY	INJURY	CHEAL	CYPES	AMARE	IPOLA	DATST
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	5-20-99	6-9-99	6-9-99	6-9-99	6-9-99	6-9-99	6-9-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg							
1	BICEP II MAGNUM	2.88	LB A/A	PRE	1.3 a	0.0 a	100.0 a	100.0 a	100.0 a	95.0 ab	100.0 a
1	HORNET	.086	LB A/A	E-POST							
1	COC	1.00	% V/V	E-POST							
2	BICEP II MAGNUM	2.88	LB A/A	PRE	0.0 a	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
2	HORNET	.086	LB A/A	E-POST							
2	ATRAZINE	1.25	LB A/A	E-POST							
2	COC	1.00	% V/V	E-POST							
3	DUAL II MAGNUM	1.27	LB A/A	PRE	0.0 a	0.0 a	100.0 a	100.0 a	100.0 a	98.8 ab	100.0 a
3	HORNET	.086	LB A/A	E-POST							
3	ATRAZINE	1.50	LB A/A	E-POST							
3	COC	1.00	% V/V	E-POST							
4	BICEP II MAGNUM	2.88	LB A/A	PRE	0.0 a	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
4	PYTHON	.05	LB A/A	PRE							
5	DUAL II MAGNUM	1.27	LB A/A	PRE	0.0 a	0.0 a	100.0 a	100.0 a	100.0 a	92.5 b	100.0 a
5	PYTHON	.0625	LB A/A	PRE							
6	PYTHON	.05	LB A/A	PRE	0.0 a	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
6	ATRAZINE	1.00	LB A/A	PRE							
6	PRINCEP	1.00	LB A/A	PRE							
7	BICEP II MAGNUM	2.89	LB A/A	PRE	0.0 a	0.0 a	90.0 b	95.0 a	100.0 a	92.5 b	100.0 a
8	CONTROL				0.0 a	0.0 a	0.0 c	0.0 b	0.0 b	0.0 c	0.0 b
LSD (P=.05)					1.30	0.00	4.25	5.20	0.00	7.11	0.00
Standard Deviation					0.88	0.00	2.89	3.54	0.00	4.84	0.00
CV					565.69	0.0	3.35	4.07	0.0	5.7	0.0
Replicate F					1.000	0.000	1.000	1.000	0.000	0.390	0.000
Replicate Prob(F)					0.4123	1.0000	0.4123	0.4123	1.0000	0.7617	1.0000
Treatment F					1.000	0.000	588.857	395.286	0.000	202.717	0.000
Treatment Prob(F)					0.4586	1.0000	0.0001	0.0001	1.0000	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

DOW CORN HERBICIDES

Trial ID: 1999 DOW CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	CHEAL	CYPES	AMARE	IPOLA	ABUTH	INJURY
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	00-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-28-99	6-28-99	6-28-99	6-28-99	6-28-99	6-28-99	7-30-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg	INJURY	CHEAL	CYPES	AMARE	IPOLA	ABUTH	INJURY
1	BICEP II MAGNUM	2.88	LB A/A	PRE	0.0 a	95.0 ab	93.8 ab	100.0 a	81.3 bcd	100.0 a	0.0 a
1	HORNET	.086	LB A/A	E-POST							
1	COC	1.00	% V/V	E-POST							
2	BICEP II MAGNUM	2.88	LB A/A	PRE	0.0 a	94.5 b	100.0 a	100.0 a	87.5 ab	100.0 a	0.0 a
2	HORNET	.086	LB A/A	E-POST							
2	ATRAZINE	1.25	LB A/A	E-POST							
2	COC	1.00	% V/V	E-POST							
3	DUAL II MAGNUM	1.27	LB A/A	PRE	0.0 a	93.8 b	90.0 ab	100.0 a	91.3 a	100.0 a	0.0 a
3	HORNET	.086	LB A/A	E-POST							
3	ATRAZINE	1.50	LB A/A	E-POST							
3	COC	1.00	% V/V	E-POST							
4	BICEP II MAGNUM	2.88	LB A/A	PRE	0.0 a	100.0 a	97.5 ab	100.0 a	80.0 bcd	100.0 a	0.0 a
4	PYTHON	.05	LB A/A	PRE							
5	DUAL II MAGNUM	1.27	LB A/A	PRE	0.0 a	100.0 a	92.5 ab	100.0 a	75.0 cd	98.8 a	0.0 a
5	PYTHON	.0625	LB A/A	PRE							
6	PYTHON	.05	LB A/A	PRE	0.0 a	100.0 a	96.3 ab	100.0 a	73.8 d	100.0 a	0.0 a
6	ATRAZINE	1.00	LB A/A	PRE							
6	PRINCEP	1.00	LB A/A	PRE							
7	BICEP II MAGNUM	2.89	LB A/A	PRE	0.0 a	83.8 c	87.5 b	100.0 a	82.5 bc	100.0 a	0.0 a
8	CONTROL				0.0 a	0.0 d	0.0 c	0.0 b	0.0 e	0.0 b	0.0 a
LSD (P=.05)					0.00	5.16	11.83	0.00	8.01	1.30	0.00
Standard Deviation					0.00	3.51	8.05	0.00	5.45	0.88	0.00
CV					0.0	4.21	9.79	0.0	7.63	1.01	0.0
Replicate F					0.000	0.332	1.046	0.000	2.064	1.000	0.000
Replicate Prob(F)					1.0000	0.8023	0.3929	1.0000	0.1357	0.4123	1.0000
Treatment F					0.000	378.575	69.152	0.000	116.864	6378.143	0.000
Treatment Prob(F)					1.0000	0.0001	0.0001	1.0000	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

DOW CORN HERBICIDES

Trial ID: 1999 DOW CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code CHEAL IPOLA ABUTH DATST
Crop Code CORN CORN CORN CORN
Part Rated
Rating Data Type VISUAL VISUAL VISUAL VISUAL
Rating Unit 0-100 0-100 0-100 0-100
Rating Date 7-30-99 7-30-99 7-30-99 7-30-99
Footnote Number
Trt-Eval Interval
PRM Data Type
Subsamples, Dec.

Trt No.	Treatment Name	Rate	Unit	Grow Stg	CHEAL	IPOLA	ABUTH	DATST
1	BICEP II MAGNUM	2.88	LB A/A	PRE	92.0 b	91.3 a	100.0 a	100.0 a
1	HORNET	.086	LB A/A	E-POST				
1	COC	1.00	% V/V	E-POST				
2	BICEP II MAGNUM	2.88	LB A/A	PRE	92.5 b	95.0 a	100.0 a	100.0 a
2	HORNET	.086	LB A/A	E-POST				
2	ATRAZINE	1.25	LB A/A	E-POST				
2	COC	1.00	% V/V	E-POST				
3	DUAL II MAGNUM	1.27	LB A/A	PRE	95.0 ab	97.5 a	100.0 a	100.0 a
3	HORNET	.086	LB A/A	E-POST				
3	ATRAZINE	1.50	LB A/A	E-POST				
3	COC	1.00	% V/V	E-POST				
4	BICEP II MAGNUM	2.88	LB A/A	PRE	96.3 ab	91.3 a	100.0 a	100.0 a
4	PYTHON	.05	LB A/A	PRE				
5	DUAL II MAGNUM	1.27	LB A/A	PRE	100.0 a	86.3 a	100.0 a	100.0 a
5	PYTHON	.0625	LB A/A	PRE				
6	PYTHON	.05	LB A/A	PRE	100.0 a	95.0 a	100.0 a	100.0 a
6	ATRAZINE	1.00	LB A/A	PRE				
6	PRINCEP	1.00	LB A/A	PRE				
7	BICEP II MAGNUM	2.89	LB A/A	PRE	73.8 c	87.5 a	100.0 a	100.0 a
8	CONTROL				0.0 d	0.0 b	0.0 b	0.0 b
LSD (P=.05)					6.91	11.62	0.00	0.00
Standard Deviation					4.70	7.90	0.00	0.00
CV					5.79	9.82	0.0	0.0
Replicate F					1.458	1.315	0.000	0.000
Replicate Prob(F)					0.2546	0.2960	1.0000	1.0000
Treatment F					207.395	68.721	0.000	0.000
Treatment Prob(F)					0.0001	0.0001	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

DUPONT CONVENTIONAL CORN

Trial ID: 1999 DUPONT CONV Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-17-99 Country: USA
City: BLACKSBURG State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1.CYPES YELLOW NUTSEDGE 2.HIBTR VENICE MALLOW 3.CHEAL COMMON LAMBSQTR
4.AMARE REDROOT PIGWEED 5.SORHA JOHNSONGRASS 6.DIGSA LARGE CRABGRASS
7. 8. 9.

Crop 1: CORN Variety: DK 626 RR Planting Date: 5-10-99
Planting Method: ROWS Rate: 28000 ACRE Depth: 1.50 IN
Perennial Age: Row Spacing: 30 IN Seed Bed:
Soil Temperature: Soil Moisture: Emergence Date: 5-17-99

Crop 2: Variety: Planting Date:
Planting Method: Rate: Depth:
Perennial Age: Row Spacing: Seed Bed:
Soil Temperature: Soil Moisture: Emergence Date:

Crop 3: Variety: Planting Date:
Planting Method: Rate: Depth:
Perennial Age: Row Spacing: Seed Bed:
Soil Temperature: Soil Moisture: Emergence Date:

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4
Site Type:
Tillage Type: NO-TILL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance:
Trial Initiation Comments:

Previous:	Crops	Pesticides	Year
1.			
2.			
3.			

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: % Silt: % Clay:
pH: 6.2 CEC: Soil Name: GROSECLOSE Fertility Level:

DUPONT CONVENTIONAL CORN

Trial ID: 1999 DUPONT CONV Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA. Distance: 2 Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-10-99	6-1-99				
Time of Day:	2 PM	1-2 PM				
Application Method:	BROADCAST	BROADCAST				
Application Timing:	PRE	E-POST				
Applic. Placement:	SOIL	FOLIAGE				
Air Temp., Unit:	75 F	81 F				
% Relative Humidity:	35	85				
Wind Velocity, Unit:	5 MPH	5 MPH				
Dew Presence (Y/N):	N	N				
Water Hardness:	N	N				
Soil Temp., Unit:	60 F	65 F				
Soil Moisture:	DRY/MOIST	DRY				
% Cloud Cover:	20	10				

DUPONT CONVENTIONAL CORN

Trial ID: 1999 DUPONT CONV Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 CORN Stage:	PRE	E-POST				
Stage Scale:		7 LEAF				
Height, Unit:		8 INCH				
Crop 2 Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 CYPES Stage:	NONE	4-8 LEAF				
Stage Scale:		1-2.5"				
Density, Unit:		11 M2				
Weed 2 HIBTR Stage:	NONE	2 LEAF				
Stage Scale:		1/2-3/4"				
Density, Unit:		2-3 M2				
Weed 3 CHEAL Stage:	NONE	4-8 LEAF				
Stage Scale:		1/2-1"				
Density, Unit:		8-10 M2				
Weed 4 AMARE Stage:	NONE	2-3 LEAF				
Stage Scale:		1/2-3/4"				
Density, Unit:		2-4 M2				
Weed 5 SORHA Stage:	NONE	2-3 LEAF				
Stage Scale:		1/2-1"				
Density, Unit:		5-8 M2				
Weed 6 DIGSA Stage:	NONE	2 LEAF				
Stage Scale:		1/2-3/4"				
Density, Unit:						
Weed 7 Stage:						
Stage Scale:						
Density, Unit:						
Weed 8 Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 Stage:						
Stage Scale:						
Density, Unit:						

DUPONT CONVENTIONAL CORN

Trial ID: 1999 DUPONT CONV Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK				
Operating Pressure:	34 PSI	34 PSI				
Nozzle Type:	FLAT FAN	FLAT FAN				
Nozzle Size:	8003	8003				
Nozzle Spacing, Unit:	18 INCH	18 INCH				
Nozzles/Row:	4	4				
Band Width, Unit:						
Boom Length, Unit:	72 INCH	72 INCH				
Boom Height, Unit:	20 INCH	20 INCH				
Ground Speed, Unit:	3.1 MPH	3.1 MPH				
Incorporation Equip.:						
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER	WATER				
Spray Volume, Unit:	22.5 GPA	22.5 GPA				
Spray pH:						
Propellant:	CO/2	CO/2				
Tank Mix (Y/N):	Y	Y				

Trt No	Treatment	Application	Comment
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10-5-99 (DUPONTFC)
VPI & SU

AOV Means Table Page 1 of 8

DUPONT CONVENTIONAL CORN

Trial ID: 1999 DUPONT CONV Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN	CORN	CORN	CORN
INJURY	CHEAL	CYPES	AMARE	ABUTH	HIBTR	ECHCG	INJURY			
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN			
Part Rated										
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL			
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100			
Rating Date	6-1-99	6-1-99	6-1-99	6-1-99	6-1-99	6-1-99	6-1-99	6-1-99	6-1-99	6-17-99
Footnote Number										
Trt-Eval Interval										
PRM Data Type										
# Subsamples, Dec.										

Trt No.	Treatment Name	Rate	Unit	Grow Stg								
1	BASIS	.023	LB A/A	PRE	0.0 a	100.0 a	95.0 a	100.0 a	100.0 a	100.0 a	100.0 a	0.0 a
1	LEADOFF	2.81	LB A/A	PRE								
2	BASIS	.015	LB A/A	PRE	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	0.0 a
2	LEADOFF	1.25	LB A/A	PRE								
2	BASIS GOLD	.783	LB A/A	E-POST								
2	COC	1.00	% V/V	E-POST								
3	BASIS	.023	LB A/A	PRE	0.0 a	97.5 b	97.5 a	100.0 a	100.0 a	100.0 a	100.0 a	0.0 a
3	ATRAZINE	1.00	LB A/A	PRE								
3	BASIS GOLD	.783	LB A/A	E-POST								
3	COC	1.00	% V/V	E-POST								
4	BASIS GOLD	.783	LB A/A	E-POST	0.0 a	0.0 c	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b	0.0 a
4	BANVEL	.0625	LB A/A	E-POST								
4	COC	1.00	% V/V	E-POST								
5	BASIS GOLD	.783	LB A/A	E-POST	0.0 a	0.0 c	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b	0.0 a
5	ACCENT	.015	LB A/A	E-POST								
5	COC	1.00	% V/V	E-POST								
6	BASIS GOLD	.783	LB A/A	E-POST	0.0 a	0.0 c	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b	0.0 a
6	BANVEL	.0625	LB A/A	E-POST								
6	PROWL	.0625	LB A/A	E-POST								
6	COC	1.00	LB A/A	E-POST								
7	ACCENT	.015	LB A/A	E-POST	0.0 a	0.0 c	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b	0.0 a
7	EXCEED	.009	LB A/A	E-POST								
7	COC	1.00	% V/V	E-POST								
8	BASIS GOLD	.783	LB A/A	E-POST	0.0 a	0.0 c	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b	0.0 a
8	BANVEL	.0625	LB A/A	E-POST								
8	LEADOFF	.625	LB A/A	E-POST								
8	COC	1.00	% V/V	E-POST								
9	ACCENT	.031	LB A/A	E-POST	0.0 a	0.0 c	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b	0.0 a
9	EXCEED	.009	LB A/A	E-POST								
9	BANVEL	.125	LB A/A	E-POST								
9	COC	1.00	% V/V	E-POST								

DUPONT CONVENTIONAL CORN

Trial ID: 1999 DUPONT CONV Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	CHEAL	CYPES	AMARE	ABUTH	HIBTR	ECHCG	INJURY
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated								
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-1-99	6-1-99	6-1-99	6-1-99	6-1-99	6-1-99	6-1-99	6-17-99
Footnote Number								
Trt-Eval Interval								
PRM Data Type								
# Subsamples, Dec.								

Trt No.	Treatment Name	Rate	Unit	Grow Stg	INJURY	CHEAL	CYPES	AMARE	ABUTH	HIBTR	ECHCG	INJURY
10	BASIS GOLD	.783	LB A/A	E-POST	0.0 a	0.0 c	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b	0.0 a
10	LEADOFF	1.25	LB A/A	E-POST								
10	BANVEL	.125	LB A/A	E-POST								
10	COC	1.00	% V/V	E-POST								
11	PYTHON	.05	LB A/A	PRE	0.0 a	100.0 a	97.5 a	100.0 a	100.0 a	100.0 a	100.0 a	0.0 a
11	LEADOFF	2.81	LB A/A	PRE								
12	CONTROL				0.0 a	0.0 c	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b	0.0 a
LSD (P=.05)					0.00	2.08	5.13	0.00	0.00	0.00	0.00	0.00
Standard Deviation					0.00	1.44	3.55	0.00	0.00	0.00	0.00	0.00
CV					0.0	4.36	10.93	0.0	0.0	0.0	0.0	0.0
Replicate F					0.000	1.000	0.880	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)					1.0000	0.4051	0.4615	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F					0.000	4597.364	730.440	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)					1.0000	0.0001	0.0001	1.0000	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

DUPONT CONVENTIONAL CORN

Trial ID: 1999 DUPONT CONV Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	CHEAL	CYPES	AMARE	ABUTH	HIBTR	ECHCG	INJURY	CHEAL
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated								
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-17-99	6-17-99	6-17-99	6-17-99	6-17-99	6-17-99	8-2-99	8-2-99
Footnote Number								
Trt-Eval Interval								
PRM Data Type								
# Subsamples, Dec.								

Trt No.	Treatment Name	Rate	Unit	Grow Stg								
1	BASIS	.023	LB A/A	PRE	100.0 a	72.5 c	100.0 a	100.0 a	100.0 a	100.0 a	0.0 a	93.3 a
1	LEADOFF	2.81	LB A/A	PRE								
2	BASIS	.015	LB A/A	PRE	100.0 a	90.0 ab	100.0 a	100.0 a	100.0 a	100.0 a	0.0 a	95.0 a
2	LEADOFF	1.25	LB A/A	PRE								
2	BASIS GOLD	.783	LB A/A	E-POST								
2	COC	1.00	% V/V	E-POST								
3	BASIS	.023	LB A/A	PRE	96.0 a	76.3 bc	100.0 a	96.3 a	100.0 a	100.0 a	0.0 a	73.8 b
3	ATRAZINE	1.00	LB A/A	PRE								
3	BASIS GOLD	.783	LB A/A	E-POST								
3	COC	1.00	% V/V	E-POST								
4	BASIS GOLD	.783	LB A/A	E-POST	77.5 c	48.8 d	97.5 a	93.8 a	100.0 a	97.5 a	0.0 a	75.0 b
4	BANVEL	.0625	LB A/A	E-POST								
4	COC	1.00	% V/V	E-POST								
5	BASIS GOLD	.783	LB A/A	E-POST	45.0 d	40.0 d	100.0 a	95.0 a	100.0 a	100.0 a	0.0 a	40.0 d
5	ACCENT	.015	LB A/A	E-POST								
5	COC	1.00	% V/V	E-POST								
6	BASIS GOLD	.783	LB A/A	E-POST	86.3 b	52.5 d	97.5 a	91.3 a	100.0 a	88.8 b	0.0 a	88.8 a
6	BANVEL	.0625	LB A/A	E-POST								
6	PROWL	.0625	LB A/A	E-POST								
6	COC	1.00	LB A/A	E-POST								
7	ACCENT	.015	LB A/A	E-POST	70.0 c	52.5 d	97.5 a	97.5 a	100.0 a	92.5 ab	0.0 a	55.0 c
7	EXCEED	.009	LB A/A	E-POST								
7	COC	1.00	% V/V	E-POST								
8	BASIS GOLD	.783	LB A/A	E-POST	96.3 a	42.5 d	100.0 a	100.0 a	100.0 a	100.0 a	0.0 a	92.5 a
8	BANVEL	.0625	LB A/A	E-POST								
8	LEADOFF	.625	LB A/A	E-POST								
8	COC	1.00	% V/V	E-POST								
9	ACCENT	.031	LB A/A	E-POST	87.5 b	41.3 d	100.0 a	100.0 a	100.0 a	92.5 ab	0.0 a	88.8 a
9	EXCEED	.009	LB A/A	E-POST								
9	BANVEL	.125	LB A/A	E-POST								
9	COC	1.00	% V/V	E-POST								

DUPONT CONVENTIONAL CORN

Trial ID: 1999 DUPONT CONV Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	CHEAL	CYPES	AMARE	ABUTH	HIBTR	ECHCG	INJURY	CHEAL
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated								
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-17-99	6-17-99	6-17-99	6-17-99	6-17-99	6-17-99	8-2-99	8-2-99
Footnote Number								
Trt-Eval Interval								
PRM Data Type								
# Subsamples, Dec.								

Trt No.	Treatment Name	Rate	Unit	Grow Stg								
10	BASIS GOLD	.783	LB A/A	E-POST	92.5	ab	55.0	d	100.0	a	100.0	a
10	LEADOFF	1.25	LB A/A	E-POST								
10	BANVEL	.125	LB A/A	E-POST								
10	COC	1.00	% V/V	E-POST								
11	PYTHON	.05	LB A/A	PRE	100.0	a	97.5	a	100.0	a	100.0	a
11	LEADOFF	2.81	LB A/A	PRE								
12	CONTROL				0.0	e	0.0	e	0.0	b	0.0	b
	LSD (P=.05)				8.25		17.17		3.72		10.52	
	Standard Deviation				5.71		11.89		2.57		7.28	
	CV				7.21		21.34		2.83		8.14	
	Replicate F				3.540		2.508		0.314		1.136	
	Replicate Prob(F)				0.0251		0.0759		0.8149		0.3490	
	Treatment F				107.968		19.102		496.771		60.549	
	Treatment Prob(F)				0.0001		0.0001		0.0001		0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)

DUPONT CONVENTIONAL CORN

Trial ID: 1999 DUPONT CONV Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	AMARE	ABUTH	HIBTR	ECHCG	INJURY	CHEAL	AMARE
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	8-2-99	8-2-99	8-2-99	8-2-99	8-30-99	8-30-99	8-30-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg							
1	BASIS	.023	LB A/A	PRE	100.0 a	100.0 a	99.5 a	95.0 abc	0.0 a	95.0 ab	100.0 a
1	LEADOFF	2.81	LB A/A	PRE							
2	BASIS	.015	LB A/A	PRE	100.0 a	100.0 a	100.0 a	97.5 a	0.0 a	92.5 abc	100.0 a
2	LEADOFF	1.25	LB A/A	PRE							
2	BASIS GOLD	.783	LB A/A	E-POST							
2	COC	1.00	% V/V	E-POST							
3	BASIS	.023	LB A/A	PRE	100.0 a	100.0 a	100.0 a	95.0 abc	0.0 a	73.8 de	98.8 a
3	ATRAZINE	1.00	LB A/A	PRE							
3	BASIS GOLD	.783	LB A/A	E-POST							
3	COC	1.00	% V/V	E-POST							
4	BASIS GOLD	.783	LB A/A	E-POST	96.3 ab	92.5 ab	97.5 a	86.3 cde	0.0 a	70.0 e	96.3 a
4	BANVEL	.0625	LB A/A	E-POST							
4	COC	1.00	% V/V	E-POST							
5	BASIS GOLD	.783	LB A/A	E-POST	97.5 ab	100.0 a	97.5 a	96.3 ab	0.0 a	48.8 f	97.5 a
5	ACCENT	.015	LB A/A	E-POST							
5	COC	1.00	% V/V	E-POST							
6	BASIS GOLD	.783	LB A/A	E-POST	95.0 b	91.3 b	88.8 b	80.0 e	0.0 a	82.5 cd	88.8 b
6	BANVEL	.0625	LB A/A	E-POST							
6	PROWL	.0625	LB A/A	E-POST							
6	COC	1.00	LB A/A	E-POST							
7	ACCENT	.015	LB A/A	E-POST	100.0 a	100.0 a	100.0 a	95.0 abc	0.0 a	56.3 f	98.8 a
7	EXCEED	.009	LB A/A	E-POST							
7	COC	1.00	% V/V	E-POST							
8	BASIS GOLD	.783	LB A/A	E-POST	100.0 a	100.0 a	100.0 a	85.0 de	0.0 a	87.5 bc	97.5 a
8	BANVEL	.0625	LB A/A	E-POST							
8	LEADOFF	.625	LB A/A	E-POST							
8	COC	1.00	% V/V	E-POST							
9	ACCENT	.031	LB A/A	E-POST	100.0 a	100.0 a	96.3 a	87.5 b-e	0.0 a	88.8 abc	96.3 a
9	EXCEED	.009	LB A/A	E-POST							
9	BANVEL	.125	LB A/A	E-POST							
9	COC	1.00	% V/V	E-POST							

DUPONT CONVENTIONAL CORN

Trial ID: 1999 DUPONT CONV Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	AMARE	ABUTH	HIBTR	ECHCG	INJURY	CHEAL	AMARE
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	8-2-99	8-2-99	8-2-99	8-2-99	8-30-99	8-30-99	8-30-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg							
10	BASIS GOLD	.783	LB A/A	E-POST	100.0 a	96.3 ab	100.0 a	90.0 a-d	0.0 a	100.0 a	100.0 a
10	LEADOFF	1.25	LB A/A	E-POST							
10	BANVEL	.125	LB A/A	E-POST							
10	COC	1.00	% V/V	E-POST							
11	PYTHON	.05	LB A/A	PRE	100.0 a	100.0 a	100.0 a	96.3 ab	0.0 a	100.0 a	100.0 a
11	LEADOFF	2.81	LB A/A	PRE							
12	CONTROL				0.0 c	0.0 c	0.0 c	0.0 f	0.0 a	0.0 g	0.0 c
LSD (P=.05)					3.81	7.80	5.36	9.49	0.00	12.47	5.03
Standard Deviation					2.64	5.40	3.71	6.57	0.00	8.64	3.48
CV					2.91	6.0	4.13	7.86	0.0	11.58	3.89
Replicate F					3.068	2.286	2.084	1.009	0.000	3.294	3.934
Replicate Prob(F)					0.0414	0.0970	0.1213	0.4012	1.0000	0.0325	0.0167
Treatment F					470.932	111.545	236.171	67.093	0.000	44.091	264.917
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

DUPONT CONVENTIONAL CORN

Trial ID: 1999 DUPONT CONV Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code ABUTH HIBTR
Crop Code CORN CORN
Part Rated
Rating Data Type VISUAL VISUAL
Rating Unit 0-100 0-100
Rating Date 8-30-99 8-30-99
Footnote Number
Trt-Eval Interval
PRM Data Type
Subsamples, Dec.

Trt No.	Treatment Name	Rate	Unit	Grow Stg		
1	BASIS	.023	LB A/A	PRE	100.0 a	100.0 a
1	LEADOFF	2.81	LB A/A	PRE		
2	BASIS	.015	LB A/A	PRE	100.0 a	100.0 a
2	LEADOFF	1.25	LB A/A	PRE		
2	BASIS GOLD	.783	LB A/A	E-POST		
2	COC	1.00	% V/V	E-POST		
3	BASIS	.023	LB A/A	PRE	92.5 ab	97.5 a
3	ATRAZINE	1.00	LB A/A	PRE		
3	BASIS GOLD	.783	LB A/A	E-POST		
3	COC	1.00	% V/V	E-POST		
4	BASIS GOLD	.783	LB A/A	E-POST	87.5 b	93.8 a
4	BANVEL	.0625	LB A/A	E-POST		
4	COC	1.00	% V/V	E-POST		
5	BASIS GOLD	.783	LB A/A	E-POST	93.8 ab	97.5 a
5	ACCENT	.015	LB A/A	E-POST		
5	COC	1.00	% V/V	E-POST		
6	BASIS GOLD	.783	LB A/A	E-POST	90.0 ab	78.8 b
6	BANVEL	.0625	LB A/A	E-POST		
6	PROWL	.0625	LB A/A	E-POST		
6	COC	1.00	LB A/A	E-POST		
7	ACCENT	.015	LB A/A	E-POST	97.5 ab	96.3 a
7	EXCEED	.009	LB A/A	E-POST		
7	COC	1.00	% V/V	E-POST		
8	BASIS GOLD	.783	LB A/A	E-POST	88.8 ab	91.3 a
8	BANVEL	.0625	LB A/A	E-POST		
8	LEADOFF	.625	LB A/A	E-POST		
8	COC	1.00	% V/V	E-POST		
9	ACCENT	.031	LB A/A	E-POST	96.3 ab	90.0 a
9	EXCEED	.009	LB A/A	E-POST		
9	BANVEL	.125	LB A/A	E-POST		
9	COC	1.00	% V/V	E-POST		

VPI & SU

DUPONT CONVENTIONAL CORN

Trial ID: 1999 DUPONT CONV Investigator: E.S. HAGOOD
 Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code ABUTH HIBTR
 Crop Code CORN CORN
 Part Rated
 Rating Data Type VISUAL VISUAL
 Rating Unit 0-100 0-100
 Rating Date 8-30-99 8-30-99
 Footnote Number
 Trt-Eval Interval
 PRM Data Type
 # Subsamples, Dec.

Trt No.	Treatment Name	Rate	Unit	Grow Stg		
10	BASIS GOLD	.783	LB A/A	E-POST	100.0 a	100.0 a
10	LEADOFF	1.25	LB A/A	E-POST		
10	BANVEL	.125	LB A/A	E-POST		
10	COC	1.00	% V/V	E-POST		
11	PYTHON	.05	LB A/A	PRE	100.0 a	100.0 a
11	LEADOFF	2.81	LB A/A	PRE		
12	CONTROL				0.0 c	0.0 c
LSD (P=.05)					11.43	10.33
Standard Deviation					7.91	7.15
CV					9.08	8.21
Replicate F					3.268	4.807
Replicate Prob(F)					0.0334	0.0069
Treatment F					49.508	61.807
Treatment Prob(F)					0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

FMC CONVENTIONAL CORN

Trial ID: FMC CONV CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-28-99 Country: USA
City: BLACKSBURG State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1. _____ 2. _____ 3. _____
4. _____ 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: CORN Variety: DK 626 RR Planting Date: 5-10-99
Planting Method: ROWS Rate: 28000 ACRE Depth: 1.50 IN
Perennial Age: _____ Row Spacing: 30 INCH Seed Bed: _____
Soil Temperature: 61 F Soil Moisture: DRY/MOIST Emergence Date: 5-17-99

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4

Site Type: _____
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: SPRING DISK
Trial Initiation Comments: _____

Previous:	Crops	Pesticides	Year
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: _____ % Silt: _____ % Clay: _____
pH: 6.2 CEC: _____ Soil Name: GROSECLOSE Fertility Level: _____

FMC CONVENTIONAL CORN

Trial ID: FMC CONV CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS						
On:	Date	Time	Amount	Unit	Type	Interval Unit
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA
Closest Weather Station: BLACKSBURG, VA. Distance: 2 Unit: MI

	APPLICATION DESCRIPTION					
	A	B	C	D	E	F
Application Date:	6-1-99	6-18-99				
Time of Day:	11 AM	11:30 AM				
Application Method:	BROADCAST	BROADCAST				
Application Timing:	E-POST	L-POST				
Applic. Placement:	FOLIAGE	FOLIAGE				
Air Temp., Unit:	81 F	78 F				
% Relative Humidity:	15	45				
Wind Velocity, Unit:	3 MPH	5 MPH				
Dew Presence (Y/N):	N	N				
Water Hardness:						
Soil Temp., Unit:	62 F	60 F				
Soil Moisture:	DRY/DAMP	DAMP/MOIS				
% Cloud Cover:	35	10				

VPI & SU

FMC CONVENTIONAL CORN

Trial ID: FMC CONV CORN Investigator: E.S. HAGOOD
 Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 CORN Stage:	E-POST	L-POST				
Stage Scale:	5 LEAF	8 LEAF				
Height, Unit:	4 INCH	24 INCH				
Crop 2 Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 Stage:	CHEAL	CHEAL				
Stage Scale:	8 LF 1 IN	4 LF 1 IN				
Density, Unit:	60 M2	30 M2				
Weed 2 Stage:	AMARE	AMARE				
Stage Scale:	4 LF 1 IN	2MLF 1 IN				
Density, Unit:	30 M2	2 M2				
Weed 3 Stage:	CYPES	CYPES				
Stage Scale:	10LF 3 IN	10LF 2 IN				
Density, Unit:	80 M2	8 M2				
Weed 4 Stage:	ABUTH	ABUTH				
Stage Scale:	3 LF 2 IN	4 LF 2 IN				
Density, Unit:	20 M2	4 M2				
Weed 5 Stage:	IPOHR	IPOHR				
Stage Scale:	2 LF 1 IN	4 LF 2 IN				
Density, Unit:	3 M2	2 M2				
Weed 6 Stage:	HIBTR	HIBTR				
Stage Scale:	2 LF 1 IN	3 LF 1 IN				
Density, Unit:	5 M2	3 M2				
Weed 7 Stage:						
Stage Scale:						
Density, Unit:						
Weed 8 Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 Stage:						
Stage Scale:						
Density, Unit:						

FMC CONVENTIONAL CORN

Trial ID: FMC CONV CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK				
Operating Pressure:	34 PSI	34 PSI				
Nozzle Type:	FLAT FAN	FLAT FAN				
Nozzle Size:	8003	8003				
Nozzle Spacing, Unit:	18 INCH	18 INCH				
Nozzles/Row:	4	4				
Band Width, Unit:						
Boom Length, Unit:	72 INCH	72 INCH				
Boom Height, Unit:	20 INCH	20 INCH				
Ground Speed, Unit:	3.1 MPH	3.1 MPH				
Incorporation Equip.:						
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER	WATER				
Spray Volume, Unit:	22.5 GPA	22.5 GPA				
Spray pH:						
Propellant:	CO/2	CO/2				
Tank Mix (Y/N):	Y	Y				

Trt No	Treatment Application Comment
—	_____
—	_____
—	_____

FMC CONVENTIONAL CORN

Trial ID: FMC CONV CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	INJURY CORN	INJURY CORN	CHEAL CORN	ABUTH CORN	DATST CORN	INJURY CORN	CHEAL CORN
Crop Code							
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-8-99	6-17-99	6-17-99	6-17-99	6-17-99	8-3-99	8-3-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg	INJURY CORN	INJURY CORN	CHEAL CORN	ABUTH CORN	DATST CORN	INJURY CORN	CHEAL CORN
1	AIM	.008	LB A/A	E-POST	10.0 a-d	0.0 a	57.5 e	100.0 a	100.0 a	0.0 a	86.3 abc
1	NIS	.250	% V/V	E-POST							
2	AIM	.008	LB A/A	E-POST	3.8 de	0.0 a	86.3 bc	100.0 a	100.0 a	0.0 a	76.3 bc
2	ATRAZINE	.750	LB A/A	E-POST							
2	NIS	.250	% V/V	E-POST							
3	AIM	.008	LB A/A	E-POST	3.8 de	0.0 a	90.0 abc	100.0 a	100.0 a	0.0 a	91.3 ab
3	CLARITY	.125	LB A/A	E-POST							
3	NIS	.250	% V/V	E-POST							
4	AIM	.008	LB A/A	E-POST	11.3 abc	0.0 a	97.5 ab	100.0 a	100.0 a	0.0 a	100.0 a
4	CLARITY	.125	LB A/A	E-POST							
4	ATRAZINE	.750	LB A/A	E-POST							
4	NIS	.250	% V/V	E-POST							
5	AIM	.008	LB A/A	E-POST	11.3 abc	0.0 a	81.3 cd	100.0 a	100.0 a	0.0 a	45.0 e
5	ACCENT	.031	LB A/A	E-POST							
5	NIS	.250	% V/V	E-POST							
6	AIM	.008	LB A/A	E-POST	11.3 abc	0.0 a	63.8 e	100.0 a	100.0 a	0.0 a	52.5 de
6	BEACON	.018	LB A/A	E-POST							
6	NIS	.250	% V/V	E-POST							
7	AIM	.008	LB A/A	E-POST	6.3 cde	0.0 a	100.0 a	100.0 a	100.0 a	0.0 a	100.0 a
7	MARKSMAN	.80	LB A/A	E-POST							
7	NIS	.250	% V/V	E-POST							
8	AIM	.008	LB A/A	E-POST	7.5 bcd	0.0 a	90.0 abc	95.0 b	97.5 b	0.0 a	68.8 cd
8	EXCEED	.036	LB A/A	E-POST							
8	NIS	.250	% V/V	E-POST							
9	AIM	.008	LB A/A	E-POST	7.5 bcd	0.0 a	90.0 abc	100.0 a	100.0 a	0.0 a	77.5 bc
9	SPIRIT	.036	LB A/A	E-POST							
9	NIS	.250	% V/V	E-POST							
10	AIM	.008	LB A/A	E-POST	6.3 cde	0.0 a	70.0 de	100.0 a	100.0 a	0.0 a	77.5 bc
10	ACCENT GOLD	.152	LB A/A	E-POST							
10	UAN	1.00	LB A/A	E-POST							
10	NIS	.250	% V/V	E-POST							

FMC CONVENTIONAL CORN

Trial ID: FMC CONV CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	CHEAL	ABUTH	DATST	INJURY	CHEAL
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated						
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-8-99	6-17-99	6-17-99	6-17-99	8-3-99	8-3-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Unit	Grow Stg							
11	AIM	.008	LB A/A	E-POST	16.3 a	0.0 a	100.0 a	100.0 a	100.0 a	0.0 a	100.0 a
11	SHOTGUN	.81	LB A/A	E-POST							
11	NIS	.250	% V/V	E-POST							
12	AIM	.008	LB A/A	E-POST	11.3 abc	0.0 a	96.3 ab	100.0 a	100.0 a	0.0 a	90.0 ab
12	LADDOK	.83	LB A/A	E-POST							
12	UAN	1.00	LB A/A	E-POST							
12	NIS	.250	% V/V	E-POST							
13	AIM	.008	LB A/A	E-POST	7.5 bcd	0.0 a	93.8 abc	100.0 a	100.0 a	0.0 a	95.0 ab
13	NORTHSTAR	.148	LB A/A	E-POST							
13	NIS	.250	% V/V	E-POST							
14	AIM	.008	LB A/A	E-POST	13.8 ab	0.0 a	92.5 abc	97.5 ab	100.0 a	0.0 a	83.8 abc
14	ROUNDUP ULTRA	1.00	LB A/A	E-POST							
14	NIS	.250	% V/V	E-POST							
15	ROUNDUP ULTRA	1.00	LB A/A	E-POST	0.0 e	0.0 a	91.3 abc	100.0 a	100.0 a	0.0 a	92.5 ab
16	ROUNDUP ULTRA	.75	LB A/A	E-POST	0.0 e	0.0 a	96.3 ab	100.0 a	100.0 a	0.0 a	97.5 a
16	ROUNDUP ULTRA	.75	LB A/A	L-POST							
17	ATRAZINE	1.00	LB A/A	E-POST	6.3 cde	0.0 a	95.0 ab	93.8 b	100.0 a	0.0 a	97.5 a
17	ACCENT	.031	LB A/A	E-POST							
17	CLARITY	.250	LB A/A	E-POST							
17	NIS	.250	% V/V	E-POST							
18	CONTROL				3.8 de	0.0 a	0.0 f	0.0 c	0.0 c	0.0 a	0.0 f
LSD (P=.05)					6.36	0.00	12.88	4.36	1.67	0.00	19.16
Standard Deviation					4.50	0.00	9.10	3.08	1.18	0.00	13.55
CV					58.89	0.0	10.99	3.29	1.25	0.0	17.04
Replicate F					0.297	0.000	1.926	2.084	1.000	0.000	0.517
Replicate Prob(F)					0.8271	1.0000	0.1372	0.1139	0.4005	1.0000	0.6728
Treatment F					3.921	0.000	27.808	231.675	1596.294	0.000	14.108
Treatment Prob(F)					0.0001	1.0000	0.0001	0.0001	0.0001	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

FMC CONVENTIONAL CORN

Trial ID: FMC CONV CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	ABUTH	DATST	INJURY	CHEAL	ABUTH	DATST
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated						
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	8-3-99	8-3-99	8-30-99	8-30-99	8-30-99	8-30-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Unit	Grow Stg	ABUTH	DATST	INJURY	CHEAL	ABUTH	DATST
1	AIM	.008	LB A/A	E-POST	98.8 a	100.0 a	0.0 a	78.8 bc	95.0 ab	95.0 b
1	NIS	.250	% V/V	E-POST						
2	AIM	.008	LB A/A	E-POST	100.0 a	100.0 a	0.0 a	67.5 cd	96.3 ab	96.3 ab
2	ATRAZINE	.750	LB A/A	E-POST						
2	NIS	.250	% V/V	E-POST						
3	AIM	.008	LB A/A	E-POST	97.5 ab	100.0 a	0.0 a	95.0 ab	100.0 a	100.0 a
3	CLARITY	.125	LB A/A	E-POST						
3	NIS	.250	% V/V	E-POST						
4	AIM	.008	LB A/A	E-POST	100.0 a	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a
4	CLARITY	.125	LB A/A	E-POST						
4	ATRAZINE	.750	LB A/A	E-POST						
4	NIS	.250	% V/V	E-POST						
5	AIM	.008	LB A/A	E-POST	97.5 ab	97.5 ab	0.0 a	43.8 e	92.5 b	93.8 b
5	ACCENT	.031	LB A/A	E-POST						
5	NIS	.250	% V/V	E-POST						
6	AIM	.008	LB A/A	E-POST	100.0 a	100.0 a	0.0 a	47.5 de	100.0 a	100.0 a
6	BEACON	.018	LB A/A	E-POST						
6	NIS	.250	% V/V	E-POST						
7	AIM	.008	LB A/A	E-POST	100.0 a	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a
7	MARKSMAN	.80	LB A/A	E-POST						
7	NIS	.250	% V/V	E-POST						
8	AIM	.008	LB A/A	E-POST	96.3 ab	100.0 a	0.0 a	81.3 abc	95.0 ab	96.3 ab
8	EXCEED	.036	LB A/A	E-POST						
8	NIS	.250	% V/V	E-POST						
9	AIM	.008	LB A/A	E-POST	98.8 a	100.0 a	0.0 a	82.5 abc	100.0 a	100.0 a
9	SPIRIT	.036	LB A/A	E-POST						
9	NIS	.250	% V/V	E-POST						
10	AIM	.008	LB A/A	E-POST	91.3 b	95.0 b	0.0 a	82.5 abc	100.0 a	100.0 a
10	ACCENT GOLD	.152	LB A/A	E-POST						
10	UAN	1.00	LB A/A	E-POST						
10	NIS	.250	% V/V	E-POST						

FMC CONVENTIONAL CORN

Trial ID: FMC CONV CORN
Location: SMITHFIELD, VA.

Investigator: E.S. HAGOOD
Study Dir.: Scott Hagood

Weed Code	ABUTH	DATST	INJURY	CHEAL	ABUTH	DATST
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated						
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	8-3-99	8-3-99	8-30-99	8-30-99	8-30-99	8-30-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Unit	Grow Stg	100.0 a	100.0 a	0.0 a	96.3 ab	100.0 a	100.0 a
11	AIM	.008	LB A/A	E-POST	100.0 a	100.0 a	0.0 a	96.3 ab	100.0 a	100.0 a
11	SHOTGUN	.81	LB A/A	E-POST						
11	NIS	.250	% V/V	E-POST						
12	AIM	.008	LB A/A	E-POST	95.0 ab	100.0 a	0.0 a	90.0 ab	93.8 b	97.5 ab
12	LADDOK	.83	LB A/A	E-POST						
12	UAN	1.00	LB A/A	E-POST						
12	NIS	.250	% V/V	E-POST						
13	AIM	.008	LB A/A	E-POST	97.5 ab	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a
13	NORTHSTAR	.148	LB A/A	E-POST						
13	NIS	.250	% V/V	E-POST						
14	AIM	.008	LB A/A	E-POST	97.5 ab	100.0 a	0.0 a	88.8 ab	100.0 a	100.0 a
14	ROUNDUP ULTRA	1.00	LB A/A	E-POST						
14	NIS	.250	% V/V	E-POST						
15	ROUNDUP ULTRA	1.00	LB A/A	E-POST	100.0 a	100.0 a	0.0 a	92.5 ab	100.0 a	100.0 a
16	ROUNDUP ULTRA	.75	LB A/A	E-POST	100.0 a	100.0 a	0.0 a	97.5 ab	100.0 a	100.0 a
16	ROUNDUP ULTRA	.75	LB A/A	L-POST						
17	ATRAZINE	1.00	LB A/A	E-POST	97.5 ab	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a
17	ACCENT	.031	LB A/A	E-POST						
17	CLARITY	.250	LB A/A	E-POST						
17	NIS	.250	% V/V	E-POST						
18	CONTROL				0.0 c	0.0 c	0.0 a	0.0 f	0.0 c	0.0 c
LSD (P=.05)					6.55	2.59	0.00	21.14	5.68	4.16
Standard Deviation					4.63	1.83	0.00	14.95	4.02	2.94
CV					5.0	1.95	0.0	18.64	4.32	3.15
Replicate F					0.108	0.415	0.000	1.336	1.867	1.538
Replicate Prob(F)					0.9550	0.7432	1.0000	0.2731	0.1470	0.2159
Treatment F					100.723	659.537	0.000	12.286	135.091	252.380
Treatment Prob(F)					0.0001	0.0001	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

MONSANTO RR CORN TIMING AND WEED COMPETITION

Trial ID: 1999 MONSANTO Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPISU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-12-99 Country: USA
City: BLACKSBURG, VA. State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1.CHEAL COMMON LAMBSQTR 2.CYPES YELLOW NUTSEDEGE 3.ECHCG BARNYARDGRASS
4.DATST JIMSONWEED 5.AMARE REDROOT PIGWEED 6.SORHA JOHNSONGRASS
7. 8. 9.

Crop 1: CORN Variety: DK 626 RR Planting Date: 5-10-99
Planting Method: ROWS Rate: 28000 ACRE Depth: 1.5 IN
Perennial Age: Row Spacing: 30 IN Seed Bed:
Soil Temperature: Soil Moisture: Emergence Date: 5-17-99

Crop 2: Variety: Planting Date:
Planting Method: Rate: Depth:
Perennial Age: Row Spacing: Seed Bed:
Soil Temperature: Soil Moisture: Emergence Date:

Crop 3: Variety: Planting Date:
Planting Method: Rate: Depth:
Perennial Age: Row Spacing: Seed Bed:
Soil Temperature: Soil Moisture: Emergence Date:

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4

Site Type:
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: SPRING DISK
Trial Initiation Comments:

Previous: Crops	Pesticides	Year
1.		
2.		
3.		

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: % Silt: % Clay:
pH: 6.2 CEC: Soil Name: GROSECLOSE Fertility Level:

VPI & SU

MONSANTO RR CORN TIMING AND WEED COMPETITION

Trial ID: 1999 MONSANTO Investigator: E.S. HAGOOD
 Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On: Date	Time	Amount	Unit	Type	Interval	Unit
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA. Distance: 12 Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-10-99	5-25-99	6-1-99	6-9-99	6-18-99	
Time of Day:	11:30 AM	4:00 PM	11:30 AM	4:00 PM	11:30 AM	
Application Method:	BROADCAST	BROADCAST	BROADCAST	BROADCAST	BROADCAST	
Application Timing:	PRE	VE-POST	E-POST	M-POST	L-POST	
Applic. Placement:	SOIL	FOLIAGE	FOLIAGE	FOLIAGE	FOLIAGE	
Air Temp., Unit:	75 F	70 F	76 F	90 F	78 F	
% Relative Humidity:	30	25	85	85	40	
Wind Velocity, Unit:	3 MPH	5 MPH	7 MPH	3 MPH	4 MPH	
Dew Presence (Y/N):	N	N	N	N	N	
Water Hardness:	N	N	N	N	N	
Soil Temp., Unit:	60 F	60 F	65 F	61 F	61 F	
Soil Moisture:	DRY/MOIST	DRY	DRY	DRY	MOIST	
% Cloud Cover:	30	40	5	65	5	

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MONSANTO RR CORN TIMING AND WEED COMPETITION

Trial ID: 1999 MONSANTO Investigator: E.S. HAGOOD
 Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 CORN Stage:	PRE	VE-POST	E-POST	M-POST	L-POST	
Stage Scale:		3 LEAF	4 LEAF	6-7 LEAF	9-10 LEAF	
Height, Unit:		3.0 INCH	5.0 INCH	10 INCH	16.0 INCH	
Crop 2 Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 CHEAL Stage:	NONE	2-4 LEAF	6 LEAF	10 LEAF	14 LEAF	
Stage Scale:		1/4-1/2"	1 INCH	2 INCH	5 INCH	
Density, Unit:		20 M2	20 M2	20 M2	20 M2	
Weed 2 CYPES Stage:	NONE	2-3 LEAF	4 LEAF	7 LEAF	10 LEAF	
Stage Scale:		2 INCH	3 INCH	4 INCH	5 INCH	
Density, Unit:		10 M2	10 M2	10 M2	10 M2	
Weed 3 ECHCG Stage:	NONE	1-2 LEAF	4 LEAF	5 LEAF	7 LEAF	
Stage Scale:		1/4-1/2"	1 INCH	2 INCH	3 INCH	
Density, Unit:		5 M2	5 M2	5 M2	5 M2	
Weed 4 DATST Stage:	NONE	COT-2 LF	4 LEAF	6 LEAF	8 LEAF	
Stage Scale:		1/2-1"	2 INCH	3 INCH	5 INCH	
Density, Unit:		1 M2	1 M2	1 M2	1 M2	
Weed 5 AMARE Stage:	NONE	COTY-2 LF	3 LEAF	3-4 LEAF	5 LEAF	
Stage Scale:		1/4-1/2"	1 INCH	1 INCH	2 INCH	
Density, Unit:		1 M2	1 M2	1 M2	1 M2	
Weed 6 SORHA Stage:	NONE	3-4 LEAF	6 LEAF	7-10 LEAF	NONE	
Stage Scale:		4-6 INCH	7 INCH	12 INCH		
Density, Unit:		2 M2	2 M2	3 M2		
Weed 7 Stage:						
Stage Scale:						
Density, Unit:						
Weed 8 Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 Stage:						
Stage Scale:						
Density, Unit:						

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MONSANTO RR CORN TIMING AND WEED COMPETITION

Trial ID: 1999 MONSANTO Investigator: E.S. HAGOOD
 Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK	BACKPACK	BACKPACK	
Operating Pressure:	34 PSI	34 PSI	34 PSI	34 PSI	34 PSI	
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN	FLAT FAN	FLAT FAN	
Nozzle Size:	8003	8003	8003	8003	8003	
Nozzle Spacing, Unit:	18 INCH	18 INCH	18 INCH	18 INCH	18 INCH	
Nozzles/Row:	4	4	4	4	4	
Band Width, Unit:						
Boom Length, Unit:	72 INCH	72 INCH	72 INCH	72 INCH	72 INCH	
Boom Height, Unit:	20 INCH	20 INCH	20 INCH	20 INCH	20 INCH	
Ground Speed, Unit:	3.1 MPH	3.1 MPH	3.1 MPH	3.1 MPH	3.1 MPH	
Incorporation Equip.:						
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER	WATER	WATER	WATER	WATER	
Spray Volume, Unit:	22.5 GPA	22.5 GPA	22.5 GPA	22.5 GPA	22.5 GPA	
Spray pH:						
Propellant:	CO/2	CO/2	CO/2	CO/2	CO/2	
Tank Mix (Y/N):	Y	Y	Y	Y	Y	

Trt No	Treatment Application Comment
—	—
—	—
—	—

MONSANTO RR CORN TIMING AND WEED COMPETITION

Trial ID: 1999 MONSANTO Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	CHEAL	CYPES	ECHCG	AMARE	HIBTR
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated						
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	5-20-99	6-7-99	6-7-99	6-7-99	6-7-99	6-7-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Unit	Grow Stg	INJURY	CHEAL	CYPES	ECHCG	AMARE	HIBTR
1	HARNESX XTRA	2.85	LB A/A	VEP	0.0 a	97.5 a	56.3 de	100.0 a	100.0 a	100.0 a
1	ROUNDUP ULTRA	1.00	LB A/A	VEP	0.0 a	97.5 a	56.3 de	100.0 a	100.0 a	100.0 a
2	ROUNDUP ULTRA	1.00	LB A/A	E-POST	0.0 a	86.3 ab	63.8 cde	97.5 a	100.0 a	92.5 ab
3	ROUNDUP ULTRA	1.00	LB A/A	M-POST	0.0 a	0.0 d	0.0 f	0.0 c	0.0 c	0.0 c
4	ROUNDUP ULTRA	1.00	LB A/A	L-POST	0.0 a	0.0 d	0.0 f	0.0 c	0.0 c	0.0 c
5	ROUNDUP ULTRA	1.00	LB A/A	E-POST	0.0 a	97.5 a	50.0 e	100.0 a	100.0 a	100.0 a
5	ATRAZINE	1.00	LB A/A	E-POST	0.0 a	97.5 a	50.0 e	100.0 a	100.0 a	100.0 a
6	HARNESX XTRA	2.40	LB A/A	E-POST	0.0 a	97.5 a	68.8 bcd	100.0 a	100.0 a	100.0 a
6	ROUNDUP ULTRA	1.00	LB A/A	E-POST	0.0 a	97.5 a	68.8 bcd	100.0 a	100.0 a	100.0 a
7	ROUNDUP ULTRA	1.00	LB A/A	E-POST	0.0 a	95.0 a	82.5 ab	97.5 a	93.8 b	95.0 ab
7	ROUNDUP ULTRA	1.00	LB A/A	L-POST	0.0 a	95.0 a	82.5 ab	97.5 a	93.8 b	95.0 ab
8	HARNESX XTRA	2.40	LB A/A	PRE	1.3 a	90.0 a	78.8 bc	100.0 a	100.0 a	100.0 a
8	ROUNDUP ULTRA	1.00	LB A/A	M-POST	1.3 a	90.0 a	78.8 bc	100.0 a	100.0 a	100.0 a
9	BICEP II MAGNUM	2.88	LB A/A	PRE	1.3 a	77.5 bc	97.5 a	100.0 a	100.0 a	100.0 a
10	BICEP II MAGNUM	2.88	LB A/A	PRE	1.3 a	87.5 ab	97.5 a	100.0 a	100.0 a	100.0 a
10	EXCEED	.036	LB A/A	E-POST	1.3 a	87.5 ab	97.5 a	100.0 a	100.0 a	100.0 a
10	BANVEL	.250	LB A/A	E-POST	1.3 a	87.5 ab	97.5 a	100.0 a	100.0 a	100.0 a
10	NIS	.250	% V/V	E-POST	1.3 a	87.5 ab	97.5 a	100.0 a	100.0 a	100.0 a
11	BASIS GOLD	.783	LB A/A	E-POST	0.0 a	70.0 c	65.0 b-e	73.8 b	92.5 b	90.0 b
11	COC	1.00	% V/V	E-POST	0.0 a	70.0 c	65.0 b-e	73.8 b	92.5 b	90.0 b
11	UAN	4.00	% V/V	E-POST	0.0 a	70.0 c	65.0 b-e	73.8 b	92.5 b	90.0 b
12	CONTROL				0.0 a	0.0 d	0.0 f	0.0 c	0.0 c	0.0 c
LSD (P=.05)					1.86	0.00	12.25	18.73	5.43	8.34
Standard Deviation					1.29	0.00	8.48	12.97	3.76	5.78
CV					411.94	0.0	12.75	23.59	5.2	7.9

MONSANTO RR CORN TIMING AND WEED COMPETITION

Trial ID: 1999 MONSANTO Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	CHEAL	CYPES	ECHCG	HIBTR	INJURY	CHEAL
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-25-99	6-25-99	6-25-99	6-25-99	6-25-99	7-30-99	7-30-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg							
1	HARNESS XTRA	2.85	LB A/A	VEP	0.0 a	96.3 abc	53.8 def	87.5 cd	100.0 a	0.0 a	90.0 bc
1	ROUNDUP ULTRA	1.00	LB A/A	VEP							
2	ROUNDUP ULTRA	1.00	LB A/A	E-POST	0.0 a	93.8 abc	48.8 ef	88.8 bcd	96.3 b	0.0 a	85.0 c
3	ROUNDUP ULTRA	1.00	LB A/A	M-POST	0.0 a	98.3 ab	75.0 bc	100.0 a	100.0 a	0.0 a	91.3 bc
4	ROUNDUP ULTRA	1.00	LB A/A	L-POST	0.0 a	90.0 c	37.5 f	93.8 abc	75.0 c	0.0 a	95.0 ab
5	ROUNDUP ULTRA	1.00	LB A/A	E-POST	0.0 a	91.3 bc	56.3 c-f	86.3 cd	100.0 a	0.0 a	91.3 bc
5	ATRAZINE	1.00	LB A/A	E-POST							
6	HARNESS XTRA	2.40	LB A/A	E-POST	0.0 a	98.8 a	68.8 bcd	98.8 ab	100.0 a	0.0 a	96.3 ab
6	ROUNDUP ULTRA	1.00	LB A/A	E-POST							
7	ROUNDUP ULTRA	1.00	LB A/A	E-POST	0.0 a	98.8 a	83.8 ab	100.0 a	99.5 ab	0.0 a	95.0 ab
7	ROUNDUP ULTRA	1.00	LB A/A	L-POST							
8	HARNESS XTRA	2.40	LB A/A	PRE	0.0 a	98.8 a	61.3 cde	100.0 a	100.0 a	0.0 a	98.8 a
8	ROUNDUP ULTRA	1.00	LB A/A	M-POST							
9	BICEP II MAGNUM	2.88	LB A/A	PRE	0.0 a	73.8 d	72.5 bcd	37.5 e	100.0 a	0.0 a	63.8 d
10	BICEP II MAGNUM	2.88	LB A/A	PRE	0.0 a	99.5 a	95.0 a	84.5 cd	98.3 ab	0.0 a	100.0 a
10	EXCEED	.036	LB A/A	E-POST							
10	BANVEL	.250	LB A/A	E-POST							
10	NIS	.250	% V/V	E-POST							
11	BASIS GOLD	.783	LB A/A	E-POST	0.0 a	37.5 e	42.5 ef	81.3 d	100.0 a	0.0 a	46.3 e
11	COC	1.00	% V/V	E-POST							
11	UAN	4.00	% V/V	E-POST							
12	CONTROL				0.0 a	0.0 f	0.0 g	0.0 f	0.0 d	0.0 a	0.0 f
LSD (P=.05)					0.00	7.04	19.18	10.83	3.69	0.00	7.06
Standard Deviation					0.00	4.87	13.29	7.50	2.55	0.00	4.89
CV					0.0	5.99	22.94	9.39	2.87	0.0	6.16

MONSANTO RR CORN TIMING AND WEED COMPETITION

Trial ID: 1999 MONSANTO Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code DIGSA HIBTR IPOLA
Crop Code CORN CORN CORN
Part Rated
Rating Data Type VISUAL VISUAL VISUAL
Rating Unit 0-100 0-100 0-100
Rating Date 7-30-99 7-30-99 7-30-99
Footnote Number
Trt-Eval Interval
PRM Data Type
Subsamples, Dec.

Trt No.	Treatment Name	Rate	Unit	Grow Stg	DIGSA	HIBTR	IPOLA
1	HARNESS XTRA	2.85	LB A/A	VEP	92.5 ab	100.0 a	100.0 a
1	ROUNDUP ULTRA	1.00	LB A/A	VEP			
2	ROUNDUP ULTRA	1.00	LB A/A	E-POST	88.8 b	100.0 a	93.8 a
3	ROUNDUP ULTRA	1.00	LB A/A	M-POST	91.3 ab	98.8 a	97.5 a
4	ROUNDUP ULTRA	1.00	LB A/A	L-POST	95.0 ab	97.5 a	97.5 a
5	ROUNDUP ULTRA	1.00	LB A/A	E-POST	91.3 ab	98.8 a	96.3 a
5	ATRAZINE	1.00	LB A/A	E-POST			
6	HARNESS XTRA	2.40	LB A/A	E-POST	96.3 ab	100.0 a	97.5 a
6	ROUNDUP ULTRA	1.00	LB A/A	E-POST			
7	ROUNDUP ULTRA	1.00	LB A/A	E-POST	96.3 ab	100.0 a	97.5 a
7	ROUNDUP ULTRA	1.00	LB A/A	L-POST			
8	HARNESS XTRA	2.40	LB A/A	PRE	97.5 ab	100.0 a	100.0 a
8	ROUNDUP ULTRA	1.00	LB A/A	M-POST			
9	BICEP II MAGNUM	2.88	LB A/A	PRE	100.0 a	100.0 a	97.5 a
10	BICEP II MAGNUM	2.88	LB A/A	PRE	100.0 a	100.0 a	96.3 a
10	EXCEED	.036	LB A/A	E-POST			
10	BANVEL	.250	LB A/A	E-POST			
10	NIS	.250	% V/V	E-POST			
11	BASIS GOLD	.783	LB A/A	E-POST	55.0 c	82.5 b	80.0 b
11	COC	1.00	% V/V	E-POST			
11	UAN	4.00	% V/V	E-POST			
12	CONTROL				0.0 d	0.0 c	0.0 c
LSD (P=.05)					10.50	9.47	10.80
Standard Deviation					7.27	6.56	7.48
CV					8.7	7.3	8.52

MONSANTO RR CORN SYSTEMS

Trial ID: 1999 MONSANTO 2 Investigator: PROFESSOR
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-12-99 Country: USA
City: BLACKSBURG, VA. State/Prov.: USA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1.CHEAL COMMON LAMBSQTR 2.CYPES YELLOW NUTSEDGE 3.DATST JIMSONWEED
4.IPOLA PITTED MRNGGLRY 5.ECHCG BARNYARDGRASS 6.SORHA JOHNSONGRASS
7.ABUTH VELVETLEAF 8. _____ 9. _____

Crop 1: CORN Variety: DK 626 RR Planting Date: 5-10-99
Planting Method: ROWS Rate: 28000 ACRE Depth: 1.50 IN
Perennial Age: _____ Row Spacing: 30 IN Seed Bed: _____
Soil Temperature: _____ Soil Moisture: DRY/MOIST Emergence Date: 5-17-99

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4
Site Type: _____
Tillage Type: _____ Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: _____
Trial Initiation Comments: _____

Previous:	Crops	Pesticides	Year
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: _____ % Silt: _____ % Clay: _____
pH: 6.2 CEC: _____ Soil Name: GROSECLOSE Fertility Level: _____

VPI & SU

MONSANTO RR CORN SYSTEMS

Trial ID: 1999 MONSANTO 2 Investigator: PROFESSOR
 Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA. Distance: 2 Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-10-99	5-25-99	6-7-99	6-14-99		
Time of Day:	11:00 AM	2:00 PM	11:00 AM	11:15 AM		
Application Method:	BROADCAST	BROADCAST	BROADCAST	BROADCAST		
Application Timing:	PRE	E-POST	M-POST	SEQ		
Applic. Placement:	SOIL	FOLIAGE	FOLIAGE	FOLIAGE		
Air Temp., Unit:	75 F	70 F	80 F	78 F		
% Relative Humidity:	30	30	65	75		
Wind Velocity, Unit:	3 MPH	6 MPH	6 MPH	7 MPH		
Dew Presence (Y/N):	N	N	N	N		
Water Hardness:	N/A	N/A	N/A	N/A		
Soil Temp., Unit:	57 F	60 F	71 F	73 F		
Soil Moisture:	DRY/MOIST	DRY/MOIST	DRY	DRY/DAMP		
% Cloud Cover:	30	40	40	20		

MONSANTO RR CORN SYSTEMS

Trial ID: 1999 MONSANTO 2 Investigator: PROFESSOR
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 CORN Stage:	PRE	E-POST	M-POST	SEQ		
Stage Scale:		4 LEAF	7 LEAF	10 LEAF		
Height, Unit:		3.5 INCH	10 INCH	20 INCH		
Crop 2 Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 CHEAL Stage:	NONE	4-8 LEAF	8-20 LEAF	24 LEAF		
Stage Scale:		1/4-1/2"	.5-3 INCH	3 INCH		
Density, Unit:		10 M2	12.5 M2	3 M2		
Weed 2 CYPES Stage:	NONE	2-6 LEAF	6-12 LEAF	12 LEAF		
Stage Scale:		1-3 INCH	6-8 INCH	4 INCH		
Density, Unit:		10 M2	5-10 M2	6 M2		
Weed 3 DATST Stage:	NONE	COTY-2 LF	NONE	NONE		
Stage Scale:		1-2 INCH				
Density, Unit:		2 M2				
Weed 4 IPOLA Stage:	NONE	COTY-1 LF	4-12 LEAF	2 LEAF		
Stage Scale:		1-1.5"	1.5-3"	1 INCH		
Density, Unit:		2 M2	2 M2	1 M2		
Weed 5 ECHCG Stage:	NONE	1-2 LEAF	3-5 LEAF	7 LEAF		
Stage Scale:		1/4 INCH	2-3 INCH	4 INCH		
Density, Unit:		5 M2	5 M2	6 M2		
Weed 6 SORHA Stage:	NONE	4-5 LEAF	4-6 LEAF	10 LEAF		
Stage Scale:		6-8 INCH	7-9 INCH	8 INCH		
Density, Unit:		2 M2	2-5 M2	1 M2		
Weed 7 ABUTH Stage:	NONE	NONE	6 LEAF	NONE		
Stage Scale:			2 INCH			
Density, Unit:			1-2 M2			
Weed 8 Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 Stage:						
Stage Scale:						
Density, Unit:						

MONSANTO RR CORN SYSTEMS

Trial ID: 1999 MONSANTO 2 Investigator: PROFESSOR
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK	BACKPACK		
Operating Pressure:	34 PSI	34 PSI	34 PSI	34 PSI		
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN	FLAT FAN		
Nozzle Size:	8003	8003	8003	8003		
Nozzle Spacing, Unit:	18 INCH	18 INCH	18 INCH	18 INCH		
Nozzles/Row:	4	4	4	4		
Band Width, Unit:						
Boom Length, Unit:	72 INCH	72 INCH	72 INCH	72 INCH		
Boom Height, Unit:	20 INCH	20 INCH	20 INCH	20 INCH		
Ground Speed, Unit:	3.1 MPH	3.1 MPH	3.1 MPH	3.1 MPH		
Incorporation Equip.:						
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER	WATER	WATER	WATER		
Spray Volume, Unit:	22.5 GPA	22.5 GPA	22.5 GPA	22.5 GPA		
Spray pH:						
Propellant:	CO/2	CO/2	CO/2	CO/2		
Tank Mix (Y/N):	Y	Y	Y	Y		

Trt No Treatment Application Comment

MONSANTO RR CORN SYSTEMS

Trial ID: 1999 MONSANTO 2 Investigator: PROFESSOR
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	INJURY	CHEAL	CYPES	ECHCG	AMARA	DATST
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	5-20-99	6-7-99	6-7-99	6-7-99	6-7-99	6-7-99	6-7-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg							
1	ROUNDUP ULTRA	1.00	LB A/A	E-POST	0.0 a	0.0 a	91.3 a-d	87.5 abc	100.0 a	100.0 a	100.0 a
2	ROUNDUP ULTRA	1.00	LB A/A	E-POST	0.0 a	0.0 a	88.8 b-e	82.5 abc	95.0 ab	100.0 a	100.0 a
2	ROUNDUP ULTRA	1.00	LB A/A	SEQ							
3	HARNESS	1.00	LB A/A	PRE	0.0 a	0.0 a	61.3 f	71.3 bc	95.0 ab	82.5 c	45.0 b
3	ROUNDUP ULTRA	1.00	LB A/A	M-POST							
4	HARNESS XTRA	1.18	LB A/A	PRE	0.0 a	0.0 a	83.8 cde	72.5 bc	100.0 a	97.5 b	100.0 a
4	ROUNDUP ULTRA	1.00	LB A/A	M-POST							
5	HARNESS	1.30	LB A/A	E-POST	0.0 a	0.0 a	97.5 ab	82.5 abc	97.5 ab	100.0 a	100.0 a
5	ROUNDUP ULTRA	1.00	LB A/A	E-POST							
6	HARNESS XTRA	2.24	LB A/A	E-POST	0.0 a	0.0 a	97.5 ab	76.3 abc	100.0 a	100.0 a	100.0 a
6	ROUNDUP ULTRA	1.00	LB A/A	E-POST							
7	ATRAZINE	1.00	LB A/A	E-POST	0.0 a	0.0 a	93.8 abc	68.8 c	96.3 ab	100.0 a	100.0 a
7	ROUNDUP ULTRA	1.00	LB A/A	E-POST							
8	MON 78126	2.30	LB A/A	E-POST	0.0 a	0.0 a	100.0 a	80.0 abc	100.0 a	100.0 a	100.0 a
9	MON 78123	3.30	LB A/A	E-POST	0.0 a	0.0 a	100.0 a	77.5 abc	100.0 a	100.0 a	100.0 a
10	MON 78045	2.00	LB A/A	E-POST	0.0 a	0.0 a	100.0 a	92.5 a	100.0 a	100.0 a	100.0 a
11	DUAL II MAGNUM	1.27	LB A/A	PRE	0.0 a	0.0 a	100.0 a	90.0 ab	100.0 a	100.0 a	100.0 a
11	CLARITY	.48	LB A/A	E-POST							
11	ATRAZINE	.91	LB A/A	E-POST							
11	NIS	.25	% V/V	E-POST							
12	BICEP II MAGNUM	2.88	LB A/A	PRE	0.0 a	0.0 a	82.5 de	83.8 abc	90.0 b	100.0 a	100.0 a
13	BASIS GOLD	.783	LB A/A	E-POST	0.0 a	0.0 a	86.3 cde	83.8 abc	95.0 ab	100.0 a	100.0 a
13	COC	1.00	% V/V	E-POST							
13	UAN	4.00	% V/V	E-POST							
14	ACCENT	.031	LB A/A	E-POST	0.0 a	0.0 a	78.8 e	82.5 abc	96.3 ab	100.0 a	100.0 a
14	BANVEL	.250	LB A/A	E-POST							
14	UAN	4.00	% V/V	E-POST							

MONSANTO RR CORN SYSTEMS

Trial ID: 1999 MONSANTO 2 Investigator: PROFESSOR
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	AMARA	CHEAL	CYPES	ECHCG	AMARA	DATST
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated						
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	5-20-99	6-7-99	6-7-99	6-7-99	6-7-99	6-7-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg							
15	CONTROL	0.0	a	0.0	a	0.0	g	0.0	d	0.0	c
LSD (P=.05)		0.00		0.00		10.02		19.46		8.52	
Standard Deviation		0.00		0.00		7.01		13.61		5.96	
CV		0.0		0.0		8.34		18.05		6.55	
Replicate F		0.000		0.000		2.653		6.627		0.188	
Replicate Prob(F)		1.0000		1.0000		0.0609		0.0009		0.9042	
Treatment F		0.000		0.000		53.271		10.366		72.317	
Treatment Prob(F)		1.0000		1.0000		0.0001		0.0001		0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)

MONSANTO RR CORN SYSTEMS

Trial ID: 1999 MONSANTO 2 Investigator: PROFESSOR
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	IPOLA	INJURY	CHEAL	CYPES	ECHCG	AMARE	DATST
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-7-99	6-26-99	6-26-99	6-26-99	6-26-99	6-26-99	6-26-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg	IPOLA	INJURY	CHEAL	CYPES	ECHCG	AMARE	DATST
1	ROUNDUP ULTRA	1.00	LB A/A	E-POST	95.0 ab	0.0 a	88.8 a	82.5 abc	45.0 de	100.0 a	88.8 b
2	ROUNDUP ULTRA	1.00	LB A/A	E-POST	87.5 b	0.0 a	91.3 a	85.0 ab	41.3 e	100.0 a	100.0 a
2	ROUNDUP ULTRA	1.00	LB A/A	SEQ							
3	HARNESS	1.00	LB A/A	PRE	45.0 c	0.0 a	92.0 a	90.0 a	47.5 cd	100.0 a	100.0 a
3	ROUNDUP ULTRA	1.00	LB A/A	M-POST							
4	HARNESS XTRA	1.18	LB A/A	PRE	100.0 a	0.0 a	95.0 a	90.0 a	75.0 a	100.0 a	92.5 ab
4	ROUNDUP ULTRA	1.00	LB A/A	M-POST							
5	HARNESS	1.30	LB A/A	E-POST	88.8 b	0.0 a	90.0 a	78.8 abc	50.0 c	100.0 a	97.5 a
5	ROUNDUP ULTRA	1.00	LB A/A	E-POST							
6	HARNESS XTRA	2.24	LB A/A	E-POST	95.0 ab	0.0 a	92.0 a	67.5 bc	50.0 c	100.0 a	100.0 a
6	ROUNDUP ULTRA	1.00	LB A/A	E-POST							
7	ATRAZINE	1.00	LB A/A	E-POST	100.0 a	0.0 a	88.8 a	61.3 c	50.0 c	93.8 b	95.0 ab
7	ROUNDUP ULTRA	1.00	LB A/A	E-POST							
8	MON 78126	2.30	LB A/A	E-POST	100.0 a	0.0 a	93.8 a	78.8 abc	50.0 c	100.0 a	100.0 a
9	MON 78123	3.30	LB A/A	E-POST	100.0 a	0.0 a	93.8 a	82.5 abc	50.0 c	100.0 a	100.0 a
10	MON 78045	2.00	LB A/A	E-POST	100.0 a	0.0 a	91.3 a	70.0 abc	50.0 c	93.8 b	100.0 a
11	DUAL II MAGNUM	1.27	LB A/A	PRE	100.0 a	0.0 a	97.5 a	87.5 ab	45.0 de	100.0 a	97.5 a
11	CLARITY	.48	LB A/A	E-POST							
11	ATRAZINE	.91	LB A/A	E-POST							
11	NIS	.25	% V/V	E-POST							
12	BICEP II MAGNUM	2.88	LB A/A	PRE	100.0 a	0.0 a	75.0 bc	78.8 abc	67.5 b	100.0 a	100.0 a
13	BASIS GOLD	.783	LB A/A	E-POST	93.8 ab	0.0 a	86.3 ab	71.3 abc	45.0 de	96.3 ab	100.0 a
13	COC	1.00	% V/V	E-POST							
13	UAN	4.00	% V/V	E-POST							
14	ACCENT	.031	LB A/A	E-POST	96.3 ab	0.0 a	63.8 c	83.8 ab	50.0 c	100.0 a	97.5 a
14	BANVEL	.250	LB A/A	E-POST							
14	UAN	4.00	% V/V	E-POST							

MONSANTO RR CORN SYSTEMS

Trial ID: 1999 MONSANTO 2 Investigator: PROFESSOR
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	IPOLA	INJURY	CHEAL	CYPES	ECHCG	AMARE	DATST
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-7-99	6-26-99	6-26-99	6-26-99	6-26-99	6-26-99	6-26-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg							
15	CONTROL				0.0 d	0.0 a	0.0 d	0.0 d	0.0 f	0.0 c	0.0 c
	LSD (P=.05)				10.15	0.00	12.39	22.33	4.05	4.33	7.55
	Standard Deviation				7.10	0.00	8.67	15.63	2.83	3.03	5.28
	CV				8.18	0.0	10.5	21.17	5.94	3.28	5.79
	Replicate F				3.404	0.000	0.279	3.624	1.296	0.773	1.171
	Replicate Prob(F)				0.0262	1.0000	0.8402	0.0205	0.2882	0.5158	0.3323
	Treatment F				61.101	0.000	31.654	7.986	124.911	286.481	93.043
	Treatment Prob(F)				0.0001	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

MONSANTO RR CORN SYSTEMS

Trial ID: 1999 MONSANTO 2 Investigator: PROFESSOR
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	IPOLA	INJURY	CHEAL	DATST	AMARE	IPOLA
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated						
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-26-99	7-30-99	7-30-99	7-30-99	7-30-99	7-30-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Unit	Grow Stg	IPOLA	INJURY	CHEAL	DATST	AMARE	IPOLA
1	ROUNDUP ULTRA	1.00	LB A/A	E-POST	91.3 ab	0.0 a	81.3 bc	100.0 a	100.0 a	92.5 b
2	ROUNDUP ULTRA	1.00	LB A/A	E-POST	95.0 ab	0.0 a	91.3 ab	100.0 a	100.0 a	96.3 ab
2	ROUNDUP ULTRA	1.00	LB A/A	SEQ						
3	HARNESS	1.00	LB A/A	PRE	96.3 a	0.0 a	93.8 ab	100.0 a	100.0 a	100.0 a
3	ROUNDUP ULTRA	1.00	LB A/A	M-POST						
4	HARNESS XTRA	1.18	LB A/A	PRE	92.5 ab	0.0 a	94.5 a	97.5 a	100.0 a	100.0 a
4	ROUNDUP ULTRA	1.00	LB A/A	M-POST						
5	HARNESS	1.30	LB A/A	E-POST	85.0 ab	0.0 a	81.3 bc	100.0 a	100.0 a	96.3 ab
5	ROUNDUP ULTRA	1.00	LB A/A	E-POST						
6	HARNESS XTRA	2.24	LB A/A	E-POST	88.8 ab	0.0 a	91.3 ab	100.0 a	100.0 a	100.0 a
6	ROUNDUP ULTRA	1.00	LB A/A	E-POST						
7	ATRAZINE	1.00	LB A/A	E-POST	91.3 ab	0.0 a	87.5 ab	100.0 a	100.0 a	97.5 ab
7	ROUNDUP ULTRA	1.00	LB A/A	E-POST						
8	MON 78126	2.30	LB A/A	E-POST	96.3 a	0.0 a	91.3 ab	100.0 a	100.0 a	100.0 a
9	MON 78123	3.30	LB A/A	E-POST	97.5 a	0.0 a	91.3 ab	100.0 a	100.0 a	100.0 a
10	MON 78045	2.00	LB A/A	E-POST	87.0 ab	0.0 a	92.5 ab	100.0 a	100.0 a	100.0 a
11	DUAL II MAGNUM	1.27	LB A/A	PRE	98.8 a	0.0 a	98.8 a	100.0 a	100.0 a	100.0 a
11	CLARITY	.48	LB A/A	E-POST						
11	ATRAZINE	.91	LB A/A	E-POST						
11	NIS	.25	% V/V	E-POST						
12	BICEP II MAGNUM	2.88	LB A/A	PRE	97.5 a	0.0 a	88.8 ab	100.0 a	100.0 a	100.0 a
13	BASIS GOLD	.783	LB A/A	E-POST	81.3 b	0.0 a	81.3 bc	100.0 a	100.0 a	100.0 a
13	COC	1.00	% V/V	E-POST						
13	UAN	4.00	% V/V	E-POST						
14	ACCENT	.031	LB A/A	E-POST	96.3 a	0.0 a	73.8 c	97.5 a	97.5 b	97.5 ab
14	BANVEL	.250	LB A/A	E-POST						
14	UAN	4.00	% V/V	E-POST						

MONSANTO RR CORN SYSTEMS

Trial ID: 1999 MONSANTO 2 Investigator: PROFESSOR
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	IPOLA	INJURY	CHEAL	DATST	AMARE	IPOLA
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated						
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-26-99	7-30-99	7-30-99	7-30-99	7-30-99	7-30-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Grow						
		Rate Unit	Stg						
15	CONTROL			0.0 c	0.0 a	0.0 d	0.0 b	0.0 c	0.0 c
LSD (P=.05)				14.59	0.00	12.74	2.64	1.84	5.70
Standard Deviation				10.21	0.00	8.91	1.85	1.29	3.99
CV				11.83	0.0	10.8	1.99	1.39	4.34
Replicate F				2.313	0.000	2.737	0.651	1.000	1.953
Replicate Prob(F)				0.0898	1.0000	0.0553	0.5867	0.4023	0.1358
Treatment F				22.872	0.000	28.383	776.721	1595.286	163.849
Treatment Prob(F)				0.0001	1.0000	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

MONSANTO RR CORN CROP SAFETY

Trial ID: 1999 MON CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-20-99 Country: USA
City: BLACKSBURG, VA. State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1.CHEAL COMMON LAMBSQTR 2.DATST JIMSONWEED 3.CYPES YELLOW NUTSEGE
4.IPOLA PITTED MRNGGLOR 5.ABUTH VELVETLEAF 6.ECHCG BARNNYARDGRASS
7.AMARE REDROOT PIGWEED 8. _____ 9. _____

Crop 1: CORN _____ Variety: DK 626 RR Planting Date: 5-10-99
Planting Method: ROWS Rate: 28000 ACRE Depth: 1.50 IN
Perennial Age: _____ Row Spacing: 30 INCH Seed Bed: _____
Soil Temperature: 60 F Soil Moisture: DRY/MOIST Emergence Date: 5-17-99

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4

Site Type: _____
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: SPRING DISK
Trial Initiation Comments: _____

Previous: Crops	Pesticides	Year
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: _____ % Silt: _____ % Clay: _____
pH: 6.2 CEC: _____ Soil Name: GROSECLOSE Fertility Level: _____

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MONSANTO RR CORN CROP SAFETY

Trial ID: 1999 MON CORN Investigator: E.S. HAGOOD
 Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA.

Distance: 2 Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-25-99	6-7-99	6-18-99			
Time of Day:	5:00 PM	11:00 AM	11:30 AM			
Application Method:	BROADCAST	BROADCAST	BROADCAST			
Application Timing:	EPOST	MPOST	LPOST			
Applic. Placement:	FOLIAGE	FOLIAGE	FOLIAGE			
Air Temp., Unit:	70 F	80 F	75 F			
% Relative Humidity:	35	65	35			
Wind Velocity, Unit:	6 MPH	6 MPH	4 MPH			
Dew Presence (Y/N):	N	N	N			
Water Hardness:	N	N	N			
Soil Temp., Unit:	60 F	71 F	60 F			
Soil Moisture:	DRY/MOIST	DRY	DAMP			
% Cloud Cover:	30	40	10			

MONSANTO RR CORN CROP SAFETY

Trial ID: 1999 MON CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 CORN Stage:	E-POST	M-POST	L-POST			
Stage Scale:	3 LEAF	7 LEAF	8-9 LEAF			
Height, Unit:	3 INCH	10 INCH	22 INCH			
Crop 2 Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 CHEAL Stage:	2-4 LEAF	8-20 LEAF	VEGEGATIV			
Stage Scale:	0.25-1 "	1/2-3 "	3-8 INCH			
Density, Unit:	10 M2	12.5 M2	10 M2			
Weed 2 DATST Stage:	SEEDLING	NONE	6-7 LEAF			
Stage Scale:	COTYL-1"		4-5 INCH			
Density, Unit:	5 M2		3-5 M2			
Weed 3 CYPES Stage:	2-3 LEAF	6-8 LEAF	6-12 LEAF			
Stage Scale:	2-3 INCH	6-12 INCH	3-7 INCH			
Density, Unit:	5 M2	5-10 M2	5-8 M2			
Weed 4 IPOLA Stage:	SEEDLING	4-12 LEAF	RUNNING			
Stage Scale:	COTYL-1"	1.5-3 "	10-12 "			
Density, Unit:	1 M2	2 M2	1 M2			
Weed 5 ABUTH Stage:	COTYL-2LF	6-7 LEAF	5-6 LEAF			
Stage Scale:	0.75-1 "	2 INCH	6-10 INCH			
Density, Unit:	2 M2	1-2 M2	1 M2			
Weed 6 ECHCG Stage:	1-2 LEAF	3-5 LEAF	4-5 LEAF			
Stage Scale:	1/4-1/2 "	2-3 INCH	6-8 INCH			
Density, Unit:	2 M2	5 M2	2-3 M2			
Weed 7 AMARE Stage:	NONE	NONE	10-12 LF			
Stage Scale:			6-7 INCH			
Density, Unit:			2-3 M2			
Weed 8 Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 Stage:						
Stage Scale:						
Density, Unit:						

MONSANTO RR CORN CROP SAFETY

Trial ID: 1999 MON CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

	APPLICATION EQUIPMENT					
	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK			
Operating Pressure:	34 PSI	34 PSI	34 PSI			
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN			
Nozzle Size:	8003	8003	8003			
Nozzle Spacing, Unit:	18 INCH	18 INCH	18 INCH			
Nozzles/Row:	4	4	4			
Band Width, Unit:						
Boom Length, Unit:	72 INCH	72 INCH	72 INCH			
Boom Height, Unit:	20 INCH	20 INCH	20 INCH			
Ground Speed, Unit:	3.1 MPH	3.1 MPH	3.1 MPH			
Incorporation Equip.:	N/A	N/A	N/A			
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER	WATER	WATER			
Spray Volume, Unit:	22.5 GPA	22.5 GPA	22.5 GPA			
Spray pH:						
Propellant:	CO/2	CO/2	CO/2			
Tank Mix (Y/N):	Y	Y	Y			

Trt No	Treatment Application Comment
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MONSANTO RR CORN CROP SAFETY

Trial ID: 1999 MON CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	CHEAL	CYPES	ECHCG	IPOLA	AMARE	INJURY
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-7-99	6-7-99	6-7-99	6-7-99	6-7-99	6-7-99	6-17-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg	INJURY	CHEAL	CYPES	ECHCG	IPOLA	AMARE	INJURY
1	ROUNDUP ULTRA	1.00	LB A/A	E-POST	0.0 b	98.8 a	72.5 c	97.5 ab	97.5 a	100.0 a	0.0 b
2	ACCENT	.031	LB A/A	E-POST	2.5 ab	73.8 c	70.0 c	85.0 c	87.5 b	90.0 b	0.0 b
2	COC	1.00	% V/V	E-POST							
3	EXCEED	.036	LB A/A	E-POST	0.0 b	90.0 b	82.5 b	91.3 bc	100.0 a	100.0 a	0.0 b
3	COC	1.00	% V/V	E-POST							
4	SPIRIT	.036	LB A/A	E-POST	0.0 b	92.5 ab	75.0 bc	93.8 ab	100.0 a	100.0 a	0.0 b
4	COC	1.00	% V/V	E-POST							
5	ACCENT	.016	LB A/A	E-POST	0.0 b	93.8 ab	72.5 c	97.5 ab	100.0 a	100.0 a	0.0 b
5	EXCEED	.036	LB A/A	E-POST							
5	COC	1.00	% V/V	E-POST							
6	ROUNDUP ULTRA	1.00	LB A/A	M-POST	0.0 b	0.0 d	0.0 d	0.0 d	0.0 c	0.0 c	0.0 b
7	ACCENT	.031	LB A/A	M-POST	0.0 b	0.0 d	0.0 d	0.0 d	0.0 c	0.0 c	0.0 b
7	COC	1.00	% V/V	M-POST							
8	EXCEED	.036	LB A/A	M-POST	0.0 b	0.0 d	0.0 d	0.0 d	0.0 c	0.0 c	0.0 b
8	COC	1.00	% V/V	M-POST							
9	SPIRIT	.036	LB A/A	M-POST	0.0 b	0.0 d	0.0 d	0.0 d	0.0 c	0.0 c	0.0 b
9	COC	1.00	% V/V	M-POST							
10	ACCENT	.016	LB A/A	M-POST	0.0 b	0.0 d	0.0 d	0.0 d	0.0 c	0.0 c	0.0 b
10	EXCEED	.036	LB A/A	M-POST							
10	COC	1.00	% V/V	M-POST							
11	ROUNDUP ULTRA	1.00	LB A/A	L-POST	0.0 b	0.0 d	0.0 d	0.0 d	0.0 c	0.0 c	0.0 b
12	ACCENT	.031	LB A/A	L-POST	0.0 b	0.0 d	0.0 d	0.0 d	0.0 c	0.0 c	0.0 b
12	COC	1.00	% V/V	L-POST							
13	EXCEED	.036	LB A/A	L-POST	0.0 b	0.0 d	0.0 d	0.0 d	0.0 c	0.0 c	0.0 b
13	COC	1.00	% V/V	L-POST							
14	SPIRIT	.036	LB A/A	L-POST	0.0 b	0.0 d	0.0 d	0.0 d	0.0 c	0.0 c	0.0 b
14	COC	1.00	% V/V	L-POST							

MONSANTO RR CORN CROP SAFETY

Trial ID: 1999 MON CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	Crop Code	Part Rated	Rating Data Type	Rating Unit	Rating Date	Footnote Number	Trt-Eval Interval	PRM Data Type	# Subsamples, Dec.
INJURY	CHEAL	CYPES	ECHCG	IPOLA	AMARE	INJURY			
CORN	CORN	CORN	CORN	CORN	CORN	CORN			
VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL			
0-100	0-100	0-100	0-100	0-100	0-100	0-100			
6-7-99	6-7-99	6-7-99	6-7-99	6-7-99	6-7-99	6-7-99			6-17-99

Trt No.	Treatment Name	Rate	Unit	Grow Stg	INJURY	CHEAL	CYPES	ECHCG	IPOLA	AMARE	INJURY
15	ACCENT	.016	LB A/A	L-POST	0.0 b	0.0 d	0.0 d	0.0 d	0.0 c	0.0 c	0.0 b
15	EXCEED	.036	LB A/A	L-POST							
15	COC	1.00	% V/V	L-POST							
16	TOUCHDOWN	1.00	LB A/A	E-POST	0.0 b	97.5 a	91.3 a	100.0 a	100.0 a	100.0 a	0.0 b
16	NIS	.250	% V/V	E-POST							
17	TOUCHDOWN	2.00	LB A/A	E-POST	3.8 a	96.3 ab	95.0 a	97.5 ab	97.5 a	100.0 a	2.5 a
17	NIS	.250	% V/V	E-POST							
18	TOUCHDOWN	1.00	LB A/A	M-POST	0.0 b	0.0 d	0.0 d	0.0 d	0.0 c	0.0 c	0.0 b
18	NIS	.250	% V/V	M-POST							
19	TOUCHDOWN	2.00	LB A/A	M-POST	0.0 b	0.0 d	0.0 d	0.0 d	0.0 c	0.0 c	2.5 a
19	NIS	.250	% V/V	M-POST							
20	TOUCHDOWN	1.00	LB A/A	L-POST	0.0 b	0.0 d	0.0 d	0.0 d	0.0 c	0.0 c	0.0 b
20	NIS	.250	% V/V	L-POST							
21	TOUCHDOWN	2.00	LB A/A	L-POST	0.0 b	0.0 d	0.0 d	0.0 d	0.0 c	0.0 c	0.0 b
21	NIS	.250	% V/V	L-POST							
22	CONTROL				0.0 b	0.0 d	0.0 d	0.0 d	0.0 c	0.0 c	0.0 b
LSD (P=.05)					2.74	6.82	8.28	7.38	4.34	4.26	2.15
Standard Deviation					1.94	4.82	5.85	5.22	3.07	3.02	1.52
CV					681.4	16.51	23.05	17.33	9.9	9.61	668.57
Replicate F					0.682	0.863	0.340	1.794	1.084	1.000	0.656
Replicate Prob(F)					0.5662	0.4648	0.7965	0.1574	0.3624	0.3988	0.5820
Treatment F					0.942	332.958	172.341	300.079	918.614	973.429	0.938
Treatment Prob(F)					0.5420	0.0001	0.0001	0.0001	0.0001	0.0001	0.5475

Means followed by same letter do not significantly differ (P=.05, LSD)

MONSANTO RR CORN CROP SAFETY

Trial ID: 1999 MON CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	CHEAL	CYPES	ECHCG	IPOLA	AMARE	INJURY	SETFA
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-17-99	6-17-99	6-17-99	6-17-99	6-17-99	7-30-99	7-30-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg	CHEAL	CYPES	ECHCG	IPOLA	AMARE	INJURY	SETFA
1	ROUNDUP ULTRA	1.00	LB A/A	E-POST	93.8 ab	60.0 abc	96.3 a	96.3 ab	100.0 a	0.0 a	92.5 abc
2	ACCENT	.031	LB A/A	E-POST	56.3 d	51.3 bcd	97.5 a	91.3 ab	100.0 a	0.0 a	85.0 c
2	COC	1.00	% V/V	E-POST							
3	EXCEED	.036	LB A/A	E-POST	93.8 ab	48.8 cd	77.5 c	96.3 ab	100.0 a	0.0 a	96.3 ab
3	COC	1.00	% V/V	E-POST							
4	SPIRIT	.036	LB A/A	E-POST	87.5 b	47.5 d	88.8 b	100.0 a	100.0 a	0.0 a	91.3 bc
4	COC	1.00	% V/V	E-POST							
5	ACCENT	.016	LB A/A	E-POST	95.0 ab	52.5 bcd	97.5 a	97.5 ab	100.0 a	0.0 a	95.0 ab
5	EXCEED	.036	LB A/A	E-POST							
5	COC	1.00	% V/V	E-POST							
6	ROUNDUP ULTRA	1.00	LB A/A	M-POST	100.0 a	33.8 ef	100.0 a	86.3 b	100.0 a	0.0 a	100.0 a
7	ACCENT	.031	LB A/A	M-POST	53.8 d	31.3 ef	93.8 ab	51.3 c	68.8 b	0.0 a	95.0 ab
7	COC	1.00	% V/V	M-POST							
8	EXCEED	.036	LB A/A	M-POST	70.0 c	42.5 de	76.3 c	93.8 ab	97.5 a	0.0 a	85.0 c
8	COC	1.00	% V/V	M-POST							
9	SPIRIT	.036	LB A/A	M-POST	57.5 d	28.8 f	76.3 c	95.0 ab	93.8 a	0.0 a	90.0 bc
9	COC	1.00	% V/V	M-POST							
10	ACCENT	.016	LB A/A	M-POST	66.3 c	47.5 d	95.0 ab	93.8 ab	95.0 a	0.0 a	91.3 bc
10	EXCEED	.036	LB A/A	M-POST							
10	COC	1.00	% V/V	M-POST							
11	ROUNDUP ULTRA	1.00	LB A/A	L-POST	0.0 e	0.0 g	0.0 d	0.0 d	0.0 c	0.0 a	100.0 a
12	ACCENT	.031	LB A/A	L-POST	0.0 e	0.0 g	0.0 d	0.0 d	0.0 c	0.0 a	95.0 ab
12	COC	1.00	% V/V	L-POST							
13	EXCEED	.036	LB A/A	L-POST	0.0 e	0.0 g	0.0 d	0.0 d	0.0 c	0.0 a	90.0 bc
13	COC	1.00	% V/V	L-POST							
14	SPIRIT	.036	LB A/A	L-POST	0.0 e	0.0 g	0.0 d	0.0 d	0.0 c	0.0 a	95.0 ab
14	COC	1.00	% V/V	L-POST							

MONSANTO RR CORN CROP SAFETY

Trial ID: 1999 MON CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	CHEAL	CYPES	ECHCG	IPOLA	AMARE	INJURY	SETFA
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-17-99	6-17-99	6-17-99	6-17-99	6-17-99	7-30-99	7-30-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg							
15	ACCENT	.016	LB A/A	L-POST	0.0 e	0.0 g	0.0 d	0.0 d	0.0 c	0.0 a	93.8 ab
15	EXCEED	.036	LB A/A	L-POST							
15	COC	1.00	% V/V	L-POST							
16	TOUCHDOWN	1.00	LB A/A	E-POST	92.5 ab	62.5 ab	98.8 a	96.3 ab	98.8 a	0.0 a	91.3 bc
16	NIS	.250	% V/V	E-POST							
17	TOUCHDOWN	2.00	LB A/A	E-POST	93.8 ab	67.5 a	98.8 a	96.3 ab	97.5 a	0.0 a	100.0 a
17	NIS	.250	% V/V	E-POST							
18	TOUCHDOWN	1.00	LB A/A	M-POST	92.5 ab	33.8 ef	100.0 a	86.3 b	100.0 a	0.0 a	100.0 a
18	NIS	.250	% V/V	M-POST							
19	TOUCHDOWN	2.00	LB A/A	M-POST	97.5 a	48.8 cd	100.0 a	91.3 ab	100.0 a	0.0 a	91.3 bc
19	NIS	.250	% V/V	M-POST							
20	TOUCHDOWN	1.00	LB A/A	L-POST	0.0 e	0.0 g	0.0 d	0.0 d	0.0 c	0.0 a	100.0 a
20	NIS	.250	% V/V	L-POST							
21	TOUCHDOWN	2.00	LB A/A	L-POST	0.0 e	0.0 g	0.0 d	0.0 d	0.0 c	0.0 a	100.0 a
21	NIS	.250	% V/V	L-POST							
22	CONTROL				0.0 e	0.0 g	0.0 d	0.0 d	0.0 c	0.0 a	0.0 d
LSD (P=.05)					7.77	12.49	6.93	12.77	14.19	0.00	7.73
Standard Deviation					5.50	8.83	4.90	9.03	10.04	0.00	5.47
CV					10.52	29.62	8.32	15.63	16.34	0.0	6.08
Replicate F					2.031	0.916	3.389	0.180	1.522	0.000	3.411
Replicate Prob(F)					0.1185	0.4383	0.0233	0.9096	0.2175	1.0000	0.0227
Treatment F					240.844	31.784	354.942	102.465	91.348	0.000	56.851
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001	0.0001	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

MONSANTO RR CORN CROP SAFETY

Trial ID: 1999 MON CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code CHEAL AMARE
Crop Code CORN CORN
Part Rated
Rating Data Type VISUAL VISUAL
Rating Unit 0-100 0-100
Rating Date 7-30-99 7-30-99
Footnote Number
Trt-Eval Interval
PRM Data Type
Subsamples, Dec.

Trt No.	Treatment Name	Rate	Unit	Grow Stg			
1	ROUNDUP ULTRA	1.00	LB A/A	E-POST	83.8	bcd	100.0 a
2	ACCENT	.031	LB A/A	E-POST	40.0	h	90.0 b
2	COC	1.00	% V/V	E-POST			
3	EXCEED	.036	LB A/A	E-POST	90.0	ab	100.0 a
3	COC	1.00	% V/V	E-POST			
4	SPIRIT	.036	LB A/A	E-POST	56.3	g	97.5 ab
4	COC	1.00	% V/V	E-POST			
5	ACCENT	.016	LB A/A	E-POST	95.0	ab	100.0 a
5	EXCEED	.036	LB A/A	E-POST			
5	COC	1.00	% V/V	E-POST			
6	ROUNDUP ULTRA	1.00	LB A/A	M-POST	100.0	a	100.0 a
7	ACCENT	.031	LB A/A	M-POST	57.5	g	90.0 b
7	COC	1.00	% V/V	M-POST			
8	EXCEED	.036	LB A/A	M-POST	72.5	def	95.0 ab
8	COC	1.00	% V/V	M-POST			
9	SPIRIT	.036	LB A/A	M-POST	57.5	g	97.5 ab
9	COC	1.00	% V/V	M-POST			
10	ACCENT	.016	LB A/A	M-POST	88.8	ab	100.0 a
10	EXCEED	.036	LB A/A	M-POST			
10	COC	1.00	% V/V	M-POST			
11	ROUNDUP ULTRA	1.00	LB A/A	L-POST	100.0	a	100.0 a
12	ACCENT	.031	LB A/A	L-POST	32.5	h	96.3 ab
12	COC	1.00	% V/V	L-POST			
13	EXCEED	.036	LB A/A	L-POST	65.0	efg	91.3 b
13	COC	1.00	% V/V	L-POST			
14	SPIRIT	.036	LB A/A	L-POST	61.3	fg	97.5 ab
14	COC	1.00	% V/V	L-POST			

MONSANTO RR CORN CROP SAFETY

Trial ID: 1999 MON CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code CHEAL AMARE
Crop Code CORN CORN
Part Rated
Rating Data Type VISUAL VISUAL
Rating Unit 0-100 0-100
Rating Date 7-30-99 7-30-99
Footnote Number
Trt-Eval Interval
PRM Data Type
Subsamples, Dec.

Trt No.	Treatment Name	Rate	Unit	Grow Stg		
15	ACCENT	.016	LB A/A	L-POST	60.0 fg	97.5 ab
15	EXCEED	.036	LB A/A	L-POST		
15	COC	1.00	% V/V	L-POST		
16	TOUCHDOWN	1.00	LB A/A	E-POST	87.5 abc	97.5 ab
16	NIS	.250	% V/V	E-POST		
17	TOUCHDOWN	2.00	LB A/A	E-POST	75.0 cde	100.0 a
17	NIS	.250	% V/V	E-POST		
18	TOUCHDOWN	1.00	LB A/A	M-POST	91.3 ab	97.5 ab
18	NIS	.250	% V/V	M-POST		
19	TOUCHDOWN	2.00	LB A/A	M-POST	88.8 ab	97.5 ab
19	NIS	.250	% V/V	M-POST		
20	TOUCHDOWN	1.00	LB A/A	L-POST	91.3 ab	100.0 a
20	NIS	.250	% V/V	L-POST		
21	TOUCHDOWN	2.00	LB A/A	L-POST	96.3 ab	100.0 a
21	NIS	.250	% V/V	L-POST		
22	CONTROL				0.0 i	0.0 c
LSD (P=.05)					13.08	7.69
Standard Deviation					9.25	5.44
CV					12.8	5.85
Replicate F					0.912	5.074
Replicate Prob(F)					0.4404	0.0033
Treatment F					29.923	59.709
Treatment Prob(F)					0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

NOVARTIS BICEP MAGNUM TR IN FIELD CORN

Trial ID: 99 NOVARTIS CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-19-99 Country: USA
City: BLACKSBURG, VA. State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1.IPOLA PITTED MRNGGLOR 2.CHEAL COMMON LAMBSQTR 3.AMARE REDROOT PIGWEED
4.SORHA JOHNSONGRASS 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: CORN _____ Variety: DK 626 RR Planting Date: 5-10-99
Planting Method: ROWS Rate: 28000 ACRE Depth: 1.50 IN
Perennial Age: _____ Row Spacing: 30 INCH Seed Bed: _____
Soil Temperature: 60 F Soil Moisture: DRY/MOIST Emergence Date: 5-17-99

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4

Site Type: _____
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: SPRING DISK
Trial Initiation Comments: _____

Previous:	Crops	Pesticides	Year
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: _____ % Silt: _____ % Clay: _____
pH: 6.2 CEC: _____ Soil Name: GROSECLOSE Fertility Level: _____

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NOVARTIS BICEP MAGNUM TR IN FIELD CORN

Trial ID: 99 NOVARTIS CORN Investigator: E.S. HAGOOD
 Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
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16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA. Distance: 2 Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-10-99	6-1-99				
Time of Day:	6-7 PM	12:00 PM				
Application Method:	BROADCAST	BROADCAST				
Application Timing:	PRE	E-POST				
Applic. Placement:	SOIL	FOLIAGE				
Air Temp., Unit:	80 F	81 F				
% Relative Humidity:	50	65				
Wind Velocity, Unit:	7 MPH	5 MPH				
Dew Presence (Y/N):	N	N				
Water Hardness:	N/A	N/A				
Soil Temp., Unit:	60 F	69 F				
Soil Moisture:	DRY/MOIST	DRY/DAMP				
% Cloud Cover:	30	30				

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NOVARTIS BICEP MAGNUM TR IN FIELD CORN

Trial ID: 99 NOVARTIS CORN Investigator: E.S. HAGOOD
 Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 CORN Stage:	PRE	E-POST				
Stage Scale:		4 LEAF				
Height, Unit:		3.5 INCH				
Crop 2 _____ Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 _____ Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 IPOLA Stage:	NONE	2 LEAF				
Stage Scale:		1 INCH				
Density, Unit:		3-5 M2				
Weed 2 CHEAL Stage:	NONE	2 LEAF				
Stage Scale:		1/4-1/2"				
Density, Unit:		12.5 M2				
Weed 3 AMARE Stage:	NONE	2 LEAF				
Stage Scale:		1/4-1/2"				
Density, Unit:		3-6 M2				
Weed 4 SORHA Stage:	NONE	2-3 LEAF				
Stage Scale:		8.5-12"				
Density, Unit:		1-3 M2				
Weed 5 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 6 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 7 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 8 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 _____ Stage:						
Stage Scale:						
Density, Unit:						

VPI & SU

NOVARTIS BICEP MAGNUM TR IN FIELD CORN

Trial ID: 99 NOVARTIS CORN Investigator: E.S. HAGOOD
 Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK				
Operating Pressure:	34 PSI	34 PSI				
Nozzle Type:	FLAT FAN	FLAT FAN				
Nozzle Size:	8003	8003				
Nozzle Spacing, Unit:	18 INCH	18 INCH				
Nozzles/Row:	4	4				
Band Width, Unit:						
Boom Length, Unit:	72 INCH	72 INCH				
Boom Height, Unit:	20 INCH	20 INCH				
Ground Speed, Unit:	3.1 MPH	3.1 MPH				
Incorporation Equip.:						
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER	WATER				
Spray Volume, Unit:	22.5 GPA	22.5 GPA				
Spray pH:						
Propellant:	CO/2	CO/2				
Tank Mix (Y/N):	Y	Y				

Trt No	Treatment Application Comment
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(This section contains a large table with multiple columns and rows of data, which is mostly illegible due to the image quality and orientation. It appears to be a data table related to the trial results.)

NOVARTIS BICEP MAGNUM TR IN FIELD CORN

Trial ID: 99 NOVARTIS CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	CHEAL	AMARE	IPOLA	INJURY	CHEAL
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated						
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	5-20-99	6-9-99	6-9-99	6-9-99	6-9-99	6-27-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Unit	Grow Stg	INJURY	CHEAL	AMARE	IPOLA	INJURY	CHEAL
1	CONTROL				0.0 a	0.0 c	0.0 b	0.0 b	0.0 b	0.0 b
2	BICEP MAGNUM TR	2.32	LB A/A	PRE	0.0 a	0.0 c	100.0 a	100.0 a	100.0 a	100.0 a
3	BICEP MAGNUM TR	2.32	LB A/A	PRE	0.0 a	0.0 c	100.0 a	100.0 a	97.5 a	100.0 a
3	PRINCEP	1.00	LB A/A	PRE						
4	BICEP MAGNUM TR	2.32	LB A/A	E-POST	0.0 a	13.8 ab	99.5 a	100.0 a	99.5 a	98.8 a
4	NIS	.500	% V/V	E-POST						
5	BICEP MAGNUM TR	2.32	LB A/A	E-POST	0.0 a	12.5 b	100.0 a	100.0 a	100.0 a	100.0 a
5	NORSTAR	0.16	LB A/A	E-POST						
5	NIS	.500	% V/V	E-POST						
6	BICEP MAGNUM TR	2.32	LB A/A	E-POST	0.0 a	16.3 a	100.0 a	100.0 a	100.0 a	100.0 a
6	ACCENT	.018	LB A/A	E-POST						
6	NIS	.500	% V/V	E-POST						
LSD (P=.05)					0.00	3.37	0.62	0.00	3.18	1.54
Standard Deviation					0.00	2.24	0.41	0.00	2.11	1.02
CV					0.0	31.57	0.49	0.0	2.55	1.23
Replicate F					0.000	2.500	1.000	0.000	0.850	1.000
Replicate Prob(F)					1.0000	0.0991	0.4199	1.0000	0.4880	0.4199
Treatment F					0.000	49.333	39921.000	0.000	1482.900	6369.000
Treatment Prob(F)					1.0000	0.0001	0.0001	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

NOVARTIS BICEP MAGNUM TR IN FIELD CORN

Trial ID: 99 NOVARTIS CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	AMARE	IPOLA	INJURY	CHEAL	IPOLA	DATST	AMARE
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-27-99	6-27-99	7-30-99	7-30-99	7-30-99	7-30-99	7-30-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg	AMARE	IPOLA	INJURY	CHEAL	IPOLA	DATST	AMARE
1	CONTROL				0.0 b	0.0 c	0.0 a	0.0 c	0.0 b	0.0 b	0.0 b
2	BICEP MAGNUM TR	2.32	LB A/A	PRE	100.0 a	97.5 a	0.0 a	100.0 a	96.3 a	100.0 a	100.0 a
3	BICEP MAGNUM TR	2.32	LB A/A	PRE	100.0 a	80.0 b	0.0 a	100.0 a	100.0 a	100.0 a	100.0 a
3	PRINCEP	1.00	LB A/A	PRE							
4	BICEP MAGNUM TR	2.32	LB A/A	E-POST	98.8 a	96.3 a	0.0 a	93.8 b	97.5 a	100.0 a	100.0 a
4	NIS	.500	% V/V	E-POST							
5	BICEP MAGNUM TR	2.32	LB A/A	E-POST	100.0 a	87.5 ab	0.0 a	100.0 a	96.3 a	100.0 a	100.0 a
5	NORSTAR	0.16	LB A/A	E-POST							
5	NIS	.500	% V/V	E-POST							
6	BICEP MAGNUM TR	2.32	LB A/A	E-POST	98.8 a	93.8 a	0.0 a	100.0 a	96.3 a	100.0 a	100.0 a
6	ACCENT	.018	LB A/A	E-POST							
6	NIS	.500	% V/V	E-POST							
LSD (P=.05)					1.95	12.68	0.00	2.94	7.97	0.00	0.00
Standard Deviation					1.29	8.42	0.00	1.95	5.29	0.00	0.00
CV					1.56	11.1	0.0	2.37	6.53	0.0	0.0
Replicate F					2.500	1.059	0.000	1.000	0.732	0.000	0.000
Replicate Prob(F)					0.0991	0.3958	1.0000	0.4199	0.5489	1.0000	1.0000
Treatment F					3961.000	80.318	0.000	1708.636	225.596	0.000	0.000
Treatment Prob(F)					0.0001	0.0001	1.0000	0.0001	0.0001	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

NOVARTIS SOLUTIONS IN CORN

Trial ID: NOV 99 CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-19-99 Country: USA
City: BLACKSBURG State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1.CYPES YELLOW NUTSEEDGE 2.IPOLA PITTED MRNGGLRY 3.AMARE REDROOT PIGWEED
4.SORHA JOHNSONGRASS 5.CHEAL COMMON LAMBSQTR 6.
7. 8. 9.

Crop 1: CORN Variety: LL 34 T 14 Planting Date: 5-17-99
Planting Method: ROWS Rate: 28000 ACRE Depth: 1.50 IN
Perennial Age: Row Spacing: 30 INCH Seed Bed: CONVENTIONAL
Soil Temperature: 63 F Soil Moisture: MOIST Emergence Date: 5-24-99

Crop 2: Variety: Planting Date:
Planting Method: Rate: Depth:
Perennial Age: Row Spacing: Seed Bed:
Soil Temperature: Soil Moisture: Emergence Date:

Crop 3: Variety: Planting Date:
Planting Method: Rate: Depth:
Perennial Age: Row Spacing: Seed Bed:
Soil Temperature: Soil Moisture: Emergence Date:

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4

Site Type:
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: SPRINF DISK
Trial Initiation Comments:

Previous:	Crops	Pesticides	Year
1.			
2.			
3.			

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: % Silt: % Clay:
pH: 6.5 CEC: Soil Name: GROSECLOSE Fertility Level:

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NOVARTIS SOLUTIONS IN CORN

Trial ID: NOV 99 CORN

Investigator: E.S. HAGOOD

Location: SMITHFIELD, VA.

Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA.

Distance: 2

Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-5-99	5-17-99	6-1-99			
Time of Day:	2:00 PM	10:30 AM	12:00 PM			
Application Method:	BROADCAST	BROADCAST	BROADCAST			
Application Timing:	15 EPP	PRE	E-POST			
Applic. Placement:	SOIL	SOIL	FOLIAGE			
Air Temp., Unit:	78 F	75 F	82 F			
% Relative Humidity:	80	40	70			
Wind Velocity, Unit:	5 MPH	3 MPH	3 MPH			
Dew Presence (Y/N):	N	N	N			
Water Hardness:	N	N	N			
Soil Temp., Unit:	60 F	63 F	69 F			
Soil Moisture:	DRY/MOIST	MOIST	DRY/DAMP			
% Cloud Cover:	80	15	30			

NOVARTIS SOLUTIONS IN CORN

Trial ID: NOV 99 CORN
 Location: SMITHFIELD, VA.

Investigator: E.S. HAGOOD
 Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 CORN Stage:	15 EPP	PRE	E-POST			
Stage Scale:			3-4 LEAF			
Height, Unit:			2.5 INCH			
Crop 2 _____ Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 _____ Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 CYPES Stage:	NONE	2 LEAF	4-8 LEAF			
Stage Scale:		1 INCH	1-1.5"			
Density, Unit:		1 M2	5-7 M2			
Weed 2 IPOLA Stage:	NONE	2 LEAF	2 LEAF			
Stage Scale:		1 INCH	3/4-1"			
Density, Unit:		1 M2	1-2 M2			
Weed 3 AMARE Stage:	NONE	NONE	2-3 LEAF			
Stage Scale:			1/2 INCH			
Density, Unit:			17.5 M2			
Weed 4 SORHA Stage:	NONE	NONE	4 LEAF			
Stage Scale:			1-2 INCH			
Density, Unit:			5-7 M2			
Weed 5 CHEAL Stage:	NONE	NONE	4-8 LEAF			
Stage Scale:			1/2-1"			
Density, Unit:			22.5 M2			
Weed 6 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 7 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 8 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 _____ Stage:						
Stage Scale:						
Density, Unit:						

NOVARTIS SOLUTIONS IN CORN

Trial ID: NOV 99 CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK			
Operating Pressure:	34 PSI	34 PSI	34 PSI			
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN			
Nozzle Size:	8003	8003	8003			
Nozzle Spacing, Unit:	18 INCH	18 INCH	18 INCH			
Nozzles/Row:	4	4	4			
Band Width, Unit:						
Boom Length, Unit:	72 INCH	72 INCH	72 INCH			
Boom Height, Unit:	20 INCH	20 INCH	20 INCH			
Ground Speed, Unit:	3.1 MPH	3.1 MPH	3.1 MPH			
Incorporation Equip.:						
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER	WATER	WATER			
Spray Volume, Unit:	22.5 GPA	22.5	22.5			
Spray pH:						
Propellant:	CO/2	CO/2	CO/2			
Tank Mix (Y/N):	Y	Y	Y			

Trt No Treatment Application Comment

Trt No	Treatment Application Comment
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Trt No	Treatment Application Comment
1	NOVARTIS SOLUTIONS IN CORN
2	NOVARTIS SOLUTIONS IN CORN
3	NOVARTIS SOLUTIONS IN CORN
4	NOVARTIS SOLUTIONS IN CORN
5	NOVARTIS SOLUTIONS IN CORN
6	NOVARTIS SOLUTIONS IN CORN
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8	NOVARTIS SOLUTIONS IN CORN
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99	NOVARTIS SOLUTIONS IN CORN
100	NOVARTIS SOLUTIONS IN CORN

NOVARTIS SOLUTIONS IN CORN

Trial ID: NOV 99 CORN
Location: SMITHFIELD, VA.

Investigator: E.S. HAGOOD
Study Dir.: Scott Hagood

Weed Code	INJURY	CHEAL	CYPES	IPOLA	SETFA	AMARE	DATST
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-9-99	6-9-99	6-9-99	6-9-99	6-9-99	6-9-99	6-9-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg	INJURY	CHEAL	CYPES	IPOLA	SETFA	AMARE	DATST
1	CONTROL				0.0 a	0.0 f	0.0 d	0.0 b	0.0 d	0.0 c	0.0 c
2	BICEP MAGNUM	2.14	LB A/A	15 EPP	0.0 a	80.0 bc	80.0 bc	100.0 a	95.0 ab	100.0 a	100.0 a
3	BICEP II MAGNUM	2.14	LB A/A	15 EPP	0.0 a	85.0 abc	93.8 ab	96.3 a	95.0 ab	100.0 a	100.0 a
3	PRINCEP	1.00	LB A/A	15 EPP							
4	BICEP II MAGNUM	2.14	LB A/A	PRE	0.0 a	72.5 cd	96.3 a	93.8 a	100.0 a	100.0 a	100.0 a
5	BICEP II MAGNUM	2.14	LB A/A	PRE	0.0 a	58.8 de	90.0 ab	100.0 a	100.0 a	100.0 a	100.0 a
5	PRINCEP	1.00	LB A/A	PRE							
6	BICEP II MAGNUM	2.14	LB A/A	PRE	0.0 a	97.5 a	98.8 a	100.0 a	100.0 a	100.0 a	100.0 a
6	NORTHSTAR	.16	LB A/A	E-POST							
6	NIS	.500	% V/V	E-POST							
7	BICEP II MAGNUM	2.14	LB A/A	PRE	0.0 a	95.0 ab	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
7	EXCEED	.038	LB A/A	E-POST							
7	BANVEL	.125	LB A/A	E-POST							
7	NIS	.500	% V/V	E-POST							
8	BICEP MAGNUM TR	2.32	LB A/A	PRE	0.0 a	92.5 ab	90.0 ab	93.8 a	91.3 ab	100.0 a	100.0 a
9	BICEP MAGNUM TR	2.32	LB A/A	PRE	0.0 a	98.8 a	97.5 a	98.8 a	100.0 a	100.0 a	100.0 a
9	PRINCEP	1.00	LB A/A	PRE							
10	LEADOFF	2.81	LB A/A	PRE	0.0 a	75.0 cd	100.0 a	100.0 a	87.5 b	100.0 a	100.0 a
11	LEADOFF	2.81	LB A/A	PRE	0.0 a	88.8 abc	100.0 a	97.5 a	100.0 a	100.0 a	100.0 a
11	BASIS GOLD	.783	LB A/A	E-POST							
11	COC	1.00	% V/V	E-POST							
12	HARNESS EXTRA	2.85	LB A/A	E-POST	0.0 a	43.8 e	71.3 c	92.5 a	52.5 c	45.0 b	97.5 b
LSD (P=.05)					0.00	17.35	14.85	7.57	10.96	0.00	2.08
Standard Deviation					0.00	12.02	10.28	5.24	7.59	0.00	1.44
CV					0.0	16.25	12.13	5.86	8.92	0.0	1.58

NOVARTIS SOLUTIONS IN CORN

Trial ID: NOV 99 CORN Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	CHEAL	CYPES	IPOLA	AMARE	DATST	INJURY
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-28-99	6-28-99	6-28-99	6-28-99	6-28-99	6-28-99	7-30-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg	INJURY	CHEAL	CYPES	IPOLA	AMARE	DATST	INJURY
1	CONTROL				0.0 a	0.0 f	0.0 d	0.0 d	0.0 d	0.0 b	0.0 a
2	BICEP MAGNUM	2.14	LB A/A	15 EPP	0.0 a	68.8 cd	75.0 b	97.5 a	97.5 ab	100.0 a	0.0 a
3	BICEP II MAGNUM	2.14	LB A/A	15 EPP	0.0 a	76.3 c	90.0 ab	87.5 abc	97.5 ab	100.0 a	0.0 a
3	PRINCEP	1.00	LB A/A	15 EPP							
4	BICEP II MAGNUM	2.14	LB A/A	PRE	0.0 a	62.5 cd	95.0 a	83.8 bc	95.0 b	100.0 a	0.0 a
5	BICEP II MAGNUM	2.14	LB A/A	PRE	0.0 a	53.8 d	86.3 ab	90.0 abc	97.5 ab	100.0 a	0.0 a
5	PRINCEP	1.00	LB A/A	PRE							
6	BICEP II MAGNUM	2.14	LB A/A	PRE	0.0 a	100.0 a	98.8 a	87.5 abc	100.0 a	100.0 a	0.0 a
6	NORTHSTAR	.16	LB A/A	E-POST							
6	NIS	.500	% V/V	E-POST							
7	BICEP II MAGNUM	2.14	LB A/A	PRE	0.0 a	100.0 a	96.3 a	93.8 ab	100.0 a	100.0 a	0.0 a
7	EXCEED	.038	LB A/A	E-POST							
7	BANVEL	.125	LB A/A	E-POST							
7	NIS	.500	% V/V	E-POST							
8	BICEP MAGNUM TR	2.32	LB A/A	PRE	0.0 a	100.0 a	87.5 ab	92.5 abc	100.0 a	100.0 a	0.0 a
9	BICEP MAGNUM TR	2.32	LB A/A	PRE	0.0 a	97.5 ab	95.0 a	95.0 ab	97.5 ab	100.0 a	0.0 a
9	PRINCEP	1.00	LB A/A	PRE							
10	LEADOFF	2.81	LB A/A	PRE	0.0 a	71.3 cd	97.5 a	81.3 c	100.0 a	100.0 a	0.0 a
11	LEADOFF	2.81	LB A/A	PRE	0.0 a	80.0 bc	100.0 a	85.0 bc	100.0 a	100.0 a	0.0 a
11	BASIS GOLD	.783	LB A/A	E-POST							
11	COC	1.00	% V/V	E-POST							
12	HARNESSEXTRA	2.85	LB A/A	E-POST	0.0 a	35.0 e	52.5 c	91.3 abc	77.5 c	100.0 a	0.0 a
LSD (P=.05)					0.00	17.51	18.32	11.55	4.80	0.00	0.00
Standard Deviation					0.00	12.13	12.69	8.00	3.32	0.00	0.00
CV					0.0	17.22	15.64	9.75	3.75	0.0	0.0

NOVARTIS SOLUTIONS IN CORN

Trial ID: NOV 99 CORN
Location: SMITHFIELD, VA.

Investigator: E.S. HAGOOD
Study Dir.: Scott Hagood

Weed Code	CHEAL	IPOLA	SETFA	ABUTH
Crop Code	CORN	CORN	CORN	CORN
Part Rated				
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100
Rating Date	7-30-99	7-30-99	7-30-99	7-30-99
Footnote Number				
Trt-Eval Interval				
PRM Data Type				
# Subsamples, Dec.				

Trt No.	Treatment Name	Rate	Unit	Grow Stg				
1	CONTROL				0.0 e	0.0 d	0.0 c	0.0 b
2	BICEP MAGNUM	2.14	LB A/A	15 EPP	71.3 cd	100.0 a	100.0 a	100.0 a
3	BICEP II MAGNUM	2.14	LB A/A	15 EPP	75.0 bc	90.0 ab	95.0 b	100.0 a
3	PRINCEP	1.00	LB A/A	15 EPP				
4	BICEP II MAGNUM	2.14	LB A/A	PRE	53.8 cd	90.0 ab	97.5 ab	100.0 a
5	BICEP II MAGNUM	2.14	LB A/A	PRE	51.3 d	96.3 ab	100.0 a	100.0 a
5	PRINCEP	1.00	LB A/A	PRE				
6	BICEP II MAGNUM	2.14	LB A/A	PRE	100.0 a	92.5 ab	100.0 a	100.0 a
6	NORTHSTAR	.16	LB A/A	E-POST				
6	NIS	.500	% V/V	E-POST				
7	BICEP II MAGNUM	2.14	LB A/A	PRE	98.8 a	91.3 ab	100.0 a	100.0 a
7	EXCEED	.038	LB A/A	E-POST				
7	BANVEL	.125	LB A/A	E-POST				
7	NIS	.500	% V/V	E-POST				
8	BICEP MAGNUM TR	2.32	LB A/A	PRE	93.8 ab	83.8 bc	100.0 a	100.0 a
9	BICEP MAGNUM TR	2.32	LB A/A	PRE	95.0 ab	95.0 ab	100.0 a	100.0 a
9	PRINCEP	1.00	LB A/A	PRE				
10	LEADOFF	2.81	LB A/A	PRE	73.8 bc	73.8 c	100.0 a	100.0 a
11	LEADOFF	2.81	LB A/A	PRE	71.3 cd	96.3 ab	100.0 a	100.0 a
11	BASIS GOLD	.783	LB A/A	E-POST				
11	COC	1.00	% V/V	E-POST				
12	HARNESS EXTRA	2.85	LB A/A	E-POST	65.0 cd	100.0 a	100.0 a	100.0 a
LSD (P=.05)					21.63	12.57	3.10	0.00
Standard Deviation					14.98	8.70	2.15	0.00
CV					21.18	10.36	2.36	0.0

NOVARTIS ROUNDUP READY SEQUENTIAL

Trial ID: 1999 NOVARTIS-COR Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-19-99 Country: USA
City: BLACKSBURG State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1.CHEAL COMMON LAMBSQTR 2.CYPES YELLOW NUTSEDEGE 3.IPOLA PITTED MRNGGLRY
4.ECHCG BARNYARDGRASS 5.ABUTH VELVETLEAF 6.DIGSA LARGE CRABGRASS
7. _____ 8. _____ 9. _____

Crop 1: CORN Variety: DK 626 RR Planting Date: 5-10-99
Planting Method: ROWS Rate: 28000 ACRE Depth: 1.50 IN
Perennial Age: _____ Row Spacing: 30 INCH Seed Bed: _____
Soil Temperature: 61 F Soil Moisture: DRY/MOIST Emergence Date: 5-18-99

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4

Site Type: _____
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: SPRING DISK
Trial Initiation Comments: _____

Previous:	Crops	Pesticides	Year
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: _____ % Silt: _____ % Clay: _____
pH: 6.2 CEC: _____ Soil Name: GROSECLOSE Fertility Level: _____

NOVARTIS ROUNDUP READY SEQUENTIAL

Trial ID: 1999 NOVARTIS-COR Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS						
On:	Date	Time	Amount	Unit	Type	Interval Unit
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA
Closest Weather Station: BLACKSBURG, VA. Distance: 2 Unit: MI

APPLICATION DESCRIPTION						
	A	B	C	D	E	F
Application Date:	5-10-99	5-25-99	6-7-99	6-18-99		
Time of Day:	1 PM	4:30 PM	11:00 AM	11:30 AM		
Application Method:	BROADCAST	BROADCAST	BROADCAST	BROADCAST		
Application Timing:	PRE	E-POST	M-POST	L-POST		
Applic. Placement:	SOIL	FOLIAGE	FOLIAGE	FOLIAGE		
Air Temp., Unit:	75 F	72 F	80 F	77 F		
% Relative Humidity:	40	30	65	55		
Wind Velocity, Unit:	5 MPH	6 MPH	6 MPH	4 MPH		
Dew Presence (Y/N):	N	N	N	N		
Water Hardness:	N	N	N	N		
Soil Temp., Unit:	60 F	60 F	71 F	60 F		
Soil Moisture:	DRY/MOIST	DRY/MOIST	DRY	DAMP/MOIS		
% Cloud Cover:	10	30	40	10		

NOVARTIS ROUNDUP READY SEQUENTIAL

Trial ID: 1999 NOVARTIS-COR Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 CORN Stage:	PRE	E-POST	M-POST	L-POST		
Stage Scale:		3 LEAF	7 LEAF	8-9 LEAF		
Height, Unit:		3 INCH	10 INCH	20 INCH		
Crop 2 Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 CHEAL Stage:	NONE	2-4 LEAF	4-16 LEAF	8-20 LF		
Stage Scale:		1/4-1/2"	3/4-2/5"	4-10"		
Density, Unit:		10 M2	20 M2	35 M2		
Weed 2 CYPES Stage:	NONE	2-3 LEAF	10-20 LF	10-20 LF		
Stage Scale:		2-3 INCH	2-4.5"	6-8 INCH		
Density, Unit:		5 M2	5 M2	5-20 M2		
Weed 3 IPOLA Stage:	NONE	COTY-1 LF	6-8 LEAF	RUNNING		
Stage Scale:		1 INCH	2-4 INCH	8-10 INCH		
Density, Unit:		1 M2	2 M2	2 M2		
Weed 4 ECHCG Stage:	NONE	1-2 LEAF	3 LEAF	5-6 LEAF		
Stage Scale:		1/4-1/2"	3/4-2"	8 INCH		
Density, Unit:		2 M2	2 M2	2 M2		
Weed 5 ABUTH Stage:	NONE	COTY-2 LF	4-5 LEAF	6 LEAF		
Stage Scale:		1/2-1"	1-2 INCH	6-8 INCH		
Density, Unit:		1 M2	1 M2	1 M2		
Weed 6 DIGSA Stage:	NONE	3-5 LEAF	5-8 LEAF	6-10 LEAF		
Stage Scale:		4-6 INCH	6-7 INCH	4-6 INCH		
Density, Unit:		2 M2	2 M2	1-2 M2		
Weed 7 Stage:						
Stage Scale:						
Density, Unit:						
Weed 8 Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 Stage:						
Stage Scale:						
Density, Unit:						

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NOVARTIS ROUNDUP READY SEQUENTIAL

Trial ID: 1999 NOVARTIS-COR Investigator: E.S. HAGOOD
 Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK	BACKPACK		
Operating Pressure:	34 PSI	34 PSI	34 PSI	34 PSI		
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN	FLAT FAN		
Nozzle Size:	8003	8003	8003	8003		
Nozzle Spacing, Unit:	18 INCH	18 INCH	18 INCH	18 INCH		
Nozzles/Row:	4	4	4	4		
Band Width, Unit:						
Boom Length, Unit:	72 INCH	72 INCH	72 INCH	72 INCH		
Boom Height, Unit:	20 INCH	20 INCH	20 INCH	20 INCH		
Ground Speed, Unit:	3.1 MPH	3.1 MPH	3.1 MPH	3.1 MPH		
Incorporation Equip.:						
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER	WATER	WATER	WATER		
Spray Volume, Unit:	22.5 GPA	22.5 GPA	22.5 GPA	22.5 GPA		
Spray pH:						
Propellant:	CO/2	CO/2	CO/2	CO/2		
Tank Mix (Y/N):	Y	Y	Y	Y		

Trt No	Treatment Application Comment
—	_____
—	_____
—	_____

NOVARTIS ROUNDUP READY SEQUENTIAL

Trial ID: 1999 NOVARTIS-COR Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	INJURY	CHEAL	ABUTH	CYPES	ECHCG	INJURY	CHEAL
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated								
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	5-20-99	6-7-99	6-7-99	6-7-99	6-7-99	6-7-99	6-17-99	6-17-99
Footnote Number								
Trt-Eval Interval								
PRM Data Type								
# Subsamples, Dec.								

Trt No.	Treatment Name	Rate	Unit	Grow Stg	INJURY	INJURY	CHEAL	ABUTH	CYPES	ECHCG	INJURY	CHEAL
1	CONTROL				0.0 a	0.0 a	0.0 d	0.0 b	0.0 b	0.0 b	0.0 a	0.0 e
2	BICEP II MAGNUM	2.14	LB A/A	PRE	0.0 a	0.0 a	88.8 bc	100.0 a	92.5 a	100.0 a	0.0 a	88.8 c
3	BICEP II MAGNUM	2.14	LB A/A	PRE	0.0 a	0.0 a	98.8 a	100.0 a	92.5 a	100.0 a	0.0 a	100.0 a
3	ROUNDUP ULTRA	.75	LB A/A	E-POST								
3	AMS	3.00	LB A/A	E-POST								
4	BICEP II MAGNUM	2.14	LB A/A	PRE	0.0 a	0.0 a	83.8 c	100.0 a	91.3 a	100.0 a	0.0 a	98.8 a
4	ROUNDUP ULTRA	.75	LB A/A	M-POST								
4	AMS	3.00	LB A/A	M-POST								
5	BICEP II MAGNUM	2.14	LB A/A	PRE	0.0 a	0.0 a	85.0 c	95.0 a	90.0 a	100.0 a	0.0 a	82.5 d
5	ROUNDUP ULTRA	.75	LB A/A	L-POST								
5	AMS	3.00	LB A/A	L-POST								
6	ROUNDUP ULTRA	.75	LB A/A	E-POST	0.0 a	0.0 a	95.0 ab	100.0 a	95.0 a	100.0 a	0.0 a	92.5 b
6	AMS	3.00	LB A/A	E-POST								
7	ROUNDUP ULTRA	.75	LB A/A	M-POST	0.0 a	0.0 a	0.0 d	0.0 b	0.0 b	0.0 b	0.0 a	95.0 b
7	AMS	3.00	LB A/A	M-POST								
8	ROUNDUP ULTRA	.75	LB A/A	L-POST	0.0 a	0.0 a	0.0 d	0.0 b	0.0 b	0.0 b	0.0 a	0.0 e
8	AMS	3.00	LB A/A	L-POST								
LSD (P=.05)					0.00	0.00	9.28	5.20	11.37	0.00	0.00	3.54
Standard Deviation					0.00	0.00	6.31	3.54	7.73	0.00	0.00	2.41
CV					0.0	0.0	11.18	5.71	13.4	0.0	0.0	3.46
Replicate F					0.000	0.000	0.177	1.000	0.362	0.000	0.000	0.897
Replicate Prob(F)					1.0000	1.0000	0.9109	0.4123	0.7811	1.0000	1.0000	0.4589
Treatment F					0.000	0.000	221.834	841.000	152.836	0.000	0.000	1296.231
Treatment Prob(F)					1.0000	1.0000	0.0001	0.0001	0.0001	1.0000	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

NOVARTIS ROUNDUP READY SEQUENTIAL

Trial ID: 1999 NOVARTIS-COR Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code	ABUTH	CYPES	ECHCG	INJURY	CHEAL	ABUTH	SETFA
Crop Code	CORN	CORN	CORN	CORN	CORN	CORN	CORN
Part Rated							
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-17-99	6-17-99	6-17-99	7-30-99	7-30-99	7-30-99	7-30-99
Footnote Number							
Trt-Eval Interval							
PRM Data Type							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Grow Stg	ABUTH	CYPES	ECHCG	INJURY	CHEAL	ABUTH	SETFA
1	CONTROL				0.0 b	0.0 c	0.0 b	0.0 a	0.0 c	0.0 b	0.0 b
2	BICEP II MAGNUM	2.14	LB A/A	PRE	98.8 a	91.3 a	100.0 a	0.0 a	76.3 b	100.0 a	100.0 a
3	BICEP II MAGNUM	2.14	LB A/A	PRE	100.0 a	90.0 a	100.0 a	0.0 a	92.5 a	100.0 a	100.0 a
3	ROUNDUP ULTRA	.75	LB A/A	E-POST							
3	AMS	3.00	LB A/A	E-POST							
4	BICEP II MAGNUM	2.14	LB A/A	PRE	100.0 a	94.5 a	100.0 a	0.0 a	97.5 a	100.0 a	100.0 a
4	ROUNDUP ULTRA	.75	LB A/A	M-POST							
4	AMS	3.00	LB A/A	M-POST							
5	BICEP II MAGNUM	2.14	LB A/A	PRE	100.0 a	83.8 b	100.0 a	0.0 a	98.8 a	100.0 a	100.0 a
5	ROUNDUP ULTRA	.75	LB A/A	L-POST							
5	AMS	3.00	LB A/A	L-POST							
6	ROUNDUP ULTRA	.75	LB A/A	E-POST	98.8 a	91.3 a	100.0 a	0.0 a	78.8 b	97.5 a	97.5 a
6	AMS	3.00	LB A/A	E-POST							
7	ROUNDUP ULTRA	.75	LB A/A	M-POST	98.8 a	83.8 b	100.0 a	0.0 a	95.0 a	100.0 a	100.0 a
7	AMS	3.00	LB A/A	M-POST							
8	ROUNDUP ULTRA	.75	LB A/A	L-POST	0.0 b	0.0 c	0.0 b	0.0 a	93.8 a	100.0 a	100.0 a
8	AMS	3.00	LB A/A	L-POST							
LSD (P=.05)					2.36	5.85	0.00	0.00	9.27	2.60	2.60
Standard Deviation					1.60	3.98	0.00	0.00	6.30	1.77	1.77
CV					2.15	5.96	0.0	0.0	7.97	2.03	2.03
Replicate F					0.304	0.534	0.000	0.000	4.116	1.000	1.000
Replicate Prob(F)					0.8219	0.6640	1.0000	1.0000	0.0192	0.4123	0.4123
Treatment F					3298.043	432.928	0.000	0.000	109.831	1589.571	1589.571
Treatment Prob(F)					0.0001	0.0001	1.0000	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

NOVARTIS ROUNDUP READY SEQUENTIAL

Trial ID: 1999 NOVARTIS-COR Investigator: E.S. HAGOOD
Location: SMITHFIELD, VA. Study Dir.: Scott Hagood

Weed Code DATST
Crop Code CORN
Part Rated
Rating Data Type VISUAL
Rating Unit 0-100
Rating Date 7-30-99
Footnote Number
Trt-Eval Interval
PRM Data Type
Subsamples, Dec.

Trt No.	Treatment Name	Rate	Unit	Grow Stg	
1	CONTROL				0.0 b
2	BICEP II MAGNUM	2.14	LB A/A	PRE	100.0 a
3	BICEP II MAGNUM	2.14	LB A/A	PRE	93.8 a
3	ROUNDUP ULTRA	.75	LB A/A	E-POST	
3	AMS	3.00	LB A/A	E-POST	
4	BICEP II MAGNUM	2.14	LB A/A	PRE	100.0 a
4	ROUNDUP ULTRA	.75	LB A/A	M-POST	
4	AMS	3.00	LB A/A	M-POST	
5	BICEP II MAGNUM	2.14	LB A/A	PRE	100.0 a
5	ROUNDUP ULTRA	.75	LB A/A	L-POST	
5	AMS	3.00	LB A/A	L-POST	
6	ROUNDUP ULTRA	.75	LB A/A	E-POST	96.3 a
6	AMS	3.00	LB A/A	E-POST	
7	ROUNDUP ULTRA	.75	LB A/A	M-POST	100.0 a
7	AMS	3.00	LB A/A	M-POST	
8	ROUNDUP ULTRA	.75	LB A/A	L-POST	96.3 a
8	AMS	3.00	LB A/A	L-POST	
	LSD (P=.05)				6.93
	Standard Deviation				4.71
	CV				5.49
	Replicate F				0.598
	Replicate Prob(F)				0.6234
	Treatment F				217.402
	Treatment Prob(F)				0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

DUPONT NO TILL CORN

Trial ID: 1999 DUPONT CORN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-12-99 Country: USA
City: BLACKSBURG, VA. State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1. _____ 2. _____ 3. _____
4. _____ 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: CORN Variety: DK 626 RR Planting Date: 5-3-99
Planting Method: ROWS Rate: 28000 ACRE Depth: 1.5 IN
Perennial Age: _____ Row Spacing: 30 IN Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: 5-11-99

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4

Site Type: _____
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: SPRING DISK
Trial Initiation Comments: _____

Previous:	Crops	Pesticides	Year
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: _____ % Silt: _____ % Clay: _____
pH: 6.2 CEC: _____ Soil Name: ROSS Fertility Level: _____

VPI & SU

DUPONT NO TILL CORN

Trial ID: 1999 DUPONT CORN Investigator: E.S. HAGOOD

Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
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Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA.

Distance: 12

Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-4-99	6-1-99				
Time of Day:	11-12 AM	10-11 AM				
Application Method:	BROADCAST	BROADCAST				
Application Timing:	PRE	E-POST				
Applic. Placement:	SOIL	FOLIAGE				
Air Temp., Unit:	75 F	80 F				
% Relative Humidity:	45	35				
Wind Velocity, Unit:	3 MPH	3 MPH				
Dew Presence (Y/N):	N	N				
Water Hardness:						
Soil Temp., Unit:		65 F				
Soil Moisture:	DAMP	DRY				
% Cloud Cover:	0	5				

VPI & SU

DUPONT NO TILL CORN

Trial ID: 1999 DUPONT CORN Investigator: E.S. HAGOOD
 Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 CORN Stage:	PRE	CORN				
Stage Scale:		6 LEAF				
Height, Unit:		7 INCH				
Crop 2 Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 Stage:	STEME	ERICA				
Stage Scale:	BLOOM	6 LF 3 IN				
Density, Unit:	70 M2	15 M2				
Weed 2 Stage:	LAMAM	STEME				
Stage Scale:	BLOOM	12LF 4 IN				
Density, Unit:	15 M2	10 M2				
Weed 3 Stage:	V.SPEEDWE					
Stage Scale:	BLOOM					
Density, Unit:	10 M2					
Weed 4 Stage:						
Stage Scale:						
Density, Unit:						
Weed 5 Stage:						
Stage Scale:						
Density, Unit:						
Weed 6 Stage:						
Stage Scale:						
Density, Unit:						
Weed 7 Stage:						
Stage Scale:						
Density, Unit:						
Weed 8 Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 Stage:						
Stage Scale:						
Density, Unit:						

VPI & SU

DUPONT NO TILL CORN

Trial ID: 1999 DUPONT CORN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

Table with columns A, B, C, D, E, F and rows for equipment specifications: Appl. Equipment, Operating Pressure, Nozzle Type, Nozzle Size, Nozzle Spacing, Nozzles/Row, Band Width, Boom Length, Boom Height, Ground Speed, Incorporation Equip., Hours to Incorp., Incorp. Depth, Carrier, Spray Volume, Spray pH, Propellant, Tank Mix (Y/N).

Trt No Treatment Application Comment
5 WAS SPRAYED AT 2:15 PM

DUPONT NO TILL CORN

Trial ID: 1999 DUPONT CORN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	ERICA	CYPES	INJURY	ERICA
Crop Code	CORN	CORN	CORN	CORN	CORN
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	5-17-99	5-17-99	5-17-99	6-18-99	6-18-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg					
1	BASIS	.015	LB A/A	PRE	0.0 a	87.5 b	97.5 a	7.5 a	100.0 a
1	LEADOFF	1.25	LB A/A	PRE					
1	COC	1.00	% V/V	PRE					
1	BASIS GOLD	.783	LB A/A	E-POST					
1	COC	1.00	% V/V	E-POST					
2	BASIS	.023	LB A/A	PRE	0.0 a	92.5 ab	97.5 a	3.8 a	100.0 a
2	LEADOFF	1.25	LB A/A	PRE					
2	COC	1.00	% V/V	PRE					
2	BASIS GOLD	.783	LB A/A	E-POST					
2	COC	1.00	% V/V	E-POST					
3	BASIS	.015	LB A/A	PRE	0.0 a	100.0 a	100.0 a	2.5 a	100.0 a
3	LEADOFF	1.25	LB A/A	PRE					
3	GRAMOXONE EXTRA	.469	LB A/A	PRE					
3	COC	1.00	% V/V	PRE					
3	BASIS GOLD	.783	LB A/A	E-POST					
3	COC	1.00	% V/V	E-POST					
4	BASIS	.015	LB A/A	PRE	0.0 a	97.5 a	100.0 a	2.5 a	100.0 a
4	LEADOFF	1.25	LB A/A	PRE					
4	2,4-D	.50	LB A/A	PRE					
4	COC	1.00	% V/V	PRE					
4	BASIS GOLD	.783	LB A/A	E-POST					
4	COC	1.00	% V/V	E-POST					
5	BASIS	.023	LB A/A	PRE	0.0 a	100.0 a	100.0 a	10.0 a	95.0 a
5	LEADOFF	2.81	LB A/A	PRE					
5	COC	1.00	% V/V	PRE					
6	BASIS	.023	LB A/A	PRE	0.0 a	100.0 a	100.0 a	8.8 a	100.0 a
6	ATRAZINE	1.00	LB A/A	PRE					
6	2,4-D	.50	LB A/A	PRE					
6	COC	1.00	% V/V	PRE					
6	BASIS GOLD	.783	LB A/A	E-POST					
6	COC	1.00	% V/V	E-POST					

DUPONT NO TILL CORN

Trial ID: 1999 DUPONT CORN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	ERICA	CYPES	INJURY	ERICA
Crop Code	CORN	CORN	CORN	CORN	CORN
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	5-17-99	5-17-99	5-17-99	6-18-99	6-18-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg					
7	BASIS	.015	LB A/A	PRE	0.0 a	96.3 a	100.0 a	8.8 a	91.3 a
7	BICEP II MAGNUM	2.88	LB A/A	PRE					
7	COC	1.00	% V/V	PRE					
8	GRAMOXONE EXTRA	.469	LB A/A	PRE	0.0 a	100.0 a	100.0 a	2.5 a	100.0 a
8	BICEP II MAGNUM	2.88	LB A/A	PRE					
8	NIS	.500	% V/V	PRE					
9	GRAMOXONE EXTRA	.469	LB A/A	PRE	0.0 a	100.0 a	100.0 a	3.8 a	100.0 a
9	BICEP II MAGNUM	2.88	LB A/A	PRE					
9	PYTHON	.05	LB A/A	PRE					
9	NIS	.500	% V/V	PRE					
10	CONTROL				0.0 a	0.0 c	0.0 b	0.0 a	15.0 b
LSD (P=.05)					0.00	8.41	3.30	10.05	15.76
Standard Deviation					0.00	5.80	2.28	6.93	10.86
CV					0.0	6.63	2.54	138.51	12.05
Replicate F					0.000	0.862	0.643	0.903	0.655
Replicate Prob(F)					1.0000	0.4726	0.5941	0.4523	0.5869
Treatment F					0.000	114.312	763.714	0.985	23.916
Treatment Prob(F)					1.0000	0.0001	0.0001	0.4747	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

NO TILL CORN-ZENECA UPPER

Trial ID: 1999 ZEN-CORN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-19-99 Country: USA
City: BLACKSBURG State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1. CHEAL 2. STEME 3. _____
4. _____ 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: CORN Variety: DK 626 Planting Date: 5-4-99
Planting Method: ROWS Rate: 28000 ACRE Depth: 1.50 IN
Perennial Age: _____ Row Spacing: 30 INCH Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: 5-11-99

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4

Site Type: _____
Tillage Type: _____ Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: _____
Trial Initiation Comments: _____

Previous: Crops	Pesticides	Year
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: _____ % Silt: _____ % Clay: _____
pH: 6.2 CEC: _____ Soil Name: ROSS Fertility Level: _____

VPI & SU

NO TILL CORN-ZENECA UPPER

Trial ID: 1999 ZEN-CORN Investigator: E.S. HAGOOD
 Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
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16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA. Distance: 11 Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-7-99					
Time of Day:	11-12NOON					
Application Method:	BROADCAST					
Application Timing:	PRE					
Applic. Placement:	SOIL					
Air Temp., Unit:	70 F					
% Relative Humidity:	40					
Wind Velocity, Unit:	3 MPH					
Dew Presence (Y/N):	N					
Water Hardness:	N/A					
Soil Temp., Unit:						
Soil Moisture:	DRY/MOIST					
% Cloud Cover:	10					

NO TILL CORN-ZENECA UPPER

Trial ID: 1999 ZEN-CORN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 CORN Stage: PRE	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 CHEAL Stage: 6-10 LF	_____	_____	_____	_____	_____	_____
Stage Scale: 2-5 INCH	_____	_____	_____	_____	_____	_____
Density, Unit: 20 M2	_____	_____	_____	_____	_____	_____
Weed 2 STEME Stage: BLOOM	_____	_____	_____	_____	_____	_____
Stage Scale: 12-24"	_____	_____	_____	_____	_____	_____
Density, Unit: 40% GC	_____	_____	_____	_____	_____	_____
Weed 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 4 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 5 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 6 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 7 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 8 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 9 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____

NO TILL CORN-ZENECA UPPER

Trial ID: 1999 ZEN-CORN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK					
Operating Pressure:	34 PSI					
Nozzle Type:	FLAT FAN					
Nozzle Size:	8003					
Nozzle Spacing, Unit:	18 INCH					
Nozzles/Row:	4					
Band Width, Unit:						
Boom Length, Unit:	72 INCH					
Boom Height, Unit:	20 INCH					
Ground Speed, Unit:	3.1 MPH					
Incorporation Equip.:						
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER					
Spray Volume, Unit:	22.5 GPA					
Spray pH:						
Propellant:	CO/2					
Tank Mix (Y/N):	Y					

Trt No Treatment Application Comment

Trt No	Treatment	Application	Comment

Trt No	Treatment	Application	Comment
1	CONTROL		
2	FIELDMASTER		
3	5A-DESTER		
4	GRAMOXONE EXTRA		
5	5A-DESTER		
6	GRAMOXONE EXTRA		
7	5A-DESTER		
8	GRAMOXONE EXTRA		
9	5A-DESTER		
10	GRAMOXONE EXTRA		
11	5A-DESTER		
12	GRAMOXONE EXTRA		
13	5A-DESTER		
14	GRAMOXONE EXTRA		
15	5A-DESTER		
16	GRAMOXONE EXTRA		
17	5A-DESTER		
18	GRAMOXONE EXTRA		
19	5A-DESTER		
20	GRAMOXONE EXTRA		
21	5A-DESTER		
22	GRAMOXONE EXTRA		
23	5A-DESTER		
24	GRAMOXONE EXTRA		
25	5A-DESTER		
26	GRAMOXONE EXTRA		
27	5A-DESTER		
28	GRAMOXONE EXTRA		
29	5A-DESTER		
30	GRAMOXONE EXTRA		
31	5A-DESTER		
32	GRAMOXONE EXTRA		
33	5A-DESTER		
34	GRAMOXONE EXTRA		
35	5A-DESTER		
36	GRAMOXONE EXTRA		
37	5A-DESTER		
38	GRAMOXONE EXTRA		
39	5A-DESTER		
40	GRAMOXONE EXTRA		
41	5A-DESTER		
42	GRAMOXONE EXTRA		
43	5A-DESTER		
44	GRAMOXONE EXTRA		
45	5A-DESTER		
46	GRAMOXONE EXTRA		
47	5A-DESTER		
48	GRAMOXONE EXTRA		
49	5A-DESTER		
50	GRAMOXONE EXTRA		
51	5A-DESTER		
52	GRAMOXONE EXTRA		
53	5A-DESTER		
54	GRAMOXONE EXTRA		
55	5A-DESTER		
56	GRAMOXONE EXTRA		
57	5A-DESTER		
58	GRAMOXONE EXTRA		
59	5A-DESTER		
60	GRAMOXONE EXTRA		
61	5A-DESTER		
62	GRAMOXONE EXTRA		
63	5A-DESTER		
64	GRAMOXONE EXTRA		
65	5A-DESTER		
66	GRAMOXONE EXTRA		
67	5A-DESTER		
68	GRAMOXONE EXTRA		
69	5A-DESTER		
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71	5A-DESTER		
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75	5A-DESTER		
76	GRAMOXONE EXTRA		
77	5A-DESTER		
78	GRAMOXONE EXTRA		
79	5A-DESTER		
80	GRAMOXONE EXTRA		
81	5A-DESTER		
82	GRAMOXONE EXTRA		
83	5A-DESTER		
84	GRAMOXONE EXTRA		
85	5A-DESTER		
86	GRAMOXONE EXTRA		
87	5A-DESTER		
88	GRAMOXONE EXTRA		
89	5A-DESTER		
90	GRAMOXONE EXTRA		
91	5A-DESTER		
92	GRAMOXONE EXTRA		
93	5A-DESTER		
94	GRAMOXONE EXTRA		
95	5A-DESTER		
96	GRAMOXONE EXTRA		
97	5A-DESTER		
98	GRAMOXONE EXTRA		
99	5A-DESTER		
100	GRAMOXONE EXTRA		

NO TILL CORN-ZENECA UPPER

Trial ID: 1999 ZEN-CORN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	CHEAL	STEME	INJURY	CHEAL
Crop Code	CORN	CORN	CORN	CORN	CORN
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	5-17-99	5-17-99	5-17-99	6-18-99	6-18-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg										
1	ICIA 5676/ZA129	2.19	LB A/A	PRE	0.0	a	51.3	b	45.0	b	0.0	a	83.8	b
2	TOUCHDOWN	.625	LB A/A	PRE	0.0	a	62.5	b	62.5	b	0.0	a	88.8	ab
2	AMS	4.00	LB A/A	PRE										
2	ICIA 5676/ZA129	2.19	LB A/A	PRE										
3	ICIA 5676/ZA129	2.19	LB A/A	PRE	0.0	a	92.5	a	100.0	a	0.0	a	100.0	a
3	GRAMOXONE EXTRA	.625	LB A/A	PRE										
3	NIS	.250	% V/V	PRE										
4	ICIA 5676/ZA129	2.19	LB A/A	PRE	0.0	a	98.8	a	100.0	a	0.0	a	90.0	ab
4	GRAMOXONE EXTRA	.625	LB A/A	PRE										
4	ATRAZINE	1.00	LB A/A	PRE										
4	NIS	.250	% V/V	PRE										
5	ICIA 5676/ZA129	2.19	LB A/A	PRE	0.0	a	100.0	a	100.0	a	0.0	a	100.0	a
5	GRAMOXONE EXTRA	.625	LB A/A	PRE										
5	2,4 - D ESTER	.47	LB A/A	PRE										
5	NIS	.250	% V/V	PRE										
6	FIELDMASTER	4.25	LB A/A	PRE	0.0	a	90.0	a	82.5	a	0.0	a	91.3	ab
6	AMS	4.00	LB A/A	PRE										
7	CONTROL				0.0	a	0.0	c	0.0	c	0.0	a	0.0	c
LSD (P=.05)					0.00		22.72		18.03		0.00		14.93	
Standard Deviation					0.00		15.29		12.13		0.00		10.05	
CV					0.0		21.62		17.33		0.0		12.7	
Replicate F					0.000		0.183		0.453		0.000		0.952	
Replicate Prob(F)					1.0000		0.9064		0.7185		1.0000		0.4366	
Treatment F					0.000		22.629		38.208		0.000		49.585	
Treatment Prob(F)					1.0000		0.0001		0.0001		1.0000		0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)

NO TILL CORN-ZENECA LOWER

Trial ID: 1999 ZEN-CORN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-19-99 Country: USA
City: BLACKSBURG State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1. _____ 2. _____ 3. _____
4. _____ 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: CORN Variety: DK 626 Planting Date: 5-3-99
Planting Method: ROWS Rate: 28000 ACRE Depth: 1.50 IN
Perennial Age: _____ Row Spacing: 30 INCH Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4
Site Type: _____
Tillage Type: _____ Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: _____
Trial Initiation Comments: _____

Previous: Crops Pesticides Year
1. _____
2. _____
3. _____

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: _____ % Silt: _____ % Clay: _____
pH: 6.2 CEC: _____ Soil Name: ROSS Fertility Level: _____

VPI & SU

NO TILL CORN-ZENECA LOWER

Trial ID: 1999 ZEN-CORN Investigator: E.S. HAGOOD
 Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA. Distance: 11 Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-7-99					
Time of Day:	11-12NOON					
Application Method:	BROADCAST					
Application Timing:	PRE					
Applic. Placement:						
Air Temp., Unit:	70 F					
% Relative Humidity:	40					
Wind Velocity, Unit:	3 MPH					
Dew Presence (Y/N):	N					
Water Hardness:	N/A					
Soil Temp., Unit:						
Soil Moisture:	DRY/MOIST					
% Cloud Cover:	10					

NO TILL CORN-ZENECA LOWER

Trial ID: 1999 ZEN-CORN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 CORN Stage: PRE	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 _____ Stage: STEME	_____	_____	_____	_____	_____	_____
Stage Scale: BLOOM	_____	_____	_____	_____	_____	_____
Density, Unit: 85 M2	_____	_____	_____	_____	_____	_____
Weed 2 _____ Stage: ERICA	_____	_____	_____	_____	_____	_____
Stage Scale: 6 LF 3 IN	_____	_____	_____	_____	_____	_____
Density, Unit: 3 M2	_____	_____	_____	_____	_____	_____
Weed 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 4 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 5 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 6 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 7 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 8 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 9 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____

NO TILL CORN-ZENECA LOWER

Trial ID: 1999 ZEN-CORN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK					
Operating Pressure:	34 PSI					
Nozzle Type:	FLAT FAN					
Nozzle Size:	8003					
Nozzle Spacing, Unit:	18 INCH					
Nozzles/Row:	4					
Band Width, Unit:						
Boom Length, Unit:	72 INCH					
Boom Height, Unit:	20 INCH					
Ground Speed, Unit:	3.1 MPH					
Incorporation Equip.:	N/A					
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER					
Spray Volume, Unit:	22.5 GPA					
Spray pH:						
Propellant:	CO/2					
Tank Mix (Y/N):	Y					

Trt No Treatment Application Comment

Trt No	Treatment Application Comment
—	_____
—	_____
—	_____

11-16-99 (ZENENTFC)
VPI & SU

AOV Means Table Page 1 of 1

NO TILL CORN-ZENECA LOWER

Trial ID: 1999 ZEN-CORN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	ERICA	STEME	INJURY	ERICA
Crop Code	CORN	CORN	CORN	CORN	CORN
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	5-17-99	5-17-99	5-17-99	6-18-99	6-18-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg					
1	ICIA 5676/ZA129	2.19	LB A/A	PRE	0.0 a	80.0 b	76.3 b	8.8 a	83.8 b
2	TOUCHDOWN	.625	LB A/A	PRE	0.0 a	80.0 b	80.0 b	3.8 ab	88.8 b
2	AMS	4.00	LB A/A	PRE					
2	ICIA 5676/ZA129	2.19	LB A/A	PRE					
3	ICIA 5676/ZA129	2.19	LB A/A	PRE	0.0 a	100.0 a	100.0 a	0.0 b	100.0 a
3	GRAMOXONE EXTRA	.625	LB A/A	PRE					
3	NIS	.250	% V/V	PRE					
4	ICIA 5676/ZA129	2.19	LB A/A	PRE	0.0 a	100.0 a	100.0 a	10.0 a	100.0 a
4	GRAMOXONE EXTRA	.625	LB A/A	PRE					
4	ATRAZINE	1.00	LB A/A	PRE					
4	NIS	.250	% V/V	PRE					
5	ICIA 5676/ZA129	2.19	LB A/A	PRE	0.0 a	97.5 a	97.5 a	3.8 ab	100.0 a
5	GRAMOXONE EXTRA	.625	LB A/A	PRE					
5	2,4 - D ESTER	.47	LB A/A	PRE					
5	NIS	.250	% V/V	PRE					
6	FIELDMASTER	4.25	LB A/A	PRE	0.0 a	83.8 b	85.0 b	2.5 ab	91.3 ab
6	AMS	4.00	LB A/A	PRE					
7	CONTROL				0.0 a	0.0 c	0.0 c	0.0 b	0.0 c
LSD (P=.05)					0.00	7.35	9.30	8.32	10.44
Standard Deviation					0.00	4.95	6.26	5.60	7.03
CV					0.0	6.4	8.13	136.32	8.73
Replicate F					0.000	0.036	0.752	1.244	0.114
Replicate Prob(F)					1.0000	0.9904	0.5354	0.3232	0.9505
Treatment F					0.000	203.235	127.268	1.975	105.458
Treatment Prob(F)					1.0000	0.0001	0.0001	0.1230	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

EVALUATION OF POST CORN HERBICIDES FOR THE CONTROL OF CANADA THISTLE

Trial ID: CTHISTLE.DAT Investigator: KEVIN BRADLEY
Location: BLACKSBURG, VA Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: KEVIN BRADLEY Title: GRADUATE RESEARCH ASST
Affiliation: VPI & SU Postal Code: 24060

Other Investigator: SCOTT HAGOOD Title: PROFESSOR
Affiliation: VPI & SU Postal Code: 24060

Trial Status: ONGOING Initiation Date: 6-4-99 Country: USA
City: MONTGOMERY COUNTY State/Prov.: VIRGINIA Postal Code: 24060

CROP AND PEST DESCRIPTION

Weed 1. CIRAR CANADA THISTLE 2. _____ 3. _____
4. _____ 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: ZEAMX FIELD CORN Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4

Site Type: _____
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: _____
Trial Initiation Comments: _____

Previous:	Crops	Pesticides	Year
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

SOIL DESCRIPTION

Texture: _____ % OM: _____ % Sand: _____ % Silt: _____ % Clay: _____
pH: _____ CEC: _____ Soil Name: _____ Fertility Level: _____

EVALUATION OF POST CORN HERBICIDES FOR THE CONTROL OF CANADA THISTLE

Trial ID: CTHISTLE.DAT Investigator: KEVIN BRADLEY
Location: BLACKSBURG, VA Study Dir.: Scott Hagood

On:	Date	Time	MOISTURE CONDITIONS		Interval	Unit
			Amount	Unit Type		
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA
Closest Weather Station: _____ Distance: _____ Unit: _____

	APPLICATION DESCRIPTION					
	A	B	C	D	E	F
Application Date:	6-4-99					
Time of Day:	2:30 PM					
Application Method:	BROADCAST					
Application Timing:	POST					
Applic. Placement:						
Air Temp., Unit:	84 F					
% Relative Humidity:	80					
Wind Velocity, Unit:	2 MPH					
Dew Presence (Y/N):	N					
Water Hardness:						
Soil Temp., Unit:	61 F					
Soil Moisture:	DRY					
% Cloud Cover:	55					

EVALUATION OF POST CORN HERBICIDES FOR THE CONTROL OF CANADA THISTLE

Trial ID: CTHISTLE.DAT Investigator: KEVIN BRADLEY
Location: BLACKSBURG, VA Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 ZEAMX Stage:	SEEDLING	_____	_____	_____	_____	_____
Stage Scale:	5 LEAF	_____	_____	_____	_____	_____
Height, Unit:	4.5 INCH	_____	_____	_____	_____	_____
Crop 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 CIRAR Stage:	SPRT-BOLT	_____	_____	_____	_____	_____
Stage Scale:	VEGETATIV	_____	_____	_____	_____	_____
Density, Unit:	1-4 INCH	_____	_____	_____	_____	_____
Weed 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 4 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 5 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 6 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 7 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 8 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 9 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____

EVALUATION OF POST CORN HERBICIDES FOR THE CONTROL OF CANADA THISTLE

Trial ID: CTHISTLE.DAT Investigator: KEVIN BRADLEY
Location: BLACKSBURG, VA Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK					
Operating Pressure:	34 PSI					
Nozzle Type:	FLAT FAN					
Nozzle Size:	8003					
Nozzle Spacing, Unit:	18 INCH					
Nozzles/Row:	4					
Band Width, Unit:						
Boom Length, Unit:	72 INCH					
Boom Height, Unit:	20 INCH					
Ground Speed, Unit:	3.1 MPH					
Incorporation Equip.:	N/A					
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER					
Spray Volume, Unit:	22.5 GPA					
Spray pH:						
Propellant:	CO/2					
Tank Mix (Y/N):	Y					

Trt No	Treatment Application Comment
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Plot Width	Plot Length	Plot Area	Plot Volume	Plot Weight
10.0	10.0	100.0	1000.0	1000.0
10.0	10.0	100.0	1000.0	1000.0
10.0	10.0	100.0	1000.0	1000.0
10.0	10.0	100.0	1000.0	1000.0

Pre-treat: _____
1. _____
2. _____
3. _____

SOIL DESCRIPTION
Texture: _____ % Cl: _____ % Sand: _____ % Silt: _____ % Clay: _____
pH: _____ Soil Name: _____ Fertility Level: _____

EVALUATION OF POST CORN HERBICIDES FOR THE CONTROL OF CANADA THISTLE

Trial ID: CTHISTLE.DAT Investigator: KEVIN BRADLEY
Location: BLACKSBURG, VA Study Dir.: Scott Hagood

Weed Code	CIRAR	CIRAR	CIRAR	CIRAR
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100
Rating Date	6-14-99	6-21-99	6-28-99	7-5-99
Trt-Eval Interval	2 WAT	3 WAT	4 WAT	5 WAT

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Rate Unit	Grow Stg				
1	STINGER	3.0	L	0.66	PT/A	POST	41.3 b	92.0 a	97.5 a	97.5 a
2	HORNET	85.6	WG	4.0	OZ/A	POST	36.3 bc	73.8 b	78.8 b	80.0 b
3	SCORPION III	84.3	WG	0.25	LB/A	POST	33.8 c	75.0 b	71.3 bc	78.8 b
4	CLARITY	4.0	L	0.50	PT/A	POST	30.0 c	71.3 bc	67.5 c	62.5 c
4	ACCENT	75	WG	0.66	OZ/A	POST				
4	NIS		L	0.25	% V/V	POST				
5	EXCEED	57	DF	1.0	OZ/A	POST	23.8 d	65.0 c	67.5 c	67.5 bc
5	NIS		L	0.25	% V/V	POST				
6	EXCEED	57	DF	1.0	OZ/A	POST	35.0 c	63.8 c	66.3 c	70.0 bc
6	BANVEL	4.0	L	0.5	PT/A	POST				
6	NIS		L	0.25	% V/V	POST				
7	EXCEED	57	DF	1.0	OZ/A	POST	30.0 c	56.3 d	65.0 c	70.0 bc
7	2,4-D AMINE	3.8	L	1	PT/A	POST				
7	NIS		L	0.25	% V/V	POST				
8	2,4-D AMINE	3.8	L	1	PT/A	POST	41.3 b	65.0 c	72.5 bc	78.8 b
8	BANVEL	4.0	L	0.50	PT/A	POST				
9	ROUNDUP ULTRA	4.0	L	2.0	QT/A	POST	88.8 a	97.8 a	95.0 a	93.8 a
10	CONTROL						0.0 e	0.0 e	0.0 d	0.0 d
LSD (P=.05)							5.77	7.15	7.87	11.38
Standard Deviation							3.98	4.93	5.42	7.84
CV							11.05	7.47	7.96	11.22
Replicate F							2.842	1.792	4.666	3.102
Replicate Prob(F)							0.0565	0.1725	0.0094	0.0433
Treatment F							122.439	115.569	96.408	47.264
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Evaluation of POST Herbicides for the Control of Trumpetcreeper

Trial ID: TRMPTCRP.DAT Investigator: Paul Davis/Kevin Bradley
Location: New Kent, VA Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: KEVIN BRADLEY Title: GRADUATE RESEARCH ASST
Affiliation: VPI & SU Postal Code: 24060

Other Investigator: PAUL DAVIS Title: NEW KENT EXTENSN AGENT
Affiliation: VPI & SU Postal Code: 23124

Trial Status: ONGOING Initiation Date: 5-19-99 Country: USA
City: NEW KENT State/Prov.: VA Postal Code: 23124

CROP AND PEST DESCRIPTION

Weed 1. CAMRA TRUMPETCREEPER 2. _____ 3. _____
4. _____ 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: ZEAMX FIELD CORN Variety: PIONEER 3394 Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: 30 INCH Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4
Site Type: _____
Tillage Type: NO-TILL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: _____
Trial Initiation Comments: _____

Previous:	Crops	Pesticides	Year
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

SOIL DESCRIPTION

Texture: _____ % OM: _____ % Sand: _____ % Silt: _____ % Clay: _____
pH: _____ CEC: _____ Soil Name: _____ Fertility Level: _____

Evaluation of POST Herbicides for the Control of Trumpetcreeper

Trial ID: TRMPTCRP.DAT
Location: New Kent, VA

Investigator: Paul Davis/Kevin Bradley
Study Dir.: Scott Hagood

MOISTURE CONDITIONS					
On:	Date	Time	Amount	Unit	Interval Unit
1.	_____	_____	_____	_____	_____
2.	_____	_____	_____	_____	_____
3.	_____	_____	_____	_____	_____
4.	_____	_____	_____	_____	_____
5.	_____	_____	_____	_____	_____
6.	_____	_____	_____	_____	_____
7.	_____	_____	_____	_____	_____
8.	_____	_____	_____	_____	_____
9.	_____	_____	_____	_____	_____
10.	_____	_____	_____	_____	_____
11.	_____	_____	_____	_____	_____
12.	_____	_____	_____	_____	_____
13.	_____	_____	_____	_____	_____
14.	_____	_____	_____	_____	_____
15.	_____	_____	_____	_____	_____
16.	_____	_____	_____	_____	_____
17.	_____	_____	_____	_____	_____
18.	_____	_____	_____	_____	_____
19.	_____	_____	_____	_____	_____
20.	_____	_____	_____	_____	_____

Overall Moisture Conditions: _____
Closest Weather Station: _____ Distance: _____ Unit: _____

	APPLICATION DESCRIPTION					
	A	B	C	D	E	F
Application Date:	5-19-99	5-26-99	_____	_____	_____	_____
Time of Day:	1:30 PM	9:00 AM	_____	_____	_____	_____
Application Method:	BROADCAST	BROADCAST	_____	_____	_____	_____
Application Timing:	POST1	POST2	_____	_____	_____	_____
Applic. Placement:	TRT 1-16	TRT 17-30	_____	_____	_____	_____
Air Temp., Unit:	75 F	68 F	_____	_____	_____	_____
% Relative Humidity:	95	90	_____	_____	_____	_____
Wind Velocity, Unit:	2 MPH	2 MPH	_____	_____	_____	_____
Dew Presence (Y/N):	N	N	_____	_____	_____	_____
Water Hardness:	N/A	N/A	_____	_____	_____	_____
Soil Temp., Unit:	69 F	69 F	_____	_____	_____	_____
Soil Moisture:	MOIST	DAMP	_____	_____	_____	_____
% Cloud Cover:	100	60	_____	_____	_____	_____

Evaluation of POST Herbicides for the Control of Trumpetcreeper

Trial ID: TRMPTCRP.DAT Investigator: Paul Davis/Kevin Bradley
Location: New Kent, VA Study Dir.: Scott Hagood

		CROP STAGE AT EACH APPLICATION					
		A	B	C	D	E	F
Crop 1	ZEMX Stage:	4-6 LEAF	5-7 LEAF	_____	_____	_____	_____
	Stage Scale:	5 COLLAR	6 COLLAR	_____	_____	_____	_____
	Height, Unit:	6 IN	8 IN	_____	_____	_____	_____
Crop 2	Stage:	_____	_____	_____	_____	_____	_____
	Stage Scale:	_____	_____	_____	_____	_____	_____
	Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 3	Stage:	_____	_____	_____	_____	_____	_____
	Stage Scale:	_____	_____	_____	_____	_____	_____
	Height, Unit:	_____	_____	_____	_____	_____	_____

		WEED STAGE AT EACH APPLICATION					
		A	B	C	D	E	F
Weed 1	CAMRA Stage:	EMERG/RUN	EMERG/RUN	_____	_____	_____	_____
	Stage Scale:	.5-18" TAL	2-20" TALL	_____	_____	_____	_____
	Density, Unit:	50% GC	50% GC	_____	_____	_____	_____
Weed 2	Stage:	_____	_____	_____	_____	_____	_____
	Stage Scale:	_____	_____	_____	_____	_____	_____
	Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 3	Stage:	_____	_____	_____	_____	_____	_____
	Stage Scale:	_____	_____	_____	_____	_____	_____
	Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 4	Stage:	_____	_____	_____	_____	_____	_____
	Stage Scale:	_____	_____	_____	_____	_____	_____
	Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 5	Stage:	_____	_____	_____	_____	_____	_____
	Stage Scale:	_____	_____	_____	_____	_____	_____
	Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 6	Stage:	_____	_____	_____	_____	_____	_____
	Stage Scale:	_____	_____	_____	_____	_____	_____
	Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 7	Stage:	_____	_____	_____	_____	_____	_____
	Stage Scale:	_____	_____	_____	_____	_____	_____
	Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 8	Stage:	_____	_____	_____	_____	_____	_____
	Stage Scale:	_____	_____	_____	_____	_____	_____
	Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 9	Stage:	_____	_____	_____	_____	_____	_____
	Stage Scale:	_____	_____	_____	_____	_____	_____
	Density, Unit:	_____	_____	_____	_____	_____	_____

Evaluation of POST Herbicides for the Control of Trumpetcreeper

Trial ID: TRMPTCRP.DAT
Location: New Kent, VA

Investigator: Paul Davis/Kevin Bradley
Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK	_____	_____	_____	_____
Operating Pressure:	34 PSI	34 PSI	_____	_____	_____	_____
Nozzle Type:	FLAT FAN	FLAT FAN	_____	_____	_____	_____
Nozzle Size:	8003	8003	_____	_____	_____	_____
Nozzle Spacing, Unit:	18 INCH	18 INCH	_____	_____	_____	_____
Nozzles/Row:	4	4	_____	_____	_____	_____
Band Width, Unit:	_____	_____	_____	_____	_____	_____
Boom Length, Unit:	72 INCH	72 INCH	_____	_____	_____	_____
Boom Height, Unit:	20 INCH	20 INCH	_____	_____	_____	_____
Ground Speed, Unit:	3.1 MPH	3.1 MPH	_____	_____	_____	_____
Incorporation Equip.:	_____	_____	_____	_____	_____	_____
Hours to Incorp.:	_____	_____	_____	_____	_____	_____
Incorp. Depth, Unit:	_____	_____	_____	_____	_____	_____
Carrier:	WATER	WATER	_____	_____	_____	_____
Spray Volume, Unit:	22.5 GPA	22.5 GPA	_____	_____	_____	_____
Spray pH:	_____	_____	_____	_____	_____	_____
Propellant:	CO/2	CO/2	_____	_____	_____	_____
Tank Mix (Y/N):	Y	Y	_____	_____	_____	_____

Trt No	Treatment Application Comment
13	THIS TREATMENT SPRAYED WITH POST2 TIMING
—	TREATMENTS 17-30 HAD TO BE SPRAYED AT A LATER TIME PERIOD BECAUSE THE
—	EXPERIMENTAL HERBICIDE ZA1296 WAS NOT AVAILABLE DURING THE FIRST TIMING

Evaluation of POST Herbicides for the Control of Trumpetcreeper

Trial ID: TRMPTCRP.DAT
Location: New Kent, VA

Investigator: Paul Davis/Kevin Bradley
Study Dir.: Scott Hagood

Weed Code	CAMRA	CAMRA	CAMRA
Part Rated	CONTRL	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	6-5-99	6-11-99	6-22-99
Trt-Eval Interval	1 WAT	2 WAT	4 WAT

Trt No.	Treatment Name	Form	Fm	Rate	Unit	Grow	Stg			
1	CONTROL							0.0	l	0.0 m 0.0 p
2	2,4-D AMINE	3.8	L	1	PT/A	POST		84.3	b	83.8 de 76.3 fgh
3	CLARITY	4.0	L	0.50	PT/A	POST		24.9	hi	34.6 jk 44.4 kl
4	CLARITY	4.0	L	0.75	PT/A	POST		30.0	ghi	35.0 jk 42.5 lm
5	2,4-D AMINE	3.8	L	1	PT/A	POST		96.3	a	96.3 abc 88.8 a-d
5	CLARITY	4.0	L	.75	PT/A	POST				
6	EXCEED	57	DF	1	OZ/A	POST		26.3	hi	30.0 kl 25.0 n
6	NIS		L	.250	% V/V	POST				
7	EXCEED	57	DF	1	OZ/A	POST		41.3	def	46.3 i 51.3 jk
7	CLARITY	4.0	L	.50	PT/A	POST				
7	NIS		L	.250	% V/V	POST				
8	EXCEED	57	DF	1	OZ/A	POST		56.3	c	63.8 fg 71.3 h
8	CLARITY	4.0	L	.75	PT/A	POST				
8	NIS		L	.250	% V/V	POST				
9	PERMIT	75	DF	1.33	OZ/A	POST		7.5	kl	0.0 m 0.0 p
9	NIS		L	.250	% V/V	POST				
10	PERMIT	75	DF	1.33	OZ/A	POST		31.7	f-i	33.2 jk 35.5 m
10	CLARITY	4.0	L	.50	PT/A	POST				
10	NIS		L	.250	% V/V	POST				
11	PERMIT	75	DF	1.33	OZ/A	POST		32.5	fgh	40.0 ij 45.0 kl
11	CLARITY	4.0	L	.75	PT/A	POST				
11	NIS		L	.250	% V/V	POST				
12	BEACON	75	DF	0.76	OZ/A	POST		21.3	ij	25.0 l 13.8 o
12	NIS		L	.250	% V/V	POST				
13	BEACON	75	DF	0.76	OZ/A	POST		39.9	efg	53.3 h 56.6 ij
13	CLARITY	4.0	L	.50	PT/A	POST				
13	NIS		L	0.250	% V/V	POST				

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Trial ID: TRMPTCRP.DAT
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Investigator: Paul Davis/Kevin Bradley
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Weed Code	CAMRA	CAMRA	CAMRA
Part Rated	CONTRL	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	6-5-99	6-11-99	6-22-99
Trt-Eval Interval	1 WAT	2 WAT	4 WAT

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate Rate	Unit	Grow Stg				
14	BEACON	75	DF	0.76	OZ/A	POST	42.5	def	57.5 gh	60.0 i
14	CLARITY		L	.75	PT/A	POST				
14	NIS		L	0.250	% V/V	POST				
15	ROUNDUP ULTRA	4.0	L	1	QT/A	POST	93.3	ab	90.5 bcd	85.0 c-f
16	ROUNDUP ULTRA	4.0	L	2	QT/A	POST	96.5	a	90.0 cd	78.8 e-h
17	ROUNDUP ULTRA	4.0	L	4	QT/A	POST	98.5	a	97.8 ab	93.3 abc
18	STINGER	3.0	L	0.33	PT/A	POST	7.5	kl	0.0 m	0.0 p
19	STINGER	3.0	L	0.66	PT/A	POST	12.5	jk	3.8 m	0.0 p
20	CONTROL						0.0	l	0.0 m	0.0 p
21	SCORPION III	84.3	WG	0.25	LB/A	POST	48.8	cde	68.8 f	75.0 gh
21	NIS		L	0.250	% V/V	POST				
22	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	45.0	de	77.5 e	80.0 d-h
22	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
22	UAN	100	L	2.50	% V/V	POST				
23	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	38.8	efg	77.5 e	82.5 d-g
23	CLARITY	4.0	L	.50	PT/A	POST				
23	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
23	UAN	100	L	2.50	% V/V	POST				
24	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	51.3	cd	76.3 e	86.3 b-e
24	CLARITY	4.0	L	.75	PT/A	POST				
24	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
24	UAN	100	L	2.50	% V/V	POST				
25	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	98.0	a	97.8 ab	95.0 ab
25	2,4-D AMINE	3.8	L	1	PT/A	POST				
25	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
25	UAN	100	L	2.50	% V/V	POST				

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Weed Code	CAMRA	CAMRA	CAMRA
Part Rated	CONTRL	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	6-5-99	6-11-99	6-22-99
Trt-Eval Interval	1 WAT	2 WAT	4 WAT

Trt No.	Treatment Name	Form	Fm Ds	Rate	Unit	Grow Stg				
26	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	40.0	efg	76.3	e 86.3 b-e
26	BEACON	75	WG	0.38	OZ/A	POST				
26	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
26	UAN	100	L	2.50	% V/V	POST				
27	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	39.5	efg	78.8	e 83.8 d-g
27	MATRIX	25	WG	0.012	LB A/A	POST				
27	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
27	UAN	100	L	2.50	% V/V	POST				
28	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	97.0	a	99.5	a 96.5 a
28	MATRIX	25	WG	0.012	LB A/A	POST				
28	2,4-D AMINE	3.8	L	1	PT/A	POST				
28	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
28	UAN	100	L	2.50	% V/V	POST				
29	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	57.5	c	82.5	e 88.8 a-d
29	MATRIX	25	WG	0.012	LB A/A	POST				
29	CLARITY	4.0	L	0.5	PT/A	POST				
29	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
29	UAN	100	L	2.50	% V/V	POST				
30	HORNET	85.6	WG	4.0	OZ/A	POST	8.8	kl	5.0	m 0.0 p
LSD (P=.05)							9.62		6.76	7.99
Standard Deviation							6.80		4.78	5.65
CV							14.93		8.85	10.33
Replicate F							0.220		1.771	1.812
Replicate Prob(F)							0.8826		0.1588	0.1512
Treatment F							86.684		208.012	152.700
Treatment Prob(F)							0.0001		0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

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Weed Code	CAMRA	CAMRA	CAMRA
Part Rated	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	7-3-99	8-2-99	8-28-99
Trt-Eval Interval	6 WAT	8 WAT	12 WAT

Trt No.	Treatment Name	Form	Fm	Rate	Grow			
		Amt	Ds	Rate	Unit	Stg		
1	CONTROL						0.0 k	0.0 l 0.0 h
2	2,4-D AMINE	3.8 L		1 PT/A	POST	58.8 f-i	23.8 k	20.0 g
3	CLARITY	4.0 L		0.50 PT/A	POST	46.6 j	43.1 g-j	51.6 def
4	CLARITY	4.0 L		0.75 PT/A	POST	58.8 f-i	58.8 def	58.8 cde
5	2,4-D AMINE	3.8 L		1 PT/A	POST	77.5 cd	40.0 hij	26.3 g
5	CLARITY	4.0 L		.75 PT/A	POST			
6	EXCEED	57 DF		1 OZ/A	POST	2.5 k	0.0 l	0.0 h
6	NIS	L		.250 % V/V	POST			
7	EXCEED	57 DF		1 OZ/A	POST	48.8 ij	38.8 ij	42.5 f
7	CLARITY	4.0 L		.50 PT/A	POST			
7	NIS	L		.250 % V/V	POST			
8	EXCEED	57 DF		1 OZ/A	POST	77.5 cd	62.5 c-f	63.8 a-d
8	CLARITY	4.0 L		.75 PT/A	POST			
8	NIS	L		.250 % V/V	POST			
9	PERMIT	75 DF		1.33 OZ/A	POST	0.0 k	0.0 l	0.0 h
9	NIS	L		.250 % V/V	POST			
10	PERMIT	75 DF		1.33 OZ/A	POST	54.0 hij	53.8 e-h	58.9 cde
10	CLARITY	4.0 L		.50 PT/A	POST			
10	NIS	L		.250 % V/V	POST			
11	PERMIT	75 DF		1.33 OZ/A	POST	51.3 ij	57.5 def	62.5 a-d
11	CLARITY	4.0 L		.75 PT/A	POST			
11	NIS	L		.250 % V/V	POST			
12	BEACON	75 DF		0.76 OZ/A	POST	2.5 k	0.0 l	0.0 h
12	NIS	L		.250 % V/V	POST			
13	BEACON	75 DF		0.76 OZ/A	POST	54.8 g-j	36.6 j	41.1 f
13	CLARITY	4.0 L		.50 PT/A	POST			
13	NIS	L		0.250 % V/V	POST			

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Rating Unit	0-100	0-100	0-100
Rating Date	7-3-99	8-2-99	8-28-99
Trt-Eval Interval	6 WAT	8 WAT	12 WAT

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate Rate	Unit	Grow Stg				
14	BEACON	75	DF	0.76	OZ/A	POST	65.0	e-h	56.3 d-g	58.8 cde
14	CLARITY		L	.75	PT/A	POST				
14	NIS		L	0.250	% V/V	POST				
15	ROUNDUP ULTRA	4.0	L	1	QT/A	POST	76.3	cde	52.5 e-i	42.5 f
16	ROUNDUP ULTRA	4.0	L	2	QT/A	POST	67.5	def	51.3 e-i	40.0 f
17	ROUNDUP ULTRA	4.0	L	4	QT/A	POST	91.5	ab	77.5 ab	73.8 a
18	STINGER	3.0	L	0.33	PT/A	POST	0.0	k	0.0 l	0.0 h
19	STINGER	3.0	L	0.66	PT/A	POST	0.0	k	0.0 l	0.0 h
20	CONTROL						0.0	k	0.0 l	0.0 h
21	SCORPION III	84.3	WG	0.25	LB/A	POST	80.0	bc	65.0 b-e	60.0 b-e
21	NIS		L	0.250	% V/V	POST				
22	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	66.3	d-g	48.8 f-j	43.8 f
22	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
22	UAN	100	L	2.50	% V/V	POST				
23	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	87.5	abc	77.5 ab	73.8 a
23	CLARITY	4.0	L	.50	PT/A	POST				
23	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
23	UAN	100	L	2.50	% V/V	POST				
24	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	87.5	abc	72.5 abc	63.8 a-d
24	CLARITY	4.0	L	.75	PT/A	POST				
24	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
24	UAN	100	L	2.50	% V/V	POST				
25	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	91.8	ab	76.3 ab	72.5 ab
25	2,4-D AMINE	3.8	L	1	PT/A	POST				
25	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
25	UAN	100	L	2.50	% V/V	POST				

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Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	7-3-99	8-2-99	8-28-99
Trt-Eval Interval	6 WAT	8 WAT	12 WAT

Trt No.	Treatment Name	Form	Fm Ds	Rate	Unit	Grow Stg				
26	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	63.8	fgh	51.3 e-i	48.8 ef
26	BEACON	75	WG	0.38	OZ/A	POST				
26	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
26	UAN	100	L	2.50	% V/V	POST				
27	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	63.8	fgh	53.8 e-h	43.8 f
27	MATRIX	25	WG	0.012	LB A/A	POST				
27	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
27	UAN	100	L	2.50	% V/V	POST				
28	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	94.0	a	80.0 a	71.3 abc
28	MATRIX	25	WG	0.012	LB A/A	POST				
28	2,4-D AMINE	3.8	L	1	PT/A	POST				
28	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
28	UAN	100	L	2.50	% V/V	POST				
29	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	87.5	abc	70.0 a-d	66.3 abc
29	MATRIX	25	WG	0.012	LB A/A	POST				
29	CLARITY	4.0	L	0.5	PT/A	POST				
29	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
29	UAN	100	L	2.50	% V/V	POST				
30	HORNET	85.6	WG	4.0	OZ/A	POST	0.0	k	0.0 i	0.0 h
LSD (P=.05)							10.53		12.35	11.59
Standard Deviation							7.45		8.73	8.19
CV							14.37		21.0	20.76
Replicate F							1.067		0.292	0.967
Replicate Prob(F)							0.3675		0.8312	0.4121
Treatment F							83.332		42.715	44.646
Treatment Prob(F)							0.0001		0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

(HONEY)
VPI & SU

Evaluation of POST Herbicides for the Control of Honeyvine Milkweed

Trial ID: Honey.dat Investigator: Paul Davis/Kevin Bradley
Location: Charles City, VA Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: Kevin Bradley Title: Graduate Research Asst
Affiliation: VPI & SU Postal Code: 24060

Other Investigator: PAUL DAVIS Title: NEW KENT EXTENSIN AGNT
Affiliation: VPI & SU Postal Code: 23124

Trial Status: ONGOING Initiation Date: 5-25-99 Country: USA
City: CHARLES CITY State/Prov.: VIRGINIA Postal Code: _____

CROP AND PEST DESCRIPTION

Weed 1. AMPAL HONEYVINE MLKWD 2. _____ 3. _____
4. _____ 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: ZEAMX FIELD CORN Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4
Site Type: _____
Tillage Type: NO-TILL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: _____
Trial Initiation Comments: _____

Previous: Crops	Pesticides	Year
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

SOIL DESCRIPTION

Texture: _____ % OM: _____ % Sand: _____ % Silt: _____ % Clay: _____
pH: _____ CEC: _____ Soil Name: _____ Fertility Level: _____

(HONEY)
VPI & SU

Evaluation of POST Herbicides for the Control of Honeyvine Milkweed

Trial ID: Honey.dat Investigator: Paul Davis/Kevin Bradley
Location: Charles City, VA Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: _____
Closest Weather Station: _____ Distance: _____ Unit: _____

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-25-99					
Time of Day:	10:30 AM					
Application Method:	BROADCAST					
Application Timing:	POST					
Applic. Placement:						
Air Temp., Unit:	70 F					
% Relative Humidity:	95					
Wind Velocity, Unit:	4 MPH					
Dew Presence (Y/N):	N					
Water Hardness:	N/A					
Soil Temp., Unit:	61 F					
Soil Moisture:	DRY/DAMP					
% Cloud Cover:	100					

Evaluation of POST Herbicides for the Control of Honeyvine Milkweed

Trial ID: Honey.dat Investigator: Paul Davis/Kevin Bradley
Location: Charles City, VA Study Dir.: Scott Hagood

	CROP STAGE AT EACH APPLICATION					
	A	B	C	D	E	F
Crop 1 ZEAMX Stage:	5 LEAF	_____	_____	_____	_____	_____
Stage Scale:	5 COLLARS	_____	_____	_____	_____	_____
Height, Unit:	11 INCH	_____	_____	_____	_____	_____
Crop 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____

	WEED STAGE AT EACH APPLICATION					
	A	B	C	D	E	F
Weed 1 AMPAL Stage:	RUNNING	_____	_____	_____	_____	_____
Stage Scale:	6 LF, 4 "	_____	_____	_____	_____	_____
Density, Unit:	60 % GC	_____	_____	_____	_____	_____
Weed 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 4 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 5 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 6 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 7 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 8 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 9 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____

Evaluation of POST Herbicides for the Control of Honeyvine Milkweed

Trial ID: Honey.dat Investigator: Paul Davis/Kevin Bradley

Location: Charles City, VA Study Dir.: Scott Hagood

Weed Code	AMPAL	AMPAL	AMPAL
Part Rated	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	6-5-99	6-11-99	6-22-99
Trt-Eval Interval	1 WAT	2 WAT	4 WAT

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Unit	Grow Stg	AMPAL 1 WAT	AMPAL 2 WAT	AMPAL 4 WAT
1	CONTROL						0.0 o	0.0 l	0.0 l
2	2,4-D AMINE	3.8 L		1 PT/A	POST		16.3 k-n	26.3 h-k	33.8 ghi
3	CLARITY	4.0 L		0.50 PT/A	POST		13.8 l-o	21.3 ijk	17.5 jk
4	CLARITY	4.0 L		0.75 PT/A	POST		22.5 j-m	40.0 e-h	41.3 fgh
5	2,4-D AMINE	3.8 L		1 PT/A	POST		47.5 efg	79.5 ab	77.5 ab
5	CLARITY	4.0 L		.75 PT/A	POST				
6	EXCEED	57 DF		1 OZ/A	POST		41.3 f-i	61.3 cd	58.8 cde
6	NIS	L		.250 % V/V	POST				
7	EXCEED	57 DF		1 OZ/A	POST		78.0 abc	80.8 ab	73.8 abc
7	CLARITY	4.0 L		.50 PT/A	POST				
7	NIS	L		.250 % V/V	POST				
8	EXCEED	57 DF		1 OZ/A	POST		83.0 ab	88.0 ab	78.8 ab
8	CLARITY	4.0 L		.75 PT/A	POST				
8	NIS	L		.250 % V/V	POST				
9	PERMIT	75 DF		1.33 OZ/A	POST		33.8 g-j	38.8 e-h	47.5 e-h
9	NIS	L		.250 % V/V	POST				
10	PERMIT	75 DF		1.33 OZ/A	POST		78.3 abc	84.8 ab	82.0 ab
10	CLARITY	4.0 L		.50 PT/A	POST				
10	NIS	L		.250 % V/V	POST				
11	PERMIT	75 DF		1.33 OZ/A	POST		76.3 abc	88.0 ab	84.3 ab
11	CLARITY	4.0 L		.75 PT/A	POST				
11	NIS	L		.250 % V/V	POST				
12	BEACON	75 DF		0.76 OZ/A	POST		31.3 hij	51.3 de	38.8 gh
12	NIS	L		.250 % V/V	POST				
13	BEACON	75 DF		0.76 OZ/A	POST		48.8 ef	74.5 abc	75.0 ab
13	CLARITY	4.0 L		.50 PT/A	POST				
13	NIS	L		0.250 % V/V	POST				

Evaluation of POST Herbicides for the Control of Honeyvine Milkweed

Trial ID: Honey.dat

Investigator: Paul Davis/Kevin Bradley

Location: Charles City, VA

Study Dir.: Scott Hagood

Weed Code	AMPAL	AMPAL	AMPAL
Part Rated	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	6-5-99	6-11-99	6-22-99
Trt-Eval Interval	1 WAT	2 WAT	4 WAT

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate Rate	Unit	Grow Stg			
14	BEACON	75	DF	0.76	OZ/A	POST	75.0 abc	81.3 ab	78.8 ab
14	CLARITY		L	.75	PT/A	POST			
14	NIS		L	0.250	% V/V	POST			
15	ROUNDUP ULTRA	4.0	L	1	QT/A	POST	28.8 ijk	42.5 efg	50.0 efg
16	ROUNDUP ULTRA	4.0	L	2	QT/A	POST	77.8 abc	79.5 ab	73.8 abc
17	ROUNDUP ULTRA	4.0	L	4	QT/A	POST	88.8 a	89.0 a	75.8 ab
18	STINGER	3.0	L	0.33	PT/A	POST	8.8 mno	21.3 ijk	18.8 ijk
19	STINGER	3.0	L	0.66	PT/A	POST	10.0 mno	17.5 jk	21.3 ijk
20	HORNET	85.6	WG	4.0	OZ/A	POST	7.5 no	12.5 kl	12.5 kl
21	SCORPION III	84.3	WG	0.25	LB/A	POST	25.0 jkl	33.8 f-i	43.8 e-h
21	NIS		L	0.250	% V/V	POST			
22	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	31.3 hij	28.8 g-j	13.8 kl
22	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST			
22	UAN	100	L	2.50	% V/V	POST			
23	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	50.0 ef	57.5 d	56.3 def
23	CLARITY	4.0	L	.50	PT/A	POST			
23	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST			
23	UAN	100	L	2.50	% V/V	POST			
24	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	57.5 de	73.8 bc	68.8 bcd
24	CLARITY	4.0	L	.75	PT/A	POST			
24	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST			
24	UAN	100	L	2.50	% V/V	POST			
25	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	73.3 bc	84.5 ab	78.8 ab
25	2,4-D AMINE	3.8	L	1	PT/A	POST			
25	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST			
25	UAN	100	L	2.50	% V/V	POST			

Evaluation of POST Herbicides for the Control of Honeyvine Milkweed

Trial ID: Honey.dat Investigator: Paul Davis/Kevin Bradley
Location: Charles City, VA Study Dir.: Scott Hagood

Weed Code	AMPAL	AMPAL	AMPAL
Part Rated	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	6-5-99	6-11-99	6-22-99
Trt-Eval Interval	1 WAT	2 WAT	4 WAT

Trt No.	Treatment Name	Form	Fm	Rate	Unit	Grow Stg			
26	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	47.5	efg	47.5 def 41.3 fgh
26	BEACON	75	WG	0.38	OZ/A	POST			
26	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST			
26	UAN	100	L	2.50	% V/V	POST			
27	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	43.8	e-h	41.3 efg 31.3 hij
27	MATRIX	25	WG	0.012	LB A/A	POST			
27	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST			
27	UAN	100	L	2.50	% V/V	POST			
28	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	67.5	cd	82.5 ab 87.0 a
28	MATRIX	25	WG	0.012	LB A/A	POST			
28	2,4-D AMINE	3.8	L	1	PT/A	POST			
28	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST			
28	UAN	100	L	2.50	% V/V	POST			
LSD (P=.05)							12.70	12.81	14.59
Standard Deviation							8.98	9.06	10.32
CV							19.92	16.61	19.78
Replicate F							0.084	1.676	0.810
Replicate Prob(F)							0.9683	0.1786	0.4918
Treatment F							35.756	37.122	25.861
Treatment Prob(F)							0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Evaluation of POST Herbicides for the Control of Honeyvine Milkweed

Trial ID: Honey.dat

Investigator: Paul Davis/Kevin Bradley

Location: Charles City, VA

Study Dir.: Scott Hagood

Weed Code		AMPAL	AMPAL	AMPAL
Part Rated		CONTRL %	CONTRL %	CONTRL %
Rating Data Type		VISUAL	VISUAL	VISUAL
Rating Unit		0-100	0-100	0-100
Rating Date		7-3-99	8-2-99	8-28-99
Trt-Eval Interval		6 WAT	8 WAT	12 WAT

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Unit	Grow Stg			
1	CONTROL						0.0 n	0.0 j	0.0 i
2	2,4-D AMINE	3.8 L		1 PT/A		POST	47.5 e-i	46.3 def	47.5 def
3	CLARITY	4.0 L		0.50 PT/A		POST	3.8 mn	0.0 j	0.0 i
4	CLARITY	4.0 L		0.75 PT/A		POST	43.8 ghi	30.0 fgh	28.8 fgh
5	2,4-D AMINE	3.8 L		1 PT/A		POST	72.5 a-d	62.5 a-d	53.8 b-e
5	CLARITY	4.0 L		.75 PT/A		POST			
6	EXCEED	57 DF		.1 OZ/A		POST	63.8 b-e	48.8 c-f	40.0 efg
6	NIS	L		.250 % V/V		POST			
7	EXCEED	57 DF		1 OZ/A		POST	61.3 c-f	46.3 def	41.3 d-g
7	CLARITY	4.0 L		.50 PT/A		POST			
7	NIS	L		.250 % V/V		POST			
8	EXCEED	57 DF		1 OZ/A		POST	70.0 a-d	60.0 b-e	48.8 cde
8	CLARITY	4.0 L		.75 PT/A		POST			
8	NIS	L		.250 % V/V		POST			
9	PERMIT	75 DF		1.33 OZ/A		POST	45.0 f-i	41.3 d-g	42.5 d-g
9	NIS	L		.250 % V/V		POST			
10	PERMIT	75 DF		1.33 OZ/A		POST	76.3 abc	71.3 ab	66.3 abc
10	CLARITY	4.0 L		.50 PT/A		POST			
10	NIS	L		.250 % V/V		POST			
11	PERMIT	75 DF		1.33 OZ/A		POST	79.5 ab	75.0 ab	68.8 ab
11	CLARITY	4.0 L		.75 PT/A		POST			
11	NIS	L		.250 % V/V		POST			
12	BEACON	75 DF		0.76 OZ/A		POST	23.8 jkl	35.0 fg	45.0 d-g
12	NIS	L		.250 % V/V		POST			
13	BEACON	75 DF		0.76 OZ/A		POST	60.0 c-g	60.0 b-e	60.0 a-d
13	CLARITY	4.0 L		.50 PT/A		POST			
13	NIS	L		0.250 % V/V		POST			

(HONEY)
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AOV Means Table Page 5 of 6

Evaluation of POST Herbicides for the Control of Honeyvine Milkweed

Trial ID: Honey.dat

Investigator: Paul Davis/Kevin Bradley

Location: Charles City, VA

Study Dir.: Scott Hagood

Weed Code	AMPAL	AMPAL	AMPAL
Part Rated	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	7-3-99	8-2-99	8-28-99
Trt-Eval Interval	6 WAT	8 WAT	12 WAT

Trt No.	Treatment Name	Form	Fm	Rate	Unit	Grow	Stg					
14	BEACON	75	DF	0.76	OZ/A	POST	71.3	a-d	62.5	a-d	56.3	b-e
14	CLARITY		L	.75	PT/A	POST						
14	NIS		L	0.250	% VV	POST						
15	ROUNDUP ULTRA	4.0	L	1	QT/A	POST	52.5	e-h	42.5	d-g	41.3	d-g
16	ROUNDUP ULTRA	4.0	L	2	QT/A	POST	63.8	b-e	40.0	efg	38.8	efg
17	ROUNDUP ULTRA	4.0	L	4	QT/A	POST	72.5	a-d	46.3	def	41.3	d-g
18	STINGER	3.0	L	0.33	PT/A	POST	10.0	lmn	0.0	j	0.0	i
19	STINGER	3.0	L	0.66	PT/A	POST	26.3	jk	6.3	ij	7.5	i
20	HORNET	85.6	WG	4.0	OZ/A	POST	17.5	klm	12.5	hij	26.3	gh
21	SCORPION III	84.3	WG	0.25	LB/A	POST	56.3	d-g	48.8	c-f	45.0	d-g
21	NIS		L	0.250	% VV	POST						
22	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	0.0	n	0.0	j	5.0	i
22	CROP OIL CONCENTRATE	100	AL	1.00	% VV	POST						
22	UAN	100	L	2.50	% VV	POST						
23	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	38.8	hij	30.0	fgh	26.3	gh
23	CLARITY	4.0	L	.50	PT/A	POST						
23	CROP OIL CONCENTRATE	100	AL	1.00	% VV	POST						
23	UAN	100	L	2.50	% VV	POST						
24	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	60.0	c-g	57.5	b-e	56.3	b-e
24	CLARITY	4.0	L	.75	PT/A	POST						
24	CROP OIL CONCENTRATE	100	AL	1.00	% VV	POST						
24	UAN	100	L	2.50	% VV	POST						
25	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	72.5	a-d	70.0	abc	67.5	ab
25	2,4-D AMINE	3.8	L	1	PT/A	POST						
25	CROP OIL CONCENTRATE	100	AL	1.00	% VV	POST						
25	UAN	100	L	2.50	% VV	POST						

Evaluation of POST Herbicides for the Control of Honeyvine Milkweed

Trial ID: Honey.dat Investigator: Paul Davis/Kevin Bradley
Location: Charles City, VA Study Dir.: Scott Hagood

Weed Code	AMPAL	AMPAL	AMPAL
Part Rated	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	7-3-99	8-2-99	8-28-99
Trt-Eval Interval	6 WAT	8 WAT	12 WAT

Trt No.	Treatment Name	Form	Fm	Rate	Unit	Grow Stg				
26	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	32.5	ijk	22.5 ghi	28.8 fgh
26	BEACON	75	WG	0.38	OZ/A	POST				
26	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
26	UAN	100	L	2.50	% V/V	POST				
27	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	27.5	jk	7.5 ij	15.0 hi
27	MATRIX	25	WG	0.012	LB A/A	POST				
27	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
27	UAN	100	L	2.50	% V/V	POST				
28	ZA-1296/ICIA 5676	3.5	SC	2.6	PT/A	POST	83.3	a	82.5 a	75.8 a
28	MATRIX	25	WG	0.012	LB A/A	POST				
28	2,4-D AMINE	3.8	L	1	PT/A	POST				
28	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST				
28	UAN	100	L	2.50	% V/V	POST				

LSD (P=.05)	14.35	18.48	16.29
Standard Deviation	10.15	13.07	11.52
CV	21.34	33.11	30.04
Replicate F	1.542	1.401	0.474
Replicate Prob(F)	0.2099	0.2485	0.7014
Treatment F	25.433	14.904	14.660
Treatment Prob(F)	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

AGREVO LL SOYBEANS

Trial ID: 99 AGREVO BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-28-99 Country: USA
City: BLACKSBURG State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1.CHEAL COMMON LAMBSQTR 2.DIGSA LARGE CRABGRASS 3.SIDSP PRICKLY SIDA
4.IPOLA PITTED MRNGGLRY 5.IPOHE IVYLEF MRNGGLRY 6.MOLVE CARPETWEED
7.AMARE REDROOT PIGWEED 8.AMBEL COMMON RAGWEED 9.CYPES YELLOW NUTSEGE

Crop 1: BEANS Variety: LL Planting Date: 5-27-99
Planting Method: ROWS Rate: 130000 ACRE Depth: 1.0 IN
Perennial Age: Row Spacing: 30 INCH Seed Bed: CONVENTIONAL
Soil Temperature: 58 F Soil Moisture: DAMP Emergence Date: 6-4-99

Crop 2: Variety: Planting Date:
Planting Method: Rate: Depth:
Perennial Age: Row Spacing: Seed Bed:
Soil Temperature: Soil Moisture: Emergence Date:

Crop 3: Variety: Planting Date:
Planting Method: Rate: Depth:
Perennial Age: Row Spacing: Seed Bed:
Soil Temperature: Soil Moisture: Emergence Date:

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4

Site Type:
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: SPRING DISK
Trial Initiation Comments:

Previous: Crops	Pesticides	Year
1.		
2.		
3.		

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: % Silt: % Clay:
pH: 6.2 CEC: Soil Name: ROSS Fertility Level:

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AGREVO LL SOYBEANS

Trial ID: 99 AGREVO BEANS Investigator: E.S. HAGOOD
 Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA.

Distance: 12

Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-28-99	6-24-99	7-2-99			
Time of Day:	7-8 AM	10-11 AM	8:00 AM			
Application Method:	BROADCAST	BROADCAST	BROADCAST			
Application Timing:	PRE	E-POST	L-POST			
Applic. Placement:	SOIL	FOLIAGE	FOLIAGE			
Air Temp., Unit:	48 F	70 F	76 F			
% Relative Humidity:	25	40	80			
Wind Velocity, Unit:	0 MPH	1 MPH	0 MPH			
Dew Presence (Y/N):	Y	N	Y			
Water Hardness:	N	N				
Soil Temp., Unit:	58 F	69 F	73 F			
Soil Moisture:	DAMP	DRY	DAMP			
% Cloud Cover:	0	10	20			

AGREVO LL SOYBEANS

Trial ID: 99 AGREVO BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 BEANS Stage:	PRE	E-POST	L-POST			
Stage Scale:		4 LEAF, V3	8 LF V-5			
Height, Unit:		4 INCH	6 INCH			
Crop 2 Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 CHEAL Stage:	NONE	12 LEAF	14 LEAF			
Stage Scale:		4 INCH	5 INCH			
Density, Unit:		5 M2	3 M2			
Weed 2 DIGSA Stage:	NONE	6 LEAF	8 LEAF			
Stage Scale:		4 INCH	5 INCH			
Density, Unit:		6 M2	4 M2			
Weed 3 SIDSP Stage:	NONE	4 LEAF				
Stage Scale:		1 INCH				
Density, Unit:		5 M2				
Weed 4 IPOLA Stage:	NONE	6 LEAF	8 LEAF			
Stage Scale:		3 INCH	4 INCH			
Density, Unit:		2 M2	2 M2			
Weed 5 IPOHE Stage:	NONE	6 LEAF	8 LEAF			
Stage Scale:		3 INCH	4 INCH			
Density, Unit:		2 M2	2 M2			
Weed 6 MOLVE Stage:	NONE	ROSETTE	8 LEAF			
Stage Scale:		2-4 INCH	4 INCH			
Density, Unit:		5 M2	1 M2			
Weed 7 AMARE Stage:	NONE	10 LEAF				
Stage Scale:		3 INCH				
Density, Unit:		3 M2				
Weed 8 AMBEL Stage:	NONE	4 LEAF				
Stage Scale:		1-3 INCH				
Density, Unit:		2 M2				
Weed 9 CYPES Stage:	NONE	8 LEAF	8 LEAF			
Stage Scale:		4 INCH	5 INCH			
Density, Unit:		3 M2	1 M2			

AGREVO LL SOYBEANS

Trial ID: 99 AGREVO BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK			
Operating Pressure:	34 PSI	34 PSI	34 PSI			
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN			
Nozzle Size:	8003	8003	8003			
Nozzle Spacing, Unit:	18 INCH	18 INCH	18 INCH			
Nozzles/Row:	4	4	4			
Band Width, Unit:						
Boom Length, Unit:	72 INCH	72 INCH	72 INCH			
Boom Height, Unit:	20 INCH	20 INCH	20 INCH			
Ground Speed, Unit:	3.1 MPH	3.1 MPH	3.1 MPH			
Incorporation Equip.:						
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER	WATER	WATER			
Spray Volume, Unit:	22.5 GPA	22.5 GPA	22.5 GPA			
Spray pH:						
Propellant:	CO/2	CO/2	CO/2			
Tank Mix (Y/N):	Y	Y	Y			

Trt No Treatment Application Comment

---	_____	_____	_____	_____	_____	_____
---	_____	_____	_____	_____	_____	_____
---	_____	_____	_____	_____	_____	_____

10-4-99 (AGREVOLL)
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AOV Means Table Page 1 of 2

AGREVO LL SOYBEANS

Trial ID: 99 AGREVO BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	IPOLA	CHEAL	SIDSP	DATST	INJURY
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	7-28-99	7-28-99	7-28-99	7-28-99	8-30-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg					
1	LIBERTY	.357	LB A/A	E-POST	75.0 a	93.8 a	81.3 c	92.5 a	0.0 a
1	AMS	3.00	LB A/A	E-POST					
2	LIBERTY	.446	LB A/A	E-POST	80.0 a	95.0 a	85.0 abc	93.8 a	0.0 a
2	AMS	3.00	LB A/A	E-POST					
3	LIBERTY	.268	LB A/A	E-POST	83.8 a	100.0 a	87.5 ab	100.0 a	0.0 a
3	AMS	3.00	LB A/A	E-POST					
3	LIBERTY	.268	LB A/A	L-POST					
3	AMS	3.00	LB A/A	L-POST					
4	CANOPY XL	.120	LB A/A	PRE	81.3 a	93.8 a	86.3 ab	93.8 a	0.0 a
4	LIBERTY	.268	LB A/A	E-POST					
4	AMS	3.00	LB A/A	E-POST					
5	PROWL	1.00	LB A/A	PRE	82.5 a	96.3 a	88.8 a	98.8 a	0.0 a
5	LIBERTY	.268	LB A/A	L-POST					
5	AMS	3.00	LB A/A	L-POST					
6	DUAL II MAGNUM	.63	LB A/A	PRE	76.3 a	95.0 a	83.8 bc	96.3 a	0.0 a
6	LIBERTY	.268	LB A/A	E-POST					
6	AMS	3.00	LB A/A	E-POST					
7	CANOPY XL	.225	LB A/A	PRE	20.0 b	22.5 b	0.0 d	7.5 b	0.0 a
7	DUAL II MAGNUM	.95	LB A/A	PRE					
8	CONTROL				0.0 c	0.0 c	0.0 d	0.0 b	0.0 a
LSD (P=.05)					13.61	14.90	4.71	8.40	0.00
Standard Deviation					9.25	10.13	3.20	5.71	0.00
CV					14.84	13.59	5.0	7.84	0.0
Replicate F					3.635	0.576	1.116	0.416	0.000
Replicate Prob(F)					0.0295	0.6369	0.3650	0.7436	1.0000
Treatment F					50.512	61.057	611.087	224.315	0.000
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

10-4-99 (AGREVOLL)
VPI & SU

AGREVO LL SOYBEANS

Trial ID: 99 AGREVO BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	CHEAL	DATST	IPOLA	SIDSP
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated				
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100
Rating Date	8-30-99	8-30-99	8-30-99	8-30-99
Footnote Number				
Trt-Eval Interval				
PRM Data Type				
# Subsamples, Dec.				

Trt No.	Treatment Name	Rate	Unit	Grow Stg				
1	LIBERTY	.357	LB A/A	E-POST	90.0 ab	91.3 abc	91.3 a	90.0 ab
1	AMS	3.00	LB A/A	E-POST				
2	LIBERTY	.446	LB A/A	E-POST	91.3 ab	90.0 bc	97.5 a	97.5 a
2	AMS	3.00	LB A/A	E-POST				
3	LIBERTY	.268	LB A/A	E-POST	100.0 a	100.0 a	90.0 a	87.5 ab
3	AMS	3.00	LB A/A	E-POST				
3	LIBERTY	.268	LB A/A	L-POST				
3	AMS	3.00	LB A/A	L-POST				
4	CANOPY XL	.120	LB A/A	PRE	82.5 bc	86.3 c	91.3 a	91.3 ab
4	LIBERTY	.268	LB A/A	E-POST				
4	AMS	3.00	LB A/A	E-POST				
5	PROWL	1.00	LB A/A	PRE	93.8 ab	97.5 ab	93.8 a	96.3 ab
5	LIBERTY	.268	LB A/A	L-POST				
5	AMS	3.00	LB A/A	L-POST				
6	DUAL II MAGNUM	.63	LB A/A	PRE	90.0 ab	92.5 abc	88.8 a	90.0 ab
6	LIBERTY	.268	LB A/A	E-POST				
6	AMS	3.00	LB A/A	E-POST				
7	CANOPY XL	.225	LB A/A	PRE	76.3 c	76.3 d	85.0 a	86.3 b
7	DUAL II MAGNUM	.95	LB A/A	PRE				
8	CONTROL				0.0 d	0.0 e	0.0 b	0.0 c
LSD (P=.05)					11.53	8.81	13.75	10.51
Standard Deviation					7.84	5.99	9.35	7.15
CV					10.06	7.56	11.73	8.95
Replicate F					1.300	3.272	3.876	1.198
Replicate Prob(F)					0.3006	0.0414	0.0238	0.3347
Treatment F					67.860	119.972	48.077	82.696
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

BAYER SOYBEANS

Trial ID: 99 BAY-SOYBEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 5-18-99 Country: USA
City: BLACKSBURG State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1.SETFA GIANT FOXTAIL 2.ABUTH VELVETLEAF 3.IPOLA PITTED MRNGGLRY
4.DATST JIMSONWEED 5.AMBEL COMMON RAGWEED 6. _____
7. _____ 8. _____ 9. _____

Crop 1: BEANS Variety: SS RT-447 Planting Date: 5-21-99
Planting Method: ROWS Rate: 130000 ACRE Depth: 1.00 IN
Perennial Age: _____ Row Spacing: 30 INCH Seed Bed: _____
Soil Temperature: 66 F Soil Moisture: WET Emergence Date: 5-28-99

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4

Site Type: _____
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: SPRING DISK
Trial Initiation Comments: _____

Previous: Crops Pesticides Year
1. _____
2. _____
3. _____

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: _____ % Silt: _____ % Clay: _____
pH: 6.2 CEC: _____ Soil Name: ROSS Fertility Level: _____

BAYER SOYBEANS

Trial ID: 99 BAY-SOYBEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA. Distance: 12 Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-21-99	6-14-99				
Time of Day:	9-10 AM	12:00 PM				
Application Method:	BROADCAST	BROADCAST				
Application Timing:	PRE	E-POST				
Applic. Placement:						
Air Temp., Unit:	65 F	80 F				
% Relative Humidity:	40	60				
Wind Velocity, Unit:	5 MPH	4 MPH				
Dew Presence (Y/N):	Y	N				
Water Hardness:	N	N				
Soil Temp., Unit:	65 F	60 F				
Soil Moisture:	WET	DRY				
% Cloud Cover:	15	60				

VPI & SU

BAYER SOYBEANS

Trial ID: 99 BAY-SOYBEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

Table with 7 columns (A-F) and rows for Crop 1 BEANS, Crop 2, and Crop 3, including Stage, Scale, and Height/Unit.

WEED STAGE AT EACH APPLICATION

Table with 7 columns (A-F) and rows for Weed 1 SETFA, Weed 2 ABUTH, Weed 3 IPOLA, Weed 4 DATST, Weed 5 AMBEL, Weed 6, Weed 7, Weed 8, and Weed 9, including Stage, Scale, and Density/Unit.

VPI & SU

BAYER SOYBEANS

Trial ID: 99 BAY-SOYBEANS Investigator: E.S. HAGOOD
 Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK				
Operating Pressure:	34 PSI	34 PSI				
Nozzle Type:	FLAT FAN	FLAT FAN				
Nozzle Size:	8003	8003				
Nozzle Spacing, Unit:	18 INCH	18 INCH				
Nozzles/Row:	4	4				
Band Width, Unit:						
Boom Length, Unit:	72 INCH	72 INCH				
Boom Height, Unit:	20 INCH	20 INCH				
Ground Speed, Unit:	3.1 MPH	3.1 MPH				
Incorporation Equip.:						
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER	WATER				
Spray Volume, Unit:	22.5 GPA	22.5 GPA				
Spray pH:						
Propellant:	CO/2	CO/2				
Tank Mix (Y/N):	Y	Y				

Trt No Treatment Application Comment

Trt No	Treatment Application Comment
—	—
—	—
—	—

BAYER SOYBEANS

Trial ID: 99 BAY-SOYBEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	SETFA	ABUTH	AMBEL	IPOLA
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-14-99	6-14-99	6-14-99	6-14-99	6-14-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg					
1	CONTROL				0.0 a	0.0 e	0.0 d	0.0 c	0.0 d
2	SENCOR	.375	LB A/A	PRE	0.0 a	68.8 d	95.0 b	96.3 a	73.8 c
2	ROUNDUP ULTRA	.75	LB A/A	E-POST					
3	MORETIME	.420	LB A/A	PRE	0.0 a	83.8 bc	90.0 c	87.5 b	72.5 c
3	ROUNDUP ULTRA	.75	LB A/A	E-POST					
4	MORETIME	.563	LB A/A	PRE	0.0 a	81.3 cd	100.0 a	100.0 a	76.3 bc
4	ROUNDUP ULTRA	.75	LB A/A	E-POST					
5	MORETIME	.420	LB A/A	PRE	0.0 a	97.5 ab	100.0 a	100.0 a	90.0 a
5	COMMAND 3ME	1.00	LB A/A	PRE					
5	ROUNDUP ULTRA	.75	LB A/A	E-POST					
6	MORETIME	.563	LB A/A	PRE	2.5 a	100.0 a	100.0 a	100.0 a	81.3 abc
6	COMMAND 3 ME	1.00	LB A/A	PRE					
6	ROUNDUP ULTRA	.75	LB A/A	E-POST					
7	ROUNDUP ULTRA	.75	LB A/A	E-POST	0.0 a	0.0 e	0.0 d	0.0 c	0.0 d
8	ROUNDUP ULTRA	1.00	LB A/A	E-POST	0.0 a	0.0 e	0.0 d	0.0 c	0.0 d
9	FOE 5043	.200	LB A/A	PRE	2.5 a	81.3 cd	98.8 ab	97.5 a	80.0 abc
9	CANOPY	.164	LB A/A	PRE					
9	ROUNDUP ULTRA	.75	LB A/A	E-POST					
10	SENCOR	.1875	LB A/A	PRE	0.0 a	75.0 cd	100.0 a	95.0 a	81.3 abc
10	SULFENTRAZONE	.1875	LB A/A	PRE					
11	SENCOR	.281	LB A/A	PRE	0.0 a	72.5 cd	97.5 ab	97.5 a	86.3 ab
11	SULFENTRAZONE	.375	LB A/A	PRE					
12	SENCOR	.1875	LB A/A	PRE	0.0 a	82.5 cd	100.0 a	100.0 a	88.8 a
12	SULFENTRAZONE	.1875	LB A/A	PRE					
12	ROUNDUP ULTRA	.75	LB A/A	E-POST					
LSD (P=.05)					2.99	14.65	4.98	7.02	11.65
Standard Deviation					2.07	10.15	3.45	4.86	8.07
CV					497.27	16.4	4.69	6.68	13.27

BAYER SOYBEANS

Trial ID: 99 BAY-SOYBEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	SIDSP	INJURY	SETFA	DATST	AMBEL
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-14-99	6-25-99	6-25-99	6-25-99	6-25-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	SIDSP	INJURY	SETFA	DATST	AMBEL
1	CONTROL				0.0 b	0.0 a	0.0 c	0.0 b	0.0 c
2	SENCOR	.375	LB A/A	PRE	96.3 a	0.0 a	100.0 a	100.0 a	100.0 a
2	ROUNDUP ULTRA	.75	LB A/A	E-POST					
3	MORETIME	.420	LB A/A	PRE	97.5 a	0.0 a	100.0 a	100.0 a	100.0 a
3	ROUNDUP ULTRA	.75	LB A/A	E-POST					
4	MORETIME	.563	LB A/A	PRE	98.8 a	0.0 a	100.0 a	100.0 a	100.0 a
4	ROUNDUP ULTRA	.75	LB A/A	E-POST					
5	MORETIME	.420	LB A/A	PRE	93.8 a	0.0 a	100.0 a	100.0 a	100.0 a
5	COMMAND 3ME	1.00	LB A/A	PRE					
5	ROUNDUP ULTRA	.75	LB A/A	E-POST					
6	MORETIME	.563	LB A/A	PRE	97.5 a	0.0 a	100.0 a	100.0 a	100.0 a
6	COMMAND 3 ME	1.00	LB A/A	PRE					
6	ROUNDUP ULTRA	.75	LB A/A	E-POST					
7	ROUNDUP ULTRA	.75	LB A/A	E-POST	0.0 b	0.0 a	100.0 a	100.0 a	100.0 a
8	ROUNDUP ULTRA	1.00	LB A/A	E-POST	0.0 b	0.0 a	100.0 a	97.5 a	100.0 a
9	FOE 5043	.200	LB A/A	PRE	98.8 a	0.0 a	100.0 a	100.0 a	100.0 a
9	CANOPY	.164	LB A/A	PRE					
9	ROUNDUP ULTRA	.75	LB A/A	E-POST					
10	SENCOR	.1875	LB A/A	PRE	97.5 a	0.0 a	70.0 b	100.0 a	83.8 b
10	SULFENTRAZONE	.1875	LB A/A	PRE					
11	SENCOR	.281	LB A/A	PRE	100.0 a	0.0 a	77.5 b	97.5 a	80.0 b
11	SULFENTRAZONE	.375	LB A/A	PRE					
12	SENCOR	.1875	LB A/A	PRE	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a
12	SULFENTRAZONE	.1875	LB A/A	PRE					
12	ROUNDUP ULTRA	.75	LB A/A	E-POST					
LSD (P=.05)					6.47	0.00	8.85	2.99	7.53
Standard Deviation					4.48	0.00	6.13	2.07	5.21
CV					6.11	0.0	7.02	2.27	5.88

BAYER SOYBEANS

Trial ID: 99 BAY-SOYBEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	IPOLA	SIDSP	ABUTH	AMBEL	IPOLA
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-25-99	6-25-99	7-28-99	7-28-99	7-28-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	IPOLA	SIDSP	ABUTH	AMBEL	IPOLA
1	CONTROL				0.0 d	0.0 c	0.0 c	0.0 d	0.0 f
2	SENCOR	.375	LB A/A	PRE	98.8 a	100.0 a	100.0 a	100.0 a	85.0 ab
2	ROUNDUP ULTRA	.75	LB A/A	E-POST					
3	MORETIME	.420	LB A/A	PRE	100.0 a	100.0 a	100.0 a	98.8 a	85.0 ab
3	ROUNDUP ULTRA	.75	LB A/A	E-POST					
4	MORETIME	.563	LB A/A	PRE	93.8 ab	100.0 a	100.0 a	100.0 a	88.8 a
4	ROUNDUP ULTRA	.75	LB A/A	E-POST					
5	MORETIME	.420	LB A/A	PRE	97.5 a	100.0 a	100.0 a	100.0 a	93.8 a
5	COMMAND 3ME	1.00	LB A/A	PRE					
5	ROUNDUP ULTRA	.75	LB A/A	E-POST					
6	MORETIME	.563	LB A/A	PRE	100.0 a	100.0 a	100.0 a	100.0 a	93.8 a
6	COMMAND 3 ME	1.00	LB A/A	PRE					
6	ROUNDUP ULTRA	.75	LB A/A	E-POST					
7	ROUNDUP ULTRA	.75	LB A/A	E-POST	98.8 a	100.0 a	100.0 a	100.0 a	78.8 bc
8	ROUNDUP ULTRA	1.00	LB A/A	E-POST	95.0 a	97.5 ab	95.0 b	100.0 a	73.8 c
9	FOE 5043	.200	LB A/A	PRE	93.8 ab	100.0 a	96.3 b	100.0 a	78.8 bc
9	CANOPY	.164	LB A/A	PRE					
9	ROUNDUP ULTRA	.75	LB A/A	E-POST					
10	SENCOR	.1875	LB A/A	PRE	77.5 c	95.0 b	100.0 a	20.0 c	60.0 d
10	SULFENTRAZONE	.1875	LB A/A	PRE					
11	SENCOR	.281	LB A/A	PRE	83.8 bc	95.0 b	100.0 a	53.8 b	50.0 e
11	SULFENTRAZONE	.375	LB A/A	PRE					
12	SENCOR	.1875	LB A/A	PRE	100.0 a	100.0 a	100.0 a	98.8 a	86.3 ab
12	SULFENTRAZONE	.1875	LB A/A	PRE					
12	ROUNDUP ULTRA	.75	LB A/A	E-POST					
LSD (P=.05)					11.02	4.12	3.56	7.09	9.61
Standard Deviation					7.63	2.85	2.47	4.91	6.66
CV					8.81	3.15	2.71	6.07	9.14

BAYER SOYBEANS

Trial ID: 99 BAY-SOYBEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	SIDSP	INJURY	SETFA	CHEAL	DATST
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	7-28-99	8-30-99	8-30-99	8-30-99	8-30-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	SIDSP	INJURY	SETFA	CHEAL	DATST
1	CONTROL				0.0 e	0.0 a	0.0 c	0.0 b	0.0 c
2	SENCOR	.375	LB A/A	PRE	91.3 bc	0.0 a	97.5 ab	100.0 a	88.8 a
2	ROUNDUP ULTRA	.75	LB A/A	E-POST					
3	MORETIME	.420	LB A/A	PRE	93.8 abc	0.0 a	100.0 a	100.0 a	95.0 a
3	ROUNDUP ULTRA	.75	LB A/A	E-POST					
4	MORETIME	.563	LB A/A	PRE	92.5 bc	0.0 a	100.0 a	100.0 a	87.5 a
4	ROUNDUP ULTRA	.75	LB A/A	E-POST					
5	MORETIME	.420	LB A/A	PRE	100.0 a	0.0 a	100.0 a	100.0 a	96.3 a
5	COMMAND 3ME	1.00	LB A/A	PRE					
5	ROUNDUP ULTRA	.75	LB A/A	E-POST					
6	MORETIME	.563	LB A/A	PRE	100.0 a	0.0 a	100.0 a	100.0 a	100.0 a
6	COMMAND 3 ME	1.00	LB A/A	PRE					
6	ROUNDUP ULTRA	.75	LB A/A	E-POST					
7	ROUNDUP ULTRA	.75	LB A/A	E-POST	87.5 cd	0.0 a	100.0 a	97.5 a	96.3 a
8	ROUNDUP ULTRA	1.00	LB A/A	E-POST	87.5 cd	0.0 a	90.0 b	96.3 a	85.0 ab
9	FOE 5043	.200	LB A/A	PRE	91.3 bc	0.0 a	100.0 a	100.0 a	92.5 a
9	CANOPY	.164	LB A/A	PRE					
9	ROUNDUP ULTRA	.75	LB A/A	E-POST					
10	SENCOR	.1875	LB A/A	PRE	81.3 d	0.0 a	95.0 ab	95.0 a	68.8 b
10	SULFENTRAZONE	.1875	LB A/A	PRE					
11	SENCOR	.281	LB A/A	PRE	92.5 bc	0.0 a	92.5 ab	97.5 a	90.0 a
11	SULFENTRAZONE	.375	LB A/A	PRE					
12	SENCOR	.1875	LB A/A	PRE	96.3 ab	0.0 a	100.0 a	100.0 a	95.0 a
12	SULFENTRAZONE	.1875	LB A/A	PRE					
12	ROUNDUP ULTRA	.75	LB A/A	E-POST					

LSD (P=.05)	6.98	0.00	9.32	5.11	17.83
Standard Deviation	4.83	0.00	6.45	3.54	12.34
CV	5.72	0.0	7.21	3.91	14.89

BAYER SOYBEANS

Trial ID: 99 BAY-SOYBEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	IPOLA	SIDSP	AMBEL
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated			
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	8-30-99	8-30-99	8-30-99
Footnote Number			
Trt-Eval Interval			
PRM Data Type			
# Subsamples, Dec.			

Trt No.	Treatment Name	Rate	Unit	Grow Stg	IPOLA	SIDSP	AMBEL
1	CONTROL				0.0 d	0.0 c	0.0 d
2	SENCOR	.375	LB A/A	PRE	70.0 bc	96.3 a	100.0 a
2	ROUNDUP ULTRA	.75	LB A/A	E-POST			
3	MORETIME	.420	LB A/A	PRE	81.3 abc	100.0 a	100.0 a
3	ROUNDUP ULTRA	.75	LB A/A	E-POST			
4	MORETIME	.563	LB A/A	PRE	73.8 bc	100.0 a	100.0 a
4	ROUNDUP ULTRA	.75	LB A/A	E-POST			
5	MORETIME	.420	LB A/A	PRE	78.8 abc	100.0 a	100.0 a
5	COMMAND 3ME	1.00	LB A/A	PRE			
5	ROUNDUP ULTRA	.75	LB A/A	E-POST			
6	MORETIME	.563	LB A/A	PRE	80.0 abc	100.0 a	100.0 a
6	COMMAND 3 ME	1.00	LB A/A	PRE			
6	ROUNDUP ULTRA	.75	LB A/A	E-POST			
7	ROUNDUP ULTRA	.75	LB A/A	E-POST	73.8 bc	100.0 a	100.0 a
8	ROUNDUP ULTRA	1.00	LB A/A	E-POST	63.8 c	92.5 ab	96.3 a
9	FOE 5043	.200	LB A/A	PRE	72.5 bc	92.5 ab	100.0 a
9	CANOPY	.164	LB A/A	PRE			
9	ROUNDUP ULTRA	.75	LB A/A	E-POST			
10	SENCOR	.1875	LB A/A	PRE	77.5 abc	86.3 b	55.0 c
10	SULFENTRAZONE	.1875	LB A/A	PRE			
11	SENCOR	.281	LB A/A	PRE	86.3 ab	96.3 a	73.8 b
11	SULFENTRAZONE	.375	LB A/A	PRE			
12	SENCOR	.1875	LB A/A	PRE	96.3 a	100.0 a	100.0 a
12	SULFENTRAZONE	.1875	LB A/A	PRE			
12	ROUNDUP ULTRA	.75	LB A/A	E-POST			
LSD (P=.05)					19.21	9.74	9.61
Standard Deviation					13.30	6.74	6.66
CV					18.7	7.61	7.79

DOW AGROSCIENCES SOYBEAN HERBICIDE LIST

Trial ID: 99 DOW BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-28-99 Country: USA
City: BLACKSBURG State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1.CHEAL COMMON LAMBSQTR 2.AMBEL COMMON RAGWEED 3.DATST JIMSONWEED
4.MOLVE CARPETWEED 5. 6.
7. 8. 9.

Crop 1: BEANS Variety: SS RR-447 Planting Date: 5-21-99
Planting Method: ROWS Rate: 130000 ACRE Depth: 1.00 IN
Perennial Age: Row Spacing: 30 INCH Seed Bed: CONVENTIONAL
Soil Temperature: 67 F Soil Moisture: WET Emergence Date: 5-28-99

Crop 2: Variety: Planting Date:
Planting Method: Rate: Depth:
Perennial Age: Row Spacing: Seed Bed:
Soil Temperature: Soil Moisture: Emergence Date:

Crop 3: Variety: Planting Date:
Planting Method: Rate: Depth:
Perennial Age: Row Spacing: Seed Bed:
Soil Temperature: Soil Moisture: Emergence Date:

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4
Site Type:
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: SPRING DISK
Trial Initiation Comments:

Previous: Crops Pesticides Year
1. _____
2. _____
3. _____

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: % Silt: % Clay:
pH: 6.2 CEC: Soil Name: ROSS Fertility Level:

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DOW AGROSCIENCES SOYBEAN HERBICIDE LIST

Trial ID: 99 DOW BEANS Investigator: E.S. HAGOOD
 Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA. Distance: 12 Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-21-99	6-14-99	7-2-99			
Time of Day:	3-4 PM	12:30 PM	7:30 AM			
Application Method:	BROADCAST	BROADCAST	BROADCAST			
Application Timing:	PRE	E-POST	EPSEQ			
Applic. Placement:	SOIL	FOLIAGE	FOLIAGE			
Air Temp., Unit:	81 F	85 F	74 F			
% Relative Humidity:	35	60	90			
Wind Velocity, Unit:	5 MPH	4 MPH	0 MPH			
Dew Presence (Y/N):	N	N	Y			
Water Hardness:	N/A	N/A				
Soil Temp., Unit:	67 F	60 F	70 F			
Soil Moisture:	WET	DRY	DAMP			
% Cloud Cover:	5	60	60			

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DOW AGROSCIENCES SOYBEAN HERBICIDE LIST

Trial ID: 99 DOW BEANS Investigator: E.S. HAGOOD
 Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 BEANS Stage:	PRE	E-POST	EPSEQ			
Stage Scale:		2-3 TRIFL	5 TRIFOLI			
Height, Unit:		2.5 INCH	6 INCH			
Crop 2 Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 CHEAL Stage:	NONE	6 LEAF	12 LEAF			
Stage Scale:		1-2 INCH	6 INCH			
Density, Unit:		20 M2	15 M2			
Weed 2 AMBEL Stage:	NONE	8-10 LEAF				
Stage Scale:		1-2 INCH				
Density, Unit:		5-8 M2				
Weed 3 DATST Stage:	NONE	5 LEAF	12 LEAF			
Stage Scale:		2 INCH	4 INCH			
Density, Unit:		3 M2	2 M2			
Weed 4 MOLVE Stage:	NONE	5 LEAF	10 LEAF			
Stage Scale:		1" ROSETT	2"ROSETTE			
Density, Unit:		15 M2	10 M2			
Weed 5 Stage:			CYPES			
Stage Scale:			4 LF 3 IN			
Density, Unit:			2 M2			
Weed 6 Stage:						
Stage Scale:						
Density, Unit:						
Weed 7 Stage:						
Stage Scale:						
Density, Unit:						
Weed 8 Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 Stage:						
Stage Scale:						
Density, Unit:						

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DOW AGROSCIENCES SOYBEAN HERBICIDE LIST

Trial ID: 99 DOW BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

Table with columns A, B, C, D, E, F. Rows include: Appl. Equipment: BACKPACK; Operating Pressure: 34 PSI; Nozzle Type: FLAT FAN; Nozzle Size: 8003; Nozzle Spacing, Unit: 18 INCH; Nozzles/Row: 4; Band Width, Unit: 72 INCH; Boom Length, Unit: 72 INCH; Boom Height, Unit: 20 INCH; Ground Speed, Unit: 3.1 MPH; Incorporation Equip.; Hours to Incorp.; Incorp. Depth, Unit; Carrier: WATER; Spray Volume, Unit: 22.5 GPA; Spray pH; Propellant: CO/2; Tank Mix (Y/N): Y

Trt No Treatment Application Comment

Table with columns for Treatment Application Comment. Contains multiple rows of data, many of which are illegible due to faintness and bleed-through from the reverse side of the page.

VPI & SU

DOW AGROSCIENCES SOYBEAN HERBICIDE LIST

Trial ID: 99 DOW BEANS

Investigator: E.S. HAGOOD

Location: WHITETHORNE, VA.

Study Dir.: Scott Hagood

Weed Code	INJURY	AMBEL	CHEAL	DATST	MOLVE
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-14-99	6-14-99	6-14-99	6-14-99	6-14-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg										
1	PYTHON	.063	LB A/A	PRE	0.0	a	71.3	bcd	100.0	a	97.5	a	97.5	ab
2	PYTHON	.063	LB A/A	PRE	0.0	a	75.0	abc	100.0	a	97.5	a	97.5	ab
2	FIRSTRATE	.016	LB A/A	E-POST										
3	PYTHON	.063	LB A/A	PRE	0.0	a	76.3	ab	100.0	a	100.0	a	100.0	a
3	FIRSTRATE	.016	LB A/A	E-POST										
3	COC	1.20	% V/V	E-POST										
4	PYTHON	.063	LB A/A	PRE	0.0	a	67.5	d	97.5	ab	97.5	a	97.5	ab
4	ROUNDUP ULTRA	.75	LB A/A	E-POST										
5	PYTHON	.063	LB A/A	PRE	0.0	a	72.5	bcd	98.8	a	97.5	a	97.5	ab
5	ROUNDUP ULTRA	.75	LB A/A	E-POST										
6	PYTHON	.063	LB A/A	PRE	0.0	a	76.3	ab	100.0	a	93.8	a	97.5	ab
6	STRONGARM	.008	LB A/A	PRE										
7	PYTHON	.50	LB A/A	PRE	0.0	a	75.0	abc	92.5	c	95.0	a	95.0	b
7	TOUCHDOWN	.75	LB A/A	E-POST										
8	PYTHON	.063	LB A/A	PRE	0.0	a	71.3	bcd	97.5	ab	100.0	a	95.0	b
8	TOUCHDOWN	.75	LB A/A	E-POST										
9	DUAL II MAGNUM	.95	LB A/A	PRE	0.0	a	80.0	a	100.0	a	100.0	a	100.0	a
9	PYTHON	.063	LB A/A	PRE										
10	PYTHON	.063	LB A/A	PRE	0.0	a	70.0	cd	95.0	bc	95.0	a	95.0	b
10	FIRSTRATE	.016	LB A/A	E-POST										
10	ROUNDUP ULTRA	.50	LB A/A	E-POST										
11	DUAL II MAGNUM	.95	LB A/A	PRE	0.0	a	30.0	e	82.5	d	32.5	b	83.8	cd
11	FIRSTRATE	.016	LB A/A	E-POST										
11	COC	1.20	% V/V	E-POST										
12	DUAL II MAGNUM	.95	LB A/A	PRE	0.0	a	26.3	e	78.8	e	31.3	b	85.0	c
12	FIRSTRATE	.016	LB A/A	EPSEQ										
12	COC	1.20	% V/V	EPSEQ										
12	COC	1.20	% V/V	EPSEQ										

DOW AGROSCIENCES SOYBEAN HERBICIDE LIST

Trial ID: 99 DOW BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	AMBEL	CHEAL	DATST	MOLVE
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-14-99	6-14-99	6-14-99	6-14-99	6-14-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	INJURY	AMBEL	CHEAL	DATST	MOLVE
13	DUAL II MAGNUM	.95	LB A/A	PRE	0.0 a	28.8 e	80.0 de	30.0 b	80.0 d
13	FIRSTRATE	.031	LB A/A	E-POST					
13	COC	1.20	% V/V	E-POST					
14	FIRSTRATE	.008	LB A/A	E-POST	0.0 a	0.0 f	0.0 f	0.0 c	0.0 e
14	ROUNDUP ULTRA	.75	LB A/A	E-POST					
14	COC	1.20	% V/V	E-POST					
15	FIRSTRATE	.012	LB A/A	E-POST	0.0 a	0.0 f	0.0 f	0.0 c	0.0 e
15	ROUNDUP ULTRA	.75	LB A/A	E-POST					
16	FIRSTRATE	.016	LB A/A	E-POST	0.0 a	0.0 f	0.0 f	0.0 c	0.0 e
16	ROUNDUP ULTRA	.50	LB A/A	E-POST					
17	FIRSTRATE	.008	LB A/A	E-POST	0.0 a	0.0 f	0.0 f	0.0 c	0.0 e
17	TOUCHDOWN	.75	LB A/A	E-POST					
18	FIRSTRATE	.012	LB A/A	E-POST	0.0 a	0.0 f	0.0 f	0.0 c	0.0 e
18	TOUCHDOWN	.75	LB A/A	E-POST					
19	FIRSTRATE	.016	LB A/A	E-POST	0.0 a	0.0 f	0.0 f	0.0 c	0.0 e
19	TOUCHDOWN	.75	LB A/A	E-POST					
20	CONTROL				0.0 a	0.0 f	0.0 f	0.0 c	0.0 e
LSD (P=.05)					0.00	6.09	3.63	7.59	4.73
Standard Deviation					0.00	4.31	2.57	5.37	3.35
CV					0.0	10.51	4.2	10.05	5.48
Replicate F					0.000	3.683	0.568	0.246	1.666
Replicate Prob(F)					1.0000	0.0170	0.6383	0.8638	0.1844
Treatment F					0.000	260.305	1308.528	298.449	765.229
Treatment Prob(F)					1.0000	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

VPI & SU

DOW AGROSCIENCES SOYBEAN HERBICIDE LIST

Trial ID: 99 DOW BEANS

Investigator: E.S. HAGOOD

Location: WHITETHORNE, VA.

Study Dir.: Scott Hagood

Weed Code	IPOLA	INJURY	AMBEL	CHEAL	DATST
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-14-99	6-25-99	6-25-99	6-25-99	6-25-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	IPOLA	INJURY	AMBEL	CHEAL	DATST
1	PYTHON	.063	LB A/A	PRE	68.8 b	0.0 b	70.0 e	100.0 a	95.0 ab
2	PYTHON	.063	LB A/A	PRE	68.8 b	0.0 b	100.0 a	100.0 a	100.0 a
2	FIRSTRATE	.016	LB A/A	E-POST					
3	PYTHON	.063	LB A/A	PRE	68.8 b	0.0 b	97.5 ab	92.5 a	98.8 a
3	FIRSTRATE	.016	LB A/A	E-POST					
3	COC	1.20	% V/V	E-POST					
4	PYTHON	.063	LB A/A	PRE	72.5 b	0.0 b	100.0 a	100.0 a	100.0 a
4	ROUNDUP ULTRA	.75	LB A/A	E-POST					
5	PYTHON	.063	LB A/A	PRE	70.0 b	0.0 b	100.0 a	100.0 a	100.0 a
5	ROUNDUP ULTRA	.75	LB A/A	E-POST					
6	PYTHON	.063	LB A/A	PRE	73.8 ab	0.0 b	97.5 ab	100.0 a	95.0 ab
6	STRONGARM	.008	LB A/A	PRE					
7	PYTHON	.50	LB A/A	PRE	68.8 b	0.0 b	100.0 a	100.0 a	100.0 a
7	TOUCHDOWN	.75	LB A/A	E-POST					
8	PYTHON	.063	LB A/A	PRE	71.3 b	0.0 b	100.0 a	100.0 a	100.0 a
8	TOUCHDOWN	.75	LB A/A	E-POST					
9	DUAL II MAGNUM	.95	LB A/A	PRE	80.0 a	0.0 b	90.0 bc	95.0 a	96.3 ab
9	PYTHON	.063	LB A/A	PRE					
10	PYTHON	.063	LB A/A	PRE	67.5 b	0.0 b	100.0 a	100.0 a	100.0 a
10	FIRSTRATE	.016	LB A/A	E-POST					
10	ROUNDUP ULTRA	.50	LB A/A	E-POST					
11	DUAL II MAGNUM	.95	LB A/A	PRE	17.5 c	0.0 b	88.8 cd	77.5 b	91.3 b
11	FIRSTRATE	.016	LB A/A	E-POST					
11	COC	1.20	% V/V	E-POST					
12	DUAL II MAGNUM	.95	LB A/A	PRE	18.8 c	0.0 b	82.5 cd	60.0 c	96.3 ab
12	FIRSTRATE	.016	LB A/A	EPSEQ					
12	COC	1.20	% V/V	EPSEQ					
12	COC	1.20	% V/V	EPSEQ					

VPI & SU

DOW AGROSCIENCES SOYBEAN HERBICIDE LIST

Trial ID: 99 DOW BEANS Investigator: E.S. HAGOOD

Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	IPOLA	INJURY	AMBEL	CHEAL	DATST
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-14-99	6-25-99	6-25-99	6-25-99	6-25-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	IPOLA	INJURY	AMBEL	CHEAL	DATST
13	DUAL II MAGNUM	.95	LB A/A	PRE	23.8 c	2.5 a	81.3 d	80.0 b	96.3 ab
13	FIRSTRATE	.031	LB A/A	E-POST					
13	COC	1.20	% V/V	E-POST					
14	FIRSTRATE	.008	LB A/A	E-POST	0.0 d	0.0 b	100.0 a	100.0 a	100.0 a
14	ROUNDUP ULTRA	.75	LB A/A	E-POST					
14	COC	1.20	% V/V	E-POST					
15	FIRSTRATE	.012	LB A/A	E-POST	0.0 d	0.0 b	100.0 a	100.0 a	100.0 a
15	ROUNDUP ULTRA	.75	LB A/A	E-POST					
16	FIRSTRATE	.016	LB A/A	E-POST	0.0 d	0.0 b	98.8 a	93.8 a	100.0 a
16	ROUNDUP ULTRA	.50	LB A/A	E-POST					
17	FIRSTRATE	.008	LB A/A	E-POST	0.0 d	0.0 b	100.0 a	100.0 a	100.0 a
17	TOUCHDOWN	.75	LB A/A	E-POST					
18	FIRSTRATE	.012	LB A/A	E-POST	0.0 d	0.0 b	98.8 a	100.0 a	100.0 a
18	TOUCHDOWN	.75	LB A/A	E-POST					
19	FIRSTRATE	.016	LB A/A	E-POST	0.0 d	0.0 b	100.0 a	100.0 a	100.0 a
19	TOUCHDOWN	.75	LB A/A	E-POST					
20	CONTROL				0.0 d	0.0 b	0.0 f	0.0 d	0.0 c
LSD (P=.05)					7.37	1.58	8.52	11.38	6.56
Standard Deviation					5.21	1.12	6.02	8.05	4.64
CV					13.53	894.43	6.67	8.95	4.96
Replicate F					0.952	1.000	0.299	0.391	1.837
Replicate Prob(F)					0.4219	0.3995	0.8262	0.7601	0.1508
Treatment F					171.460	1.000	57.453	34.450	91.167
Treatment Prob(F)					0.0001	0.4750	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

DOW AGROSCIENCES SOYBEAN HERBICIDE LIST

Trial ID: 99 DOW BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	MOLVE	IPLOA	AMBEL	CHEAL	DATST
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-25-99	6-25-99	7-28-99	7-28-99	7-28-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg										
1	PYTHON	.063	LB A/A	PRE	100.0	a	66.3	d	61.3	d	90.0	ab	87.5	a-d
2	PYTHON	.063	LB A/A	PRE	97.5	ab	96.3	a	95.0	ab	96.3	a	98.8	ab
2	FIRSTRATE	.016	LB A/A	E-POST										
3	PYTHON	.063	LB A/A	PRE	100.0	a	92.5	abc	96.3	ab	91.3	ab	100.0	a
3	FIRSTRATE	.016	LB A/A	E-POST										
3	COC	1.20	% V/V	E-POST										
4	PYTHON	.063	LB A/A	PRE	100.0	a	97.5	a	100.0	a	100.0	a	98.8	ab
4	ROUNDUP ULTRA	.75	LB A/A	E-POST										
5	PYTHON	.063	LB A/A	PRE	100.0	a	96.3	a	100.0	a	100.0	a	92.5	abc
5	ROUNDUP ULTRA	.75	LB A/A	E-POST										
6	PYTHON	.063	LB A/A	PRE	100.0	a	95.0	a	87.5	c	93.8	ab	62.5	e
6	STRONGARM	.008	LB A/A	PRE										
7	PYTHON	.50	LB A/A	PRE	100.0	a	96.3	a	100.0	a	96.3	a	97.5	ab
7	TOUCHDOWN	.75	LB A/A	E-POST										
8	PYTHON	.063	LB A/A	PRE	100.0	a	100.0	a	100.0	a	98.8	a	95.0	ab
8	TOUCHDOWN	.75	LB A/A	E-POST										
9	DUAL II MAGNUM	.95	LB A/A	PRE	100.0	a	81.3	bc	66.3	d	91.3	ab	80.0	cd
9	PYTHON	.063	LB A/A	PRE										
10	PYTHON	.063	LB A/A	PRE	100.0	a	97.5	a	100.0	a	97.5	a	86.3	bcd
10	FIRSTRATE	.016	LB A/A	E-POST										
10	ROUNDUP ULTRA	.50	LB A/A	E-POST										
11	DUAL II MAGNUM	.95	LB A/A	PRE	95.0	b	80.0	c	92.5	bc	46.3	c	100.0	a
11	FIRSTRATE	.016	LB A/A	E-POST										
11	COC	1.20	% V/V	E-POST										
12	DUAL II MAGNUM	.95	LB A/A	PRE	98.8	ab	80.0	c	100.0	a	53.8	c	100.0	a
12	FIRSTRATE	.016	LB A/A	EPSEQ										
12	COC	1.20	% V/V	EPSEQ										
12	COC	1.20	% V/V	EPSEQ										

DOW AGROSCIENCES SOYBEAN HERBICIDE LIST

Trial ID: 99 DOW BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	MOLVE	IPLOA	AMBEL	CHEAL	DATST
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-25-99	6-25-99	7-28-99	7-28-99	7-28-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg					
13	DUAL II MAGNUM	.95	LB A/A	PRE	100.0 a	88.8 abc	98.8 ab	50.0 c	98.8 ab
13	FIRSTRATE	.031	LB A/A	E-POST					
13	COC	1.20	% V/V	E-POST					
14	FIRSTRATE	.008	LB A/A	E-POST	100.0 a	96.3 a	100.0 a	98.8 a	91.3 abc
14	ROUNDUP ULTRA	.75	LB A/A	E-POST					
14	COC	1.20	% V/V	E-POST					
15	FIRSTRATE	.012	LB A/A	E-POST	97.5 ab	96.3 a	100.0 a	96.3 a	95.0 ab
15	ROUNDUP ULTRA	.75	LB A/A	E-POST					
16	FIRSTRATE	.016	LB A/A	E-POST	100.0 a	96.3 a	100.0 a	82.5 b	97.5 ab
16	ROUNDUP ULTRA	.50	LB A/A	E-POST					
17	FIRSTRATE	.008	LB A/A	E-POST	100.0 a	92.5 abc	100.0 a	98.8 a	92.5 abc
17	TOUCHDOWN	.75	LB A/A	E-POST					
18	FIRSTRATE	.012	LB A/A	E-POST	100.0 a	93.8 ab	100.0 a	100.0 a	91.3 abc
18	TOUCHDOWN	.75	LB A/A	E-POST					
19	FIRSTRATE	.016	LB A/A	E-POST	100.0 a	93.8 ab	100.0 a	98.8 a	77.5 d
19	TOUCHDOWN	.75	LB A/A	E-POST					
20	CONTROL				0.0 c	0.0 e	0.0 e	0.0 d	0.0 f
	LSD (P=.05)				3.94	13.08	7.22	11.74	12.65
	Standard Deviation				2.79	9.25	5.10	8.30	8.95
	CV				2.95	10.65	5.68	9.88	10.27
	Replicate F				1.113	1.290	1.809	0.726	0.099
	Replicate Prob(F)				0.3515	0.2867	0.1558	0.5406	0.9603
	Treatment F				255.284	22.771	87.698	39.932	25.440
	Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

VPI & SU

DOW AGROSCIENCES SOYBEAN HERBICIDE LIST

Trial ID: 99 DOW BEANS

Investigator: E.S. HAGOOD

Location: WHITETHORNE, VA.

Study Dir.: Scott Hagood

Weed Code			MOLVE	IPOLA
Crop Code			SOYBEANS	SOYBEANS
Part Rated				
Rating Data Type			VISUAL	VISUAL
Rating Unit			0-100	0-100
Rating Date			7-28-99	7-28-99
Footnote Number				
Trt-Eval Interval				
PRM Data Type				
# Subsamples, Dec.				

Trt No.	Treatment Name	Rate	Unit	Grow Stg		
1	PYTHON	.063	LB A/A	PRE	75.0 ef	30.0 f
2	PYTHON	.063	LB A/A	PRE	87.5 bcd	87.5 ab
2	FIRSTRATE	.016	LB A/A	E-POST		
3	PYTHON	.063	LB A/A	PRE	73.8 ef	68.8 d
3	FIRSTRATE	.016	LB A/A	E-POST		
3	COC	1.20	% V/V	E-POST		
4	PYTHON	.063	LB A/A	PRE	97.5 ab	86.3 abc
4	ROUNDUP ULTRA	.75	LB A/A	E-POST		
5	PYTHON	.063	LB A/A	PRE	100.0 a	78.8 bcd
5	ROUNDUP ULTRA	.75	LB A/A	E-POST		
6	PYTHON	.063	LB A/A	PRE	82.5 cde	47.5 e
6	STRONGARM	.008	LB A/A	PRE		
7	PYTHON	.50	LB A/A	PRE	96.3 ab	75.0 cd
7	TOUCHDOWN	.75	LB A/A	E-POST		
8	PYTHON	.063	LB A/A	PRE	100.0 a	75.0 cd
8	TOUCHDOWN	.75	LB A/A	E-POST		
9	DUAL II MAGNUM	.95	LB A/A	PRE	90.0 abc	22.5 f
9	PYTHON	.063	LB A/A	PRE		
10	PYTHON	.063	LB A/A	PRE	98.8 a	87.5 ab
10	FIRSTRATE	.016	LB A/A	E-POST		
10	ROUNDUP ULTRA	.50	LB A/A	E-POST		
11	DUAL II MAGNUM	.95	LB A/A	PRE	72.5 ef	87.5 ab
11	FIRSTRATE	.016	LB A/A	E-POST		
11	COC	1.20	% V/V	E-POST		
12	DUAL II MAGNUM	.95	LB A/A	PRE	68.8 f	95.0 a
12	FIRSTRATE	.016	LB A/A	EPSEQ		
12	COC	1.20	% V/V	EPSEQ		
12	COC	1.20	% V/V	EPSEQ		

DOW AGROSCIENCES SOYBEAN HERBICIDE LIST

Trial ID: 99 DOW BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code MOLVE IPOLA
Crop Code SOYBEANS SOYBEANS
Part Rated
Rating Data Type VISUAL VISUAL
Rating Unit 0-100 0-100
Rating Date 7-28-99 7-28-99
Footnote Number
Trt-Eval Interval
PRM Data Type
Subsamples, Dec.

Trt No.	Treatment Name	Rate	Unit	Grow Stg		
13	DUAL II MAGNUM	.95	LB A/A	PRE	78.8	def 93.8 a
13	FIRSTRATE	.031	LB A/A	E-POST		
13	COC	1.20	% V/V	E-POST		
14	FIRSTRATE	.008	LB A/A	E-POST	100.0	a 75.0 cd
14	ROUNDUP ULTRA	.75	LB A/A	E-POST		
14	COC	1.20	% V/V	E-POST		
15	FIRSTRATE	.012	LB A/A	E-POST	98.8	a 88.8 ab
15	ROUNDUP ULTRA	.75	LB A/A	E-POST		
16	FIRSTRATE	.016	LB A/A	E-POST	100.0	a 81.3 bc
16	ROUNDUP ULTRA	.50	LB A/A	E-POST		
17	FIRSTRATE	.008	LB A/A	E-POST	95.0	ab 83.8 abc
17	TOUCHDOWN	.75	LB A/A	E-POST		
18	FIRSTRATE	.012	LB A/A	E-POST	95.0	ab 80.0 bcd
18	TOUCHDOWN	.75	LB A/A	E-POST		
19	FIRSTRATE	.016	LB A/A	E-POST	100.0	a 77.5 bcd
19	TOUCHDOWN	.75	LB A/A	E-POST		
20	CONTROL				0.0	g 0.0 g
	LSD (P=.05)				11.24	11.65
	Standard Deviation				7.94	8.23
	CV				9.29	11.59
	Replicate F				2.456	2.782
	Replicate Prob(F)				0.0723	0.0491
	Treatment F				33.121	39.081
	Treatment Prob(F)				0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

VPI & SU

CLASSIC+FIRSTRATE TANKMIXES:IMPACT OF POAST PLUS

Trial ID: 99 DUPONT BEANS Investigator: E.S. HAGOOD
 Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
 Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
 Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 6-14-99 Country: USA
 City: BLACKSBURG State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1.SORHA JOHNSONGRASS 2.AMBEL COMMON RAGWEED 3.SETFA GIANT RAGWEED
 4.CHEAL COMMON LAMBSQTR 5.DATST JIMSONWEED 6.MOLVE CARPETWEED
 7.IPOLA PITTED MRNGGLRY 8.AMBTR GIANT RAGWEED 9. _____

Crop 1: BEANS _____ Variety: RR-ST5 Planting Date: 5-21-99
 Planting Method: ROWS Rate: 130000 ACRE Depth: 1.00 IN
 Perennial Age: _____ Row Spacing: 30 INCH Seed Bed: _____
 Soil Temperature: 64 F Soil Moisture: DAMP, DRY Emergence Date: 5-28-99

Crop 2: _____ Variety: _____ Planting Date: _____
 Planting Method: _____ Rate: _____ Depth: _____
 Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
 Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
 Planting Method: _____ Rate: _____ Depth: _____
 Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
 Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4

Site Type: _____

Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK

Field Prep./Maintenance: SPRING DISK

Trial Initiation Comments: _____

Previous: Crops	Pesticides	Year
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: _____ % Silt: _____ % Clay: _____
 pH: 6.2 CEC: _____ Soil Name: ROSS Fertility Level: _____

VPI & SU

CLASSIC+FIRSTRATE TANKMIXES:IMPACT OF POAST PLUS

Trial ID: 99 DUPONT BEANS Investigator: E.S. HAGOOD

Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA.

Distance: 12 Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	6-14-99					
Time of Day:	1:00 PM					
Application Method:	BROADCAST					
Application Timing:	POST					
Applic. Placement:	FOLIAGE					
Air Temp., Unit:	80 F					
% Relative Humidity:	60					
Wind Velocity, Unit:	4 MPH					
Dew Presence (Y/N):	N					
Water Hardness:	N/A					
Soil Temp., Unit:	61 F					
Soil Moisture:	DRY					
% Cloud Cover:	60					

VPI & SU

CLASSIC+FIRSTRATE TANKMIXES:IMPACT OF POAST PLUS

Trial ID: 99 DUPONT BEANS Investigator: E.S. HAGOOD
 Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 BEANS Stage:	POST					
Stage Scale:	2-3 TRIFL					
Height, Unit:	2.5 INCH					
Crop 2 _____ Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 _____ Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 SORHA Stage:	4 LEAF					
Stage Scale:	2-3 INCH					
Density, Unit:	10 M2					
Weed 2 AMBEL Stage:	6 LEAF					
Stage Scale:	1-2 INCH					
Density, Unit:	20 M2					
Weed 3 SETFA Stage:	8 LEAF					
Stage Scale:	2-3 INCH					
Density, Unit:	1 M2					
Weed 4 CHEAL Stage:	8 LEAF					
Stage Scale:	1/2-2"					
Density, Unit:	15 M2					
Weed 5 DATST Stage:	5 LEAF					
Stage Scale:	1-2 INCH					
Density, Unit:	5 M2					
Weed 6 MOLVE Stage:	6 LEAF					
Stage Scale:	1" ROSETT					
Density, Unit:	15 M2					
Weed 7 IPOLA Stage:	2 LEAF					
Stage Scale:	1 INCH					
Density, Unit:	3 M2					
Weed 8 AMBTR Stage:	8 LEAF					
Stage Scale:	2-3 INCH					
Density, Unit:	1 M2					
Weed 9 _____ Stage:						
Stage Scale:						
Density, Unit:						

VPI & SU

CLASSIC+FIRSTRATE TANKMIXES:IMPACT OF POAST PLUS

Trial ID: 99 DUPONT BEANS Investigator: E.S. HAGOOD
 Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK					
Operating Pressure:	34 PSI					
Nozzle Type:	FLAT FAN					
Nozzle Size:	8003					
Nozzle Spacing, Unit:	18 INCH					
Nozzles/Row:	4					
Band Width, Unit:						
Boom Length, Unit:	72 INCH					
Boom Height, Unit:	20 INCH					
Ground Speed, Unit:	3.1 MPH					
Incorporation Equip.:						
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER					
Spray Volume, Unit:	22.5 GPA					
Spray pH:						
Propellant:	CO/2					
Tank Mix (Y/N):	Y					

Trt No Treatment Application Comment

Trt No	Treatment	Application	Comment
1	POAST PLUS	1875 LB/A	
2	POAST PLUS	1875 LB/A	
3	POAST PLUS	1875 LB/A	
4	POAST PLUS	1875 LB/A	
5	POAST PLUS	1875 LB/A	
6	POAST PLUS	1875 LB/A	
7	POAST PLUS	1875 LB/A	
8	POAST PLUS	1875 LB/A	
9	POAST PLUS	1875 LB/A	
10	POAST PLUS	1875 LB/A	
11	POAST PLUS	1875 LB/A	
12	POAST PLUS	1875 LB/A	
13	POAST PLUS	1875 LB/A	
14	POAST PLUS	1875 LB/A	
15	POAST PLUS	1875 LB/A	
16	POAST PLUS	1875 LB/A	
17	POAST PLUS	1875 LB/A	
18	POAST PLUS	1875 LB/A	
19	POAST PLUS	1875 LB/A	
20	POAST PLUS	1875 LB/A	
21	POAST PLUS	1875 LB/A	
22	POAST PLUS	1875 LB/A	
23	POAST PLUS	1875 LB/A	
24	POAST PLUS	1875 LB/A	
25	POAST PLUS	1875 LB/A	
26	POAST PLUS	1875 LB/A	
27	POAST PLUS	1875 LB/A	
28	POAST PLUS	1875 LB/A	
29	POAST PLUS	1875 LB/A	
30	POAST PLUS	1875 LB/A	
31	POAST PLUS	1875 LB/A	
32	POAST PLUS	1875 LB/A	
33	POAST PLUS	1875 LB/A	
34	POAST PLUS	1875 LB/A	
35	POAST PLUS	1875 LB/A	
36	POAST PLUS	1875 LB/A	
37	POAST PLUS	1875 LB/A	
38	POAST PLUS	1875 LB/A	
39	POAST PLUS	1875 LB/A	
40	POAST PLUS	1875 LB/A	
41	POAST PLUS	1875 LB/A	
42	POAST PLUS	1875 LB/A	
43	POAST PLUS	1875 LB/A	
44	POAST PLUS	1875 LB/A	
45	POAST PLUS	1875 LB/A	
46	POAST PLUS	1875 LB/A	
47	POAST PLUS	1875 LB/A	
48	POAST PLUS	1875 LB/A	
49	POAST PLUS	1875 LB/A	
50	POAST PLUS	1875 LB/A	
51	POAST PLUS	1875 LB/A	
52	POAST PLUS	1875 LB/A	
53	POAST PLUS	1875 LB/A	
54	POAST PLUS	1875 LB/A	
55	POAST PLUS	1875 LB/A	
56	POAST PLUS	1875 LB/A	
57	POAST PLUS	1875 LB/A	
58	POAST PLUS	1875 LB/A	
59	POAST PLUS	1875 LB/A	
60	POAST PLUS	1875 LB/A	
61	POAST PLUS	1875 LB/A	
62	POAST PLUS	1875 LB/A	
63	POAST PLUS	1875 LB/A	
64	POAST PLUS	1875 LB/A	
65	POAST PLUS	1875 LB/A	
66	POAST PLUS	1875 LB/A	
67	POAST PLUS	1875 LB/A	
68	POAST PLUS	1875 LB/A	
69	POAST PLUS	1875 LB/A	
70	POAST PLUS	1875 LB/A	
71	POAST PLUS	1875 LB/A	
72	POAST PLUS	1875 LB/A	
73	POAST PLUS	1875 LB/A	
74	POAST PLUS	1875 LB/A	
75	POAST PLUS	1875 LB/A	
76	POAST PLUS	1875 LB/A	
77	POAST PLUS	1875 LB/A	
78	POAST PLUS	1875 LB/A	
79	POAST PLUS	1875 LB/A	
80	POAST PLUS	1875 LB/A	
81	POAST PLUS	1875 LB/A	
82	POAST PLUS	1875 LB/A	
83	POAST PLUS	1875 LB/A	
84	POAST PLUS	1875 LB/A	
85	POAST PLUS	1875 LB/A	
86	POAST PLUS	1875 LB/A	
87	POAST PLUS	1875 LB/A	
88	POAST PLUS	1875 LB/A	
89	POAST PLUS	1875 LB/A	
90	POAST PLUS	1875 LB/A	
91	POAST PLUS	1875 LB/A	
92	POAST PLUS	1875 LB/A	
93	POAST PLUS	1875 LB/A	
94	POAST PLUS	1875 LB/A	
95	POAST PLUS	1875 LB/A	
96	POAST PLUS	1875 LB/A	
97	POAST PLUS	1875 LB/A	
98	POAST PLUS	1875 LB/A	
99	POAST PLUS	1875 LB/A	
100	POAST PLUS	1875 LB/A	

VPI & SU

CLASSIC+FIRSTRATE TANKMIXES:IMPACT OF POAST PLUS

Trial ID: 99 DUPONT BEANS Investigator: E.S. HAGOOD
 Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	AMBEL	CHEAL	MOLVE	ABUTH	IPOLA
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated						
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-25-99	6-25-99	6-25-99	6-25-99	6-25-99	6-25-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Unit	Grow Stg												
1	CLASSIC	.008	LB A/A	POST	10.0	bcd	90.0	a	0.0	d	0.0	c	90.0	ab	90.0	a
1	COC	1.00	% V/V	POST												
1	LIQUID NITRO	2.00	% V/V	POST												
1	POAST PLUS	.1875	LB A/A	POST												
2	CLASSIC	.008	LB A/A	POST	7.5	def	87.5	a	0.0	d	0.0	c	92.5	ab	87.5	a
2	COC	1.00	% V/V	POST												
2	LIQUID NITRO	2.00	% V/V	POST												
2	POAST PLUS	.1875	LB A/A	POST												
2	FIRST RATE	.004	LB A/A	POST												
3	CLASSIC	.008	LB A/A	POST	11.3	bc	90.0	a	0.0	d	0.0	c	92.5	ab	90.0	a
3	COC	1.00	% V/V	POST												
3	LIQUID NITRO	2.00	% V/V	POST												
3	POAST PLUS	.1875	LB A/A	POST												
3	FIRSTRATE	.008	LB A/A	POST												
4	CLASSIC	.008	LB A/A	POST	12.5	ab	83.8	a	0.0	d	0.0	c	91.3	ab	87.5	a
4	COC	1.00	% V/V	POST												
4	LIQUID NITRO	2.00	% V/V	POST												
4	ASSURE II	.055	LB A/A	POST												
4	FIRST RATE	.004	LB A/A	POST												
5	CLASSIC	.008	LB A/A	POST	10.0	bcd	86.3	a	0.0	d	0.0	c	95.0	ab	95.0	a
5	COC	1.00	% V/V	POST												
5	LIQUID NITRO	2.00	% V/V	POST												
5	ASSURE II	.055	LB A/A	POST												
5	FIRST RATE	.008	LB A/A	POST												
6	COC	1.00	% V/V	POST	0.0	h	82.5	a	0.0	d	0.0	c	88.8	ab	86.3	a
6	LIQUID NITRO	2.00	% V/V	POST												
6	POAST PLUS	.1875	LB A/A	POST												
6	FIRSTRATE	.002	LB A/A	POST												
7	COC	1.00	% V/V	POST	0.0	h	88.8	a	0.0	d	0.0	c	87.5	b	86.3	a
7	LIQUID NITRO	2.00	% V/V	POST												
7	POAST PLUS	.1875	LB A/A	POST												
7	FIRSTRATE	.004	LB A/A	POST												

11-10-99 (CLASPOAS)
VPI & SU

CLASSIC+FIRSTRATE TANKMIXES: IMPACT OF POAST PLUS

Trial ID: 99 DUPONT BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	AMBEL	CHEAL	MOLVE	ABUTH	IPOLA
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated						
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-25-99	6-25-99	6-25-99	6-25-99	6-25-99	6-25-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Unit	Grow Stg						
8	COC	1.00	% V/V	POST	2.5 gh	95.0 a	0.0 d	0.0 c	97.5 a	95.0 a
8	LIQUID NITRO	2.00	% V/V	POST						
8	POAST PLUS	.1875	LB A/A	POST						
8	FIRSTRATE	.008	LB A/A	POST						
9	COC	1.00	% V/V	POST	0.0 h	95.0 a	0.0 d	0.0 c	92.5 ab	92.5 a
9	LIQUID NITRO	2.00	% V/V	POST						
9	POAST PLUS	.1875	LB A/A	POST						
9	FIRSTRATE	.016	LB A/A	POST						
10	CLASSIC	.008	LB A/A	POST	6.3 ef	90.0 a	0.0 d	0.0 c	92.5 ab	90.0 a
10	COC	1.00	% V/V	POST						
10	LIQUID NITRO	2.00	% V/V	POST						
10	POAST PLUS	.1875	LB A/A	POST						
10	FIRSTRATE	.016	LB A/A	POST						
11	SYNCHRONY	.0066	LB A/A	POST	10.0 bcd	87.5 a	83.8 ab	58.8 a	95.0 ab	87.5 a
11	X-77	.25	% V/V	POST						
11	LIQUID NITRO	2.00	% V/V	POST						
11	POAST PLUS	.1875	LB A/A	POST						
11	FIRSTRATE	.004	LB A/A	POST						
12	SNYCHRONY	.0066	LB A/A	POST	15.0 a	85.0 a	80.0 bc	57.5 a	93.8 ab	87.5 a
12	X-77	.25	% V/V	POST						
12	LIQUID NITRO	2.00	% V/V	POST						
12	POAST PLUS	.1875	LB A/A	POST						
12	FIRSTRATE	.008	LB A/A	POST						
13	SYNCHRONY	.0086	LB A/A	POST	5.0 fg	90.0 a	77.5 c	52.5 a	97.5 a	91.3 a
13	X-77	.25	% V/V	POST						
13	LIQUID NITRO	2.00	% V/V	POST						
13	POAST PLUS	.1875	LB A/A	POST						
13	FIRSTRATE	.004	LB A/A	POST						
14	SYNCHRONY	.0086	LB A/A	POST	8.8 cde	91.3 a	85.0 a	36.3 b	92.5 ab	93.8 a
14	X-77	.25	% V/V	POST						
14	LIQUID NITRO	2.00	% V/V	POST						
14	POAST PLUS	.1875	LB A/A	POST						
14	FIRSTRATE	.008	LB A/A	POST						

CLASSIC+FIRSTRATE TANKMIXES:IMPACT OF POAST PLUS

Trial ID: 99 DUPONT BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	AMBEL	CHEAL	MOLVE	ABUTH	IPOLA
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated						
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-25-99	6-25-99	6-25-99	6-25-99	6-25-99	6-25-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Unit	Grow Stg	0.0 h	0.0 b	0.0 d	0.0 c	0.0 c	0.0 b
15	CONTROL									
	LSD (P=.05)				3.07	12.84	4.83	9.72	9.05	10.42
	Standard Deviation				2.15	8.98	3.38	6.80	6.33	7.29
	CV				32.59	10.84	15.53	49.78	7.32	8.68
	Replicate F				2.746	1.288	0.426	2.832	0.177	1.985
	Replicate Prob(F)				0.0548	0.2911	0.7353	0.0497	0.9117	0.1308
	Treatment F				22.397	26.667	489.584	49.542	57.985	41.293
	Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

CLASSIC+FIRSTRATE TANKMIXES:IMPACT OF POAST PLUS

Trial ID: 99 DUPONT BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	AMBEL	CHEAL	MOLVE	ABUTH	IPOLA
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated						
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	7-8-99	7-8-99	7-8-99	7-8-99	7-8-99	7-8-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Unit	Grow Stg						
1	CLASSIC	.008	LB A/A	POST	0.0 a	100.0 a	0.0 h	0.0 f	100.0 a	95.0 a
1	COC	1.00	% V/V	POST						
1	LIQUID NITRO	2.00	% V/V	POST						
1	POAST PLUS	.1875	LB A/A	POST						
2	CLASSIC	.008	LB A/A	POST	0.0 a	100.0 a	15.0 g	17.5 de	100.0 a	93.8 ab
2	COC	1.00	% V/V	POST						
2	LIQUID NITRO	2.00	% V/V	POST						
2	POAST PLUS	.1875	LB A/A	POST						
2	FIRST RATE	.004	LB A/A	POST						
3	CLASSIC	.008	LB A/A	POST	0.0 a	100.0 a	22.5 f	27.5 c	100.0 a	90.0 ab
3	COC	1.00	% V/V	POST						
3	LIQUID NITRO	2.00	% V/V	POST						
3	POAST PLUS	.1875	LB A/A	POST						
3	FIRSTRATE	.008	LB A/A	POST						
4	CLASSIC	.008	LB A/A	POST	0.0 a	100.0 a	0.0 h	0.0 f	100.0 a	93.8 ab
4	COC	1.00	% V/V	POST						
4	LIQUID NITRO	2.00	% V/V	POST						
4	ASSURE II	.055	LB A/A	POST						
4	FIRST RATE	.004	LB A/A	POST						
5	CLASSIC	.008	LB A/A	POST	0.0 a	100.0 a	5.0 h	0.0 f	100.0 a	95.0 a
5	COC	1.00	% V/V	POST						
5	LIQUID NITRO	2.00	% V/V	POST						
5	ASSURE II	.055	LB A/A	POST						
5	FIRST RATE	.008	LB A/A	POST						
6	COC	1.00	% V/V	POST	0.0 a	100.0 a	0.0 h	0.0 f	100.0 a	80.0 c
6	LIQUID NITRO	2.00	% V/V	POST						
6	POAST PLUS	.1875	LB A/A	POST						
6	FIRSTRATE	.002	LB A/A	POST						
7	COC	1.00	% V/V	POST	0.0 a	100.0 a	0.0 h	0.0 f	100.0 a	86.3 bc
7	LIQUID NITRO	2.00	% V/V	POST						
7	POAST PLUS	.1875	LB A/A	POST						
7	FIRSTRATE	.004	LB A/A	POST						

CLASSIC+FIRSTRATE TANKMIXES:IMPACT OF POAST PLUS

Trial ID: 99 DUPONT BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	AMBEL	CHEAL	MOLVE	ABUTH	IPOLA
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated						
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	7-8-99	7-8-99	7-8-99	7-8-99	7-8-99	7-8-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Unit	Grow Stg						
8	COC	1.00	% V/V	POST	0.0 a	100.0 a	40.0 d	47.5 ab	100.0 a	90.0 ab
8	LIQUID NITRO	2.00	% V/V	POST						
8	POAST PLUS	.1875	LB A/A	POST						
8	FIRSTRATE	.008	LB A/A	POST						
9	COC	1.00	% V/V	POST	0.0 a	100.0 a	57.5 c	43.8 b	100.0 a	91.3 ab
9	LIQUID NITRO	2.00	% V/V	POST						
9	POAST PLUS	.1875	LB A/A	POST						
9	FIRSTRATE	.016	LB A/A	POST						
10	CLASSIC	.008	LB A/A	POST	0.0 a	100.0 a	31.3 e	22.5 cd	100.0 a	92.5 ab
10	COC	1.00	% V/V	POST						
10	LIQUID NITRO	2.00	% V/V	POST						
10	POAST PLUS	.1875	LB A/A	POST						
10	FIRSTRATE	.016	LB A/A	POST						
11	SYNCHRONY	.0066	LB A/A	POST	0.0 a	100.0 a	92.5 b	55.0 a	100.0 a	90.0 ab
11	X-77	.25	% V/V	POST						
11	LIQUID NITRO	2.00	% V/V	POST						
11	POAST PLUS	.1875	LB A/A	POST						
11	FIRSTRATE	.004	LB A/A	POST						
12	SNYCHRONY	.0066	LB A/A	POST	0.0 a	100.0 a	93.8 ab	51.3 ab	100.0 a	88.8 ab
12	X-77	.25	% V/V	POST						
12	LIQUID NITRO	2.00	% V/V	POST						
12	POAST PLUS	.1875	LB A/A	POST						
12	FIRSTRATE	.008	LB A/A	POST						
13	SYNCHRONY	.0086	LB A/A	POST	0.0 a	100.0 a	92.5 b	50.0 ab	100.0 a	88.3 abc
13	X-77	.25	% V/V	POST						
13	LIQUID NITRO	2.00	% V/V	POST						
13	POAST PLUS	.1875	LB A/A	POST						
13	FIRSTRATE	.004	LB A/A	POST						
14	SYNCHRONY	.0086	LB A/A	POST	0.0 a	100.0 a	98.8 a	12.5 e	100.0 a	95.0 a
14	X-77	.25	% V/V	POST						
14	LIQUID NITRO	2.00	% V/V	POST						
14	POAST PLUS	.1875	LB A/A	POST						
14	FIRSTRATE	.008	LB A/A	POST						

CLASSIC+FIRSTRATE TANKMIXES:IMPACT OF POAST PLUS

Trial ID: 99 DUPONT BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	AMBEL	CHEAL	MOLVE	ABUTH	IPOLA
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated						
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	7-8-99	7-8-99	7-8-99	7-8-99	7-8-99	7-8-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Grow Unit	Stg										
15	CONTROL	0.0	a		0.0	b	0.0	h	0.0	f	0.0	b	0.0	d
	LSD (P=.05)	0.00			0.00				5.81		8.61		0.00	8.54
	Standard Deviation	0.00			0.00				4.07		6.02		0.00	5.98
	CV	0.0			0.0				11.12		27.59		0.0	7.06
	Replicate F	0.000			0.000				1.234		3.567		0.000	0.325
	Replicate Prob(F)	1.0000			1.0000				0.3094		0.0219		1.0000	0.8070
	Treatment F	0.000			0.000				383.604		54.297		0.000	63.154
	Treatment Prob(F)	1.0000			1.0000				0.0001		0.0001		1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

CLASSIC+FIRSTRATE TANKMIXES:IMPACT OF POAST PLUS

Trial ID: 99 DUPONT BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	SORHA	INJURY	AMBEL	CHEAL	DATST	IPOLA
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated						
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	7-8-99	8-30-99	8-30-99	8-30-99	8-30-99	8-30-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Unit	Grow Stg	SORHA	INJURY	AMBEL	CHEAL	DATST	IPOLA
1	CLASSIC	.008	LB A/A	POST	95.0 ab	0.0 a	98.8 a	5.0 c	98.8 ab	92.5 abc
1	COC	1.00	% V/V	POST						
1	LIQUID NITRO	2.00	% V/V	POST						
1	POAST PLUS	.1875	LB A/A	POST						
2	CLASSIC	.008	LB A/A	POST	90.0 bc	0.0 a	98.8 a	7.5 c	100.0 a	95.0 ab
2	COC	1.00	% V/V	POST						
2	LIQUID NITRO	2.00	% V/V	POST						
2	POAST PLUS	.1875	LB A/A	POST						
2	FIRST RATE	.004	LB A/A	POST						
3	CLASSIC	.008	LB A/A	POST	94.5 ab	0.0 a	100.0 a	5.0 c	100.0 a	90.0 bcd
3	COC	1.00	% V/V	POST						
3	LIQUID NITRO	2.00	% V/V	POST						
3	POAST PLUS	.1875	LB A/A	POST						
3	FIRSTRATE	.008	LB A/A	POST						
4	CLASSIC	.008	LB A/A	POST	98.3 a	0.0 a	100.0 a	0.0 c	100.0 a	97.5 ab
4	COC	1.00	% V/V	POST						
4	LIQUID NITRO	2.00	% V/V	POST						
4	ASSURE II	.055	LB A/A	POST						
4	FIRST RATE	.004	LB A/A	POST						
5	CLASSIC	.008	LB A/A	POST	97.5 a	0.0 a	100.0 a	2.5 c	100.0 a	96.3 ab
5	COC	1.00	% V/V	POST						
5	LIQUID NITRO	2.00	% V/V	POST						
5	ASSURE II	.055	LB A/A	POST						
5	FIRST RATE	.008	LB A/A	POST						
6	COC	1.00	% V/V	POST	95.0 ab	0.0 a	96.3 ab	5.0 c	100.0 a	95.0 ab
6	LIQUID NITRO	2.00	% V/V	POST						
6	POAST PLUS	.1875	LB A/A	POST						
6	FIRSTRATE	.002	LB A/A	POST						
7	COC	1.00	% V/V	POST	93.8 ab	0.0 a	97.5 ab	5.0 c	100.0 a	100.0 a
7	LIQUID NITRO	2.00	% V/V	POST						
7	POAST PLUS	.1875	LB A/A	POST						
7	FIRSTRATE	.004	LB A/A	POST						

CLASSIC+FIRSTRATE TANKMIXES:IMPACT OF POAST PLUS

Trial ID: 99 DUPONT BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	SORHA	INJURY	AMBEL	CHEAL	DATST	IPOLA
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated						
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	7-8-99	8-30-99	8-30-99	8-30-99	8-30-99	8-30-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Unit	Grow Stg						
8	COC	1.00	% V/V	POST	96.3 ab	0.0 a	100.0 a	0.0 c	100.0 a	100.0 a
8	LIQUID NITRO	2.00	% V/V	POST						
8	POAST PLUS	.1875	LB A/A	POST						
8	FIRSTRATE	.008	LB A/A	POST						
9	COC	1.00	% V/V	POST	93.8 ab	0.0 a	100.0 a	0.0 c	100.0 a	100.0 a
9	LIQUID NITRO	2.00	% V/V	POST						
9	POAST PLUS	.1875	LB A/A	POST						
9	FIRSTRATE	.016	LB A/A	POST						
10	CLASSIC	.008	LB A/A	POST	94.5 ab	0.0 a	97.5 ab	2.5 c	100.0 a	96.3 ab
10	COC	1.00	% V/V	POST						
10	LIQUID NITRO	2.00	% V/V	POST						
10	POAST PLUS	.1875	LB A/A	POST						
10	FIRSTRATE	.016	LB A/A	POST						
11	SYNCHRONY	.0066	LB A/A	POST	95.8 ab	0.0 a	100.0 a	57.5 ab	95.0 bc	82.5 de
11	X-77	.25	% V/V	POST						
11	LIQUID NITRO	2.00	% V/V	POST						
11	POAST PLUS	.1875	LB A/A	POST						
11	FIRSTRATE	.004	LB A/A	POST						
12	SNYCHRONY	.0066	LB A/A	POST	93.8 ab	0.0 a	98.8 a	43.8 b	98.8 ab	81.3 de
12	X-77	.25	% V/V	POST						
12	LIQUID NITRO	2.00	% V/V	POST						
12	POAST PLUS	.1875	LB A/A	POST						
12	FIRSTRATE	.008	LB A/A	POST						
13	SYNCHRONY	.0086	LB A/A	POST	92.0 ab	0.0 a	97.5 ab	57.5 ab	90.0 d	77.5 e
13	X-77	.25	% V/V	POST						
13	LIQUID NITRO	2.00	% V/V	POST						
13	POAST PLUS	.1875	LB A/A	POST						
13	FIRSTRATE	.004	LB A/A	POST						
14	SYNCHRONY	.0086	LB A/A	POST	85.0 c	0.0 a	93.8 b	68.8 a	91.3 cd	85.0 cde
14	X-77	.25	% V/V	POST						
14	LIQUID NITRO	2.00	% V/V	POST						
14	POAST PLUS	.1875	LB A/A	POST						
14	FIRSTRATE	.008	LB A/A	POST						

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CLASSIC+FIRSTRATE TANKMIXES:IMPACT OF POAST PLUS

Trial ID: 99 DUPONT BEANS Investigator: E.S. HAGOOD
 Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	SORHA	INJURY	AMBEL	CHEAL	DATST	IPOLA
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated						
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	7-8-99	8-30-99	8-30-99	8-30-99	8-30-99	8-30-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt	Treatment	Rate	Grow							
No.	Name	Rate	Unit	Stg						
15	CONTROL				0.0 d	0.0 a	0.0 c	0.0 c	0.0 e	0.0 f
	LSD (P=.05)				6.48	0.00	4.70	16.18	4.14	9.66
	Standard Deviation				4.54	0.00	3.29	11.32	2.89	6.76
	CV				5.17	0.0	3.58	65.33	3.16	7.87
	Replicate F				2.806	0.000	3.532	0.849	0.182	1.371
	Replicate Prob(F)				0.0512	1.0000	0.0227	0.4749	0.9077	0.2646
	Treatment F				116.299	0.000	240.347	19.864	311.957	54.138
	Treatment Prob(F)				0.0001	1.0000	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

1	CONTROL				0.0 d	0.0 a	0.0 c	0.0 c	0.0 e	0.0 f
2	CLASSIC				0.0 d	0.0 a	0.0 c	0.0 c	0.0 e	0.0 f
3	POST PLUS				0.0 d	0.0 a	0.0 c	0.0 c	0.0 e	0.0 f
4	FIRST RATE				0.0 d	0.0 a	0.0 c	0.0 c	0.0 e	0.0 f
5	POST PLUS				0.0 d	0.0 a	0.0 c	0.0 c	0.0 e	0.0 f
6	FIRST RATE				0.0 d	0.0 a	0.0 c	0.0 c	0.0 e	0.0 f
7	POST PLUS				0.0 d	0.0 a	0.0 c	0.0 c	0.0 e	0.0 f
8	FIRST RATE				0.0 d	0.0 a	0.0 c	0.0 c	0.0 e	0.0 f
9	POST PLUS				0.0 d	0.0 a	0.0 c	0.0 c	0.0 e	0.0 f
10	FIRST RATE				0.0 d	0.0 a	0.0 c	0.0 c	0.0 e	0.0 f
11	POST PLUS				0.0 d	0.0 a	0.0 c	0.0 c	0.0 e	0.0 f
12	FIRST RATE				0.0 d	0.0 a	0.0 c	0.0 c	0.0 e	0.0 f
13	POST PLUS				0.0 d	0.0 a	0.0 c	0.0 c	0.0 e	0.0 f
14	FIRST RATE				0.0 d	0.0 a	0.0 c	0.0 c	0.0 e	0.0 f
15	CONTROL				0.0 d	0.0 a	0.0 c	0.0 c	0.0 e	0.0 f

CLASSIC+FIRSTRATE TANKMIXES: IMPACT OF POAST PLUS

Trial ID: 99 DUPONT BEANS Investigator: E. S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code MOLVE
Crop Code SOYBEANS
Part Rated
Rating Data Type VISUAL
Rating Unit 0-100
Rating Date 8-30-99
Footnote Number
Trt-Eval Interval
PRM Data Type
Subsamples, Dec.

Trt No.	Treatment Name	Rate	Unit	Grow Stg	Mean	SE	DF	LSMEAN	DF
1	CLASSIC	.008	LB A/A	POST	97.5	ab			
1	COC	1.00	% V/V	POST					
1	LIQUID NITRO	2.00	% V/V	POST					
1	POAST PLUS	.1875	LB A/A	POST					
2	CLASSIC	.008	LB A/A	POST	97.5	ab			
2	COC	1.00	% V/V	POST					
2	LIQUID NITRO	2.00	% V/V	POST					
2	POAST PLUS	.1875	LB A/A	POST					
2	FIRST RATE	.004	LB A/A	POST					
3	CLASSIC	.008	LB A/A	POST	95.0	abc			
3	COC	1.00	% V/V	POST					
3	LIQUID NITRO	2.00	% V/V	POST					
3	POAST PLUS	.1875	LB A/A	POST					
3	FIRSTRATE	.008	LB A/A	POST					
4	CLASSIC	.008	LB A/A	POST	98.8	a			
4	COC	1.00	% V/V	POST					
4	LIQUID NITRO	2.00	% V/V	POST					
4	ASSURE II	.055	LB A/A	POST					
4	FIRST RATE	.004	LB A/A	POST					
5	CLASSIC	.008	LB A/A	POST	97.5	ab			
5	COC	1.00	% V/V	POST					
5	LIQUID NITRO	2.00	% V/V	POST					
5	ASSURE II	.055	LB A/A	POST					
5	FIRST RATE	.008	LB A/A	POST					
6	COC	1.00	% V/V	POST	95.0	abc			
6	LIQUID NITRO	2.00	% V/V	POST					
6	POAST PLUS	.1875	LB A/A	POST					
6	FIRSTRATE	.002	LB A/A	POST					
7	COC	1.00	% V/V	POST	97.5	ab			
7	LIQUID NITRO	2.00	% V/V	POST					
7	POAST PLUS	.1875	LB A/A	POST					
7	FIRSTRATE	.004	LB A/A	POST					

CLASSIC+FIRSTRATE TANKMIXES: IMPACT OF POAST PLUS

Trial ID: 99 DUPONT BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code MOLVE
Crop Code SOYBEANS
Part Rated
Rating Data Type VISUAL
Rating Unit 0-100
Rating Date 8-30-99
Footnote Number
Trt-Eval Interval
PRM Data Type
Subsamples, Dec.

Trt No.	Treatment Name	Rate	Unit	Grow Stg	
8	COC	1.00	% V/V	POST	100.0 a
8	LIQUID NITRO	2.00	% V/V	POST	
8	POAST PLUS	.1875	LB A/A	POST	
8	FIRSTRATE	.008	LB A/A	POST	
9	COC	1.00	% V/V	POST	97.5 ab
9	LIQUID NITRO	2.00	% V/V	POST	
9	POAST PLUS	.1875	LB A/A	POST	
9	FIRSTRATE	.016	LB A/A	POST	
10	CLASSIC	.008	LB A/A	POST	97.5 ab
10	COC	1.00	% V/V	POST	
10	LIQUID NITRO	2.00	% V/V	POST	
10	POAST PLUS	.1875	LB A/A	POST	
10	FIRSTRATE	.016	LB A/A	POST	
11	SYNCHRONY	.0066	LB A/A	POST	92.5 bc
11	X-77	.25	% V/V	POST	
11	LIQUID NITRO	2.00	% V/V	POST	
11	POAST PLUS	.1875	LB A/A	POST	
11	FIRSTRATE	.004	LB A/A	POST	
12	SNYCHRONY	.0066	LB A/A	POST	96.3 ab
12	X-77	.25	% V/V	POST	
12	LIQUID NITRO	2.00	% V/V	POST	
12	POAST PLUS	.1875	LB A/A	POST	
12	FIRSTRATE	.008	LB A/A	POST	
13	SYNCHRONY	.0086	LB A/A	POST	97.5 ab
13	X-77	.25	% V/V	POST	
13	LIQUID NITRO	2.00	% V/V	POST	
13	POAST PLUS	.1875	LB A/A	POST	
13	FIRSTRATE	.004	LB A/A	POST	
14	SYNCHRONY	.0086	LB A/A	POST	90.0 c
14	X-77	.25	% V/V	POST	
14	LIQUID NITRO	2.00	% V/V	POST	
14	POAST PLUS	.1875	LB A/A	POST	
14	FIRSTRATE	.008	LB A/A	POST	

CLASSIC+FIRSTRATE TANKMIXES:IMPACT OF POAST PLUS

Trial ID: 99 DUPONT BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code MOLVE
Crop Code SOYBEANS
Part Rated
Rating Data Type VISUAL
Rating Unit 0-100
Rating Date 8-30-99
Footnote Number
Trt-Eval Interval
PRM Data Type
Subsamples, Dec.

Trt Treatment	Rate	Grow
No. Name	Rate Unit	Stg
15 CONTROL		0.0 d
LSD (P=.05)	5.73	
Standard Deviation	4.01	
CV	4.45	
Replicate F	5.468	
Replicate Prob(F)	0.0029	
Treatment F	156.026	
Treatment Prob(F)	0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)

DUPONT CONVENTIONAL SOYBEANS

Trial ID: DUPONT CONV BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061

Trial Status: ONGOING Initiation Date: 4-28-99 Country: USA
City: BLACKSBURG, State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1.SETFA GIANT FOXTAIL 2.ABUTH VELVETLEAF 3.DATST JIMSONWEED
4.IPOLA PITTED MRNGGLRY 5.CHEAL COMMON LAMBSQTR 6.SIDSP PRICKLY SIDA
7.XANST COMMON COCKLEBR 8. _____ 9. _____

Crop 1: BEANS _____ Variety: SS RT-447 Planting Date: 5-21-99
Planting Method: ROWS Rate: 130000 ACRE Depth: 1.00 IN
Perennial Age: _____ Row Spacing: 30 INCH Seed Bed: _____
Soil Temperature: 66 F Soil Moisture: MOIST/WET Emergence Date: 5-29-99

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4

Site Type: _____
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: SPRING DISK
Trial Initiation Comments: _____

Previous: Crops	Pesticides	Year
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: _____ % Silt: _____ % Clay: _____
pH: 6.2 CEC: _____ Soil Name: ROSS Fertility Level: _____

DUPONT CONVENTIONAL SOYBEANS

Trial ID: DUPONT CONV BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA. Distance: 12 Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-21-99	6-14-99				
Time of Day:	10-11 AM	1:00 PM				
Application Method:	BROADCAST	BROADCAST				
Application Timing:	PRE	E-POST				
Applic. Placement:	SOIL	FOLIAGE				
Air Temp., Unit:	67 F	80 F				
% Relative Humidity:	30	60				
Wind Velocity, Unit:	5 MPH	5 MPH				
Dew Presence (Y/N):	N	N				
Water Hardness:						
Soil Temp., Unit:	66 F					
Soil Moisture:	WET	VERY DRY				
% Cloud Cover:	15	60				

DUPONT CONVENTIONAL SOYBEANS

Trial ID: DUPONT CONV BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 BEANS Stage:	PRE	E-POST				
Stage Scale:		2-3 TRIFL				
Height, Unit:		3.00 INCH				
Crop 2 _____ Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 _____ Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 SETFA Stage:	NONE	5 LEAF				
Stage Scale:		4 INCH				
Density, Unit:		40 M2				
Weed 2 ABUTH Stage:	NONE	4 LEAF				
Stage Scale:		2-3 INCH				
Density, Unit:		4 M2				
Weed 3 DATST Stage:	NONE	4 LEAF				
Stage Scale:		2 INCH				
Density, Unit:		2 M2				
Weed 4 IPOLA Stage:	NONE	4 LEAF				
Stage Scale:		2 INCH				
Density, Unit:		4 M2				
Weed 5 CHEAL Stage:	NONE	8 LEAF				
Stage Scale:		2 INCH				
Density, Unit:		3-6 M2				
Weed 6 SIDSP Stage:	NONE	3 LEAF				
Stage Scale:		1 INCH				
Density, Unit:		2 M2				
Weed 7 XANST Stage:	NONE	7 LEAF				
Stage Scale:		5-6 INCH				
Density, Unit:		6 M2				
Weed 8 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 _____ Stage:						
Stage Scale:						
Density, Unit:						

DUPONT CONVENTIONAL SOYBEANS

Trial ID: DUPONT CONV BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK				
Operating Pressure:	34 PSI	34 PSI				
Nozzle Type:	FLAT FAN	FLAT FAN				
Nozzle Size:	8003	8003				
Nozzle Spacing, Unit:	18 INCH	18 INCH				
Nozzles/Row:	4	4				
Band Width, Unit:						
Boom Length, Unit:	72 INCH	72 INCH				
Boom Height, Unit:	20 INCH	20 INCH				
Ground Speed, Unit:	3.1 MPH	3.1 MPH				
Incorporation Equip.:						
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER	WATER				
Spray Volume, Unit:	22.5 GPA	22.5 GPA				
Spray pH:						
Propellant:	CO/2	CO/2				
Tank Mix (Y/N):	Y	Y				

Trt No	Treatment Application Comment
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DUPONT CONVENTIONAL SOYBEANS

Trial ID: DUPONT CONV BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code				INJURY	IPOLA	DATST	AMBEL	SIDSP	
Crop Code				SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	
Part Rated									
Rating Data Type				VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	
Rating Unit				0-100	0-100	0-100	0-100	0-100	
Rating Date				6-14-99	6-14-99	6-14-99	6-14-99	6-14-99	
Footnote Number									
Trt-Eval Interval									
PRM Data Type									
# Subsamples, Dec.									
Trt No.	Treatment Name	Rate	Unit	Grow Stg					
1	AUTHORITY	.188	LB A/A	PRE	0.0 a	81.3 a	82.5 b	80.0 b	88.8 c
1	ROUNDUP UITRA	.75	LB A/A	E-POST					
2	AUTHORITY	.188	LB A/A	PRE	0.0 a	77.5 ab	55.0 c	57.5 c	90.0 c
2	ROUNDUP UITRA	.75	LB A/A	E-POST					
2	CLASSIC	.005	LB A/A	E-POST					
2	NIS	.250	% V/V	E-POST					
3	AUTHORITY	.188	LB A/A	PRE	0.0 a	77.5 ab	82.5 b	76.3 b	90.0 c
3	SYNCHRONY	.013	LB A/A	E-POST					
3	NIS	.250	% V/V	E-POST					
4	CANOPY XL	.113	LB A/A	PRE	0.0 a	75.0 b	78.8 b	88.8 ab	93.8 bc
4	ROUNDUP ULTRA	.75	LB A/A	E-POST					
5	CANOPY XL	.113	LB A/A	PRE	0.0 a	75.0 b	75.0 b	90.0 ab	92.5 bc
5	ROUNDUP ULTRA	.75	LB A/A	E-POST					
5	CLASSIC	.005	LB A/A	E-POST					
5	NIS	.250	% V/V	E-POST					
6	CANOPY XL	.113	LB A/A	PRE	0.0 a	75.0 b	77.5 b	97.5 a	97.5 ab
6	NIS	.250	% V/V	E-POST					
6	SYNCHRONY	.013	LB A/A	E-POST					
7	SYNCHRONY	.013	LB A/A	E-POST	0.0 a	0.0 d	0.0 d	0.0 d	0.0 d
7	ASSURE	.069	LB A/A	E-POST					
7	NIS	.250	% V/V	E-POST					
8	CLASSIC	.005	LB A/A	E-POST	0.0 a	0.0 d	0.0 d	0.0 d	0.0 d
8	ROUNDUP ULTRA	.75	LB A/A	E-POST					
8	NIS	.250	% V/V	E-POST					
9	SYNCHRONY	.013	LB A/A	E-POST	0.0 a	0.0 d	0.0 d	0.0 d	0.0 d
9	PURSUIT	.088	LB A/A	E-POST					
9	ASSURE	.069	LB A/A	E-POST					
9	NIS	.250	% V/V	E-POST					
10	ROUNDUP ULTRA	.75	LB A/A	E-POST	0.0 a	0.0 d	0.0 d	0.0 d	0.0 d

DUPONT CONVENTIONAL SOYBEANS

Trial ID: DUPONT CONV BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	IPOLA	DATST	AMBEL	SIDSP
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-14-99	6-14-99	6-14-99	6-14-99	6-14-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	INJURY	IPOLA	DATST	AMBEL	SIDSP
11	COMMAND	.75	LB A/A	PRE	0.0 a	47.5 c	100.0 a	97.5 a	100.0 a
11	ROUNDUP ULTRA	.75	LB A/A	E-POST					
12	CONTROL				0.0 a	0.0 d	0.0 d	0.0 d	0.0 d
LSD (P=.05)					0.00	5.24	15.86	17.33	5.01
Standard Deviation					0.00	3.63	10.99	12.01	3.47
CV					0.0	8.55	23.92	24.52	6.39
Replicate F					0.000	0.251	0.856	3.137	3.859
Replicate Prob(F)					1.0000	0.8601	0.4737	0.0384	0.0180
Treatment F					0.000	447.425	57.675	54.866	767.450
Treatment Prob(F)					1.0000	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

DUPONT CONVENTIONAL SOYBEANS

Trial ID: DUPONT CONV BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	ABUTH	SETFA	INJURY	IPOLA	DATST
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-14-99	6-14-99	6-25-99	6-25-99	6-25-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	ABUTH	SETFA	INJURY	IPOLA	DATST
1	AUTHORITY	.188	LB A/A	PRE	93.8 b	67.5 b	0.0 b	100.0 a	100.0 a
1	ROUNDUP UITRA	.75	LB A/A	E-POST					
2	AUTHORITY	.188	LB A/A	PRE	93.8 b	66.3 b	0.0 b	100.0 a	100.0 a
2	ROUNDUP UITRA	.75	LB A/A	E-POST					
2	CLASSIC	.005	LB A/A	E-POST					
2	NIS	.250	% V/V	E-POST					
3	AUTHORITY	.188	LB A/A	PRE	93.8 b	68.8 b	0.0 b	87.5 cd	100.0 a
3	SYNCHRONY	.013	LB A/A	E-POST					
3	NIS	.250	% V/V	E-POST					
4	CANOPY XL	.113	LB A/A	PRE	93.8 b	26.3 c	0.0 b	96.3 ab	100.0 a
4	ROUNDUP ULTRA	.75	LB A/A	E-POST					
5	CANOPY XL	.113	LB A/A	PRE	95.0 b	30.0 c	0.0 b	98.8 a	100.0 a
5	ROUNDUP ULTRA	.75	LB A/A	E-POST					
5	CLASSIC	.005	LB A/A	E-POST					
5	NIS	.250	% V/V	E-POST					
6	CANOPY XL	.113	LB A/A	PRE	97.5 ab	30.0 c	0.0 b	91.3 bc	100.0 a
6	NIS	.250	% V/V	E-POST					
6	SYNCHRONY	.013	LB A/A	E-POST					
7	SYNCHRONY	.013	LB A/A	E-POST	0.0 c	0.0 d	0.0 b	82.5 de	93.8 b
7	ASSURE	.069	LB A/A	E-POST					
7	NIS	.250	% V/V	E-POST					
8	CLASSIC	.005	LB A/A	E-POST	0.0 c	0.0 d	0.0 b	90.0 bc	100.0 a
8	ROUNDUP ULTRA	.75	LB A/A	E-POST					
8	NIS	.250	% V/V	E-POST					
9	SYNCHRONY	.013	LB A/A	E-POST	0.0 c	0.0 d	5.0 a	80.0 e	96.3 b
9	PURSUIT	.088	LB A/A	E-POST					
9	ASSURE	.069	LB A/A	E-POST					
9	NIS	.250	% V/V	E-POST					
10	ROUNDUP ULTRA	.75	LB A/A	E-POST	0.0 c	0.0 d	0.0 b	96.3 ab	100.0 a

DUPONT CONVENTIONAL SOYBEANS

Trial ID: DUPONT CONV BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	ABUTH	SETFA	INJURY	IPOLA	DATST
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-14-99	6-14-99	6-25-99	6-25-99	6-25-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	ABUTH	SETFA	INJURY	IPOLA	DATST
11	COMMAND	.75	LB A/A	PRE	100.0 a	100.0 a	0.0 b	96.3 ab	100.0 a
11	ROUNDUP ULTRA	.75	LB A/A	E-POST					
12	CONTROL				0.0 c	0.0 d	0.0 b	0.0 f	0.0 c
LSD (P=.05)					4.96	6.24	2.41	7.44	2.90
Standard Deviation					3.44	4.32	1.67	5.15	2.01
CV					6.18	13.35	400.0	6.07	2.21
Replicate F					4.529	0.251	1.000	0.229	0.344
Replicate Prob(F)					0.0091	0.8603	0.4051	0.8755	0.7938
Treatment F					818.037	263.785	3.000	114.380	814.031
Treatment Prob(F)					0.0001	0.0001	0.0071	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

DUPONT CONVENTIONAL SOYBEANS

Trial ID: DUPONT CONV BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	AMBEL	SIDSP	ABUTH	SETFA	IPOLA
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-25-99	6-25-99	6-25-99	6-25-99	7-28-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	AMBEL	SIDSP	ABUTH	SETFA	IPOLA
1	AUTHORITY	.188	LB A/A	PRE	100.0 a	100.0 a	100.0 a	100.0 a	88.8 ab
1	ROUNDUP UITRA	.75	LB A/A	E-POST					
2	AUTHORITY	.188	LB A/A	PRE	100.0 a	100.0 a	100.0 a	100.0 a	88.8 ab
2	ROUNDUP UITRA	.75	LB A/A	E-POST					
2	CLASSIC	.005	LB A/A	E-POST					
2	NIS	.250	% V/V	E-POST					
3	AUTHORITY	.188	LB A/A	PRE	92.5 bc	97.5 ab	96.3 ab	61.3 c	82.5 abc
3	SYNCHRONY	.013	LB A/A	E-POST					
3	NIS	.250	% V/V	E-POST					
4	CANOPY XL	.113	LB A/A	PRE	100.0 a	100.0 a	100.0 a	100.0 a	78.8 bc
4	ROUNDUP ULTRA	.75	LB A/A	E-POST					
5	CANOPY XL	.113	LB A/A	PRE	100.0 a	100.0 a	100.0 a	100.0 a	71.3 cd
5	ROUNDUP ULTRA	.75	LB A/A	E-POST					
5	CLASSIC	.005	LB A/A	E-POST					
5	NIS	.250	% V/V	E-POST					
6	CANOPY XL	.113	LB A/A	PRE	96.3 ab	82.5 bc	96.3 ab	25.0 d	88.8 ab
6	NIS	.250	% V/V	E-POST					
6	SYNCHRONY	.013	LB A/A	E-POST					
7	SYNCHRONY	.013	LB A/A	E-POST	86.3 d	58.8 d	90.0 c	82.5 b	57.5 d
7	ASSURE	.069	LB A/A	E-POST					
7	NIS	.250	% V/V	E-POST					
8	CLASSIC	.005	LB A/A	E-POST	100.0 a	100.0 a	100.0 a	100.0 a	71.3 cd
8	ROUNDUP ULTRA	.75	LB A/A	E-POST					
8	NIS	.250	% V/V	E-POST					
9	SYNCHRONY	.013	LB A/A	E-POST	88.8 cd	80.0 c	92.5 bc	77.5 b	95.0 a
9	PURSUIT	.088	LB A/A	E-POST					
9	ASSURE	.069	LB A/A	E-POST					
9	NIS	.250	% V/V	E-POST					
10	ROUNDUP ULTRA	.75	LB A/A	E-POST	100.0 a	100.0 a	100.0 a	100.0 a	70.0 cd

DUPONT CONVENTIONAL SOYBEANS

Trial ID: DUPONT CONV BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	AMBEL	SIDSP	ABUTH	SETFA	IPOLA
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-25-99	6-25-99	6-25-99	6-25-99	7-28-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	AMBEL	SIDSP	ABUTH	SETFA	IPOLA
11	COMMAND	.75	LB A/A	PRE	100.0 a	100.0 a	100.0 a	100.0 a	72.5 c
11	ROUNDUP ULTRA	.75	LB A/A	E-POST					
12	CONTROL				0.0 e	0.0 e	0.0 d	0.0 e	0.0 e
	LSD (P=.05)				5.38	16.27	4.84	10.59	13.93
	Standard Deviation				3.73	11.27	3.35	7.34	9.65
	CV				4.21	13.28	3.74	9.3	13.38
	Replicate F				0.537	2.825	1.236	1.507	0.239
	Replicate Prob(F)				0.6603	0.0537	0.3123	0.2309	0.8686
	Treatment F				231.157	27.698	287.427	84.978	27.065
	Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

DUPONT CONVENTIONAL SOYBEANS

Trial ID: DUPONT CONV BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	DATST	AMBEL	SIDSP	ABUTH	INJURY
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	7-28-99	7-28-99	7-28-99	7-28-99	8-14-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	DATST	AMBEL	SIDSP	ABUTH	INJURY
1	AUTHORITY	.188	LB A/A	PRE	95.0 a	98.8 a	92.5 abc	100.0 a	0.0 a
1	ROUNDUP UITRA	.75	LB A/A	E-POST					
2	AUTHORITY	.188	LB A/A	PRE	97.5 a	100.0 a	98.8 a	100.0 a	0.0 a
2	ROUNDUP UITRA	.75	LB A/A	E-POST					
2	CLASSIC	.005	LB A/A	E-POST					
2	NIS	.250	% V/V	E-POST					
3	AUTHORITY	.188	LB A/A	PRE	95.0 a	88.8 b	80.2 c	100.0 a	0.0 a
3	SYNCHRONY	.013	LB A/A	E-POST					
3	NIS	.250	% V/V	E-POST					
4	CANOPY XL	.113	LB A/A	PRE	91.3 a	100.0 a	85.0 bc	97.5 ab	0.0 a
4	ROUNDUP ULTRA	.75	LB A/A	E-POST					
5	CANOPY XL	.113	LB A/A	PRE	95.0 a	100.0 a	88.8 abc	100.0 a	0.0 a
5	ROUNDUP ULTRA	.75	LB A/A	E-POST					
5	CLASSIC	.005	LB A/A	E-POST					
5	NIS	.250	% V/V	E-POST					
6	CANOPY XL	.113	LB A/A	PRE	100.0 a	97.5 a	15.0 e	96.3 ab	0.0 a
6	NIS	.250	% V/V	E-POST					
6	SYNCHRONY	.013	LB A/A	E-POST					
7	SYNCHRONY	.013	LB A/A	E-POST	100.0 a	88.8 b	0.0 f	93.8 b	0.0 a
7	ASSURE	.069	LB A/A	E-POST					
7	NIS	.250	% V/V	E-POST					
8	CLASSIC	.005	LB A/A	E-POST	100.0 a	100.0 a	97.5 ab	100.0 a	0.0 a
8	ROUNDUP ULTRA	.75	LB A/A	E-POST					
8	NIS	.250	% V/V	E-POST					
9	SYNCHRONY	.013	LB A/A	E-POST	97.5 a	90.0 b	46.3 d	100.0 a	0.0 a
9	PURSUIT	.088	LB A/A	E-POST					
9	ASSURE	.069	LB A/A	E-POST					
9	NIS	.250	% V/V	E-POST					
10	ROUNDUP ULTRA	.75	LB A/A	E-POST	77.5 b	100.0 a	95.0 ab	100.0 a	0.0 a

DUPONT CONVENTIONAL SOYBEANS

Trial ID: DUPONT CONV BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	DATST	AMBEL	SIDSP	ABUTH	INJURY
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	7-28-99	7-28-99	7-28-99	7-28-99	8-14-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	11	12	LSD	SD	CV	Rep F	Rep Prob(F)	Treat F	Treat Prob(F)
11	COMMAND	.75	LB A/A	PRE	100.0 a	100.0 a	100.0 a	100.0 a	0.0 a				
11	ROUNDUP ULTRA	.75	LB A/A	E-POST									
12	CONTROL				0.0 c	0.0 c	0.0 f	0.0 c	0.0 a				
	LSD (P=.05)				9.53	6.35	12.76	4.74	0.00				
	Standard Deviation				6.60	4.40	8.84	3.29	0.00				
	CV				7.55	4.96	13.28	3.63	0.0				
	Replicate F				0.809	0.745	0.028	1.737	0.000				
	Replicate Prob(F)				0.4981	0.5328	0.9936	0.1786	1.0000				
	Treatment F				73.133	165.774	81.651	303.316	0.000				
	Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	1.0000				

Means followed by same letter do not significantly differ (P=.05, LSD)

DUPONT CONVENTIONAL SOYBEANS

Trial ID: DUPONT CONV BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	IPOLA	DATST	AMBEL	SIDSP	ABUTH
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	8-14-99	8-14-99	8-14-99	8-14-99	8-14-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	IPOLA	DATST	AMBEL	SIDSP	ABUTH
1	AUTHORITY	.188	LB A/A	PRE	81.3 a	82.5 b	80.0 bc	88.8 bc	93.8 b
1	ROUNDUP UITRA	.75	LB A/A	E-POST					
2	AUTHORITY	.188	LB A/A	PRE	77.5 ab	75.0 c	77.5 c	90.0 b	93.8 b
2	ROUNDUP UITRA	.75	LB A/A	E-POST					
2	CLASSIC	.005	LB A/A	E-POST					
2	NIS	.250	% V/V	E-POST					
3	AUTHORITY	.188	LB A/A	PRE	77.5 ab	82.5 b	76.3 c	80.0 c	93.8 b
3	SYNCHRONY	.013	LB A/A	E-POST					
3	NIS	.250	% V/V	E-POST					
4	CANOPY XL	.113	LB A/A	PRE	75.0 b	78.8 bc	88.8 ab	93.8 ab	93.8 b
4	ROUNDUP ULTRA	.75	LB A/A	E-POST					
5	CANOPY XL	.113	LB A/A	PRE	75.0 b	75.0 c	90.0 a	92.5 ab	95.0 b
5	ROUNDUP ULTRA	.75	LB A/A	E-POST					
5	CLASSIC	.005	LB A/A	E-POST					
5	NIS	.250	% V/V	E-POST					
6	CANOPY XL	.113	LB A/A	PRE	75.0 b	77.5 c	97.5 a	97.5 ab	97.5 ab
6	NIS	.250	% V/V	E-POST					
6	SYNCHRONY	.013	LB A/A	E-POST					
7	SYNCHRONY	.013	LB A/A	E-POST	0.0 d	0.0 d	0.0 d	0.0 d	0.0 c
7	ASSURE	.069	LB A/A	E-POST					
7	NIS	.250	% V/V	E-POST					
8	CLASSIC	.005	LB A/A	E-POST	0.0 d	0.0 d	0.0 d	0.0 d	0.0 c
8	ROUNDUP ULTRA	.75	LB A/A	E-POST					
8	NIS	.250	% V/V	E-POST					
9	SYNCHRONY	.013	LB A/A	E-POST	0.0 d	0.0 d	0.0 d	0.0 d	0.0 c
9	PURSUIT	.088	LB A/A	E-POST					
9	ASSURE	.069	LB A/A	E-POST					
9	NIS	.250	% V/V	E-POST					
10	ROUNDUP ULTRA	.75	LB A/A	E-POST	0.0 d	0.0 d	0.0 d	0.0 d	0.0 c

DUPONT CONVENTIONAL SOYBEANS

Trial ID: DUPONT CONV BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	IPOLA	DATST	AMBEL	SIDSP	ABUTH
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	8-14-99	8-14-99	8-14-99	8-14-99	8-14-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg				
11	COMMAND	.75	LB A/A	PRE	47.5	c	100.0	a
11	ROUNDUP ULTRA	.75	LB A/A	E-POST			97.5	a
							100.0	a
12	CONTROL				0.0	d	0.0	d
							0.0	d
							0.0	d
LSD (P=.05)					5.24		4.11	
Standard Deviation					3.63		2.85	
CV					8.55		5.98	
Replicate F					0.251		1.094	
Replicate Prob(F)					0.8601		0.3656	
Treatment F					447.425		892.696	
Treatment Prob(F)					0.0001		0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)

DUPONT CONVENTIONAL SOYBEANS

Trial ID: DUPONT CONV BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code SETFA
Crop Code SOYBEANS
Part Rated
Rating Data Type VISUAL
Rating Unit 0-100
Rating Date 8-14-99
Footnote Number
Trt-Eval Interval
PRM Data Type
Subsamples, Dec.

Trt No.	Treatment Name	Rate	Unit	Grow Stg	
1	AUTHORITY	.188	LB A/A	PRE	67.5 a
1	ROUNDUP UITRA	.75	LB A/A	E-POST	
2	AUTHORITY	.188	LB A/A	PRE	66.3 a
2	ROUNDUP UITRA	.75	LB A/A	E-POST	
2	CLASSIC	.005	LB A/A	E-POST	
2	NIS	.250	% V/V	E-POST	
3	AUTHORITY	.188	LB A/A	PRE	73.8 a
3	SYNCHRONY	.013	LB A/A	E-POST	
3	NIS	.250	% V/V	E-POST	
4	CANOPY XL	.113	LB A/A	PRE	26.3 b
4	ROUNDUP ULTRA	.75	LB A/A	E-POST	
5	CANOPY XL	.113	LB A/A	PRE	30.0 b
5	ROUNDUP ULTRA	.75	LB A/A	E-POST	
5	CLASSIC	.005	LB A/A	E-POST	
5	NIS	.250	% V/V	E-POST	
6	CANOPY XL	.113	LB A/A	PRE	30.0 b
6	NIS	.250	% V/V	E-POST	
6	SYNCHRONY	.013	LB A/A	E-POST	
7	SYNCHRONY	.013	LB A/A	E-POST	0.0 c
7	ASSURE	.069	LB A/A	E-POST	
7	NIS	.250	% V/V	E-POST	
8	CLASSIC	.005	LB A/A	E-POST	0.0 c
8	ROUNDUP ULTRA	.75	LB A/A	E-POST	
8	NIS	.250	% V/V	E-POST	
9	SYNCHRONY	.013	LB A/A	E-POST	0.0 c
9	PURSUIT	.088	LB A/A	E-POST	
9	ASSURE	.069	LB A/A	E-POST	
9	NIS	.250	% V/V	E-POST	
10	ROUNDUP ULTRA	.75	LB A/A	E-POST	0.0 c

DUPONT CONVENTIONAL SOYBEANS

Trial ID: DUPONT CONV BEANS Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code SETFA
Crop Code SOYBEANS
Part Rated
Rating Data Type VISUAL
Rating Unit 0-100
Rating Date 8-14-99
Footnote Number
Trt-Eval Interval
PRM Data Type
Subsamples, Dec.

Trt No.	Treatment Name	Rate	Unit	Grow Stg
11	COMMAND	.75	LB A/A	PRE 75.0 a
11	ROUNDUP ULTRA	.75	LB A/A	E-POST
12	CONTROL			0.0 c
LSD (P=.05)		21.87	.	
Standard Deviation		15.14	.	
CV		49.28	.	
Replicate F		1.329		
Replicate Prob(F)		0.2817		
Treatment F		17.709		
Treatment Prob(F)		0.0001		

Means followed by same letter do not significantly differ (P=.05, LSD)

NOVARTIS BROADSTRIKE/DUAL MAGNUM SOYBEANS

Trial ID: 99 NOVARTIS BEAN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061
Other Investigator: E.S. HAGOOD Title: PROFESSOR
Affiliation: VPI&SU Postal Code: 24061
Trial Status: ONGOING Initiation Date: 4-29-99 Country: USA
City: BLACKSBURG State/Prov.: VIRGINIA Postal Code: 24061

CROP AND PEST DESCRIPTION

Weed 1.SORHA JOHNSONGRASS 2.AMBEL COMMON RAGWEED 3.AMBTR GIANT RAGWEED
4.CHEAL COMMON LAMBSQTR 5.DATST JIMSONWEED 6.MOLVE CARPETWEED
7.IPOLA PITTED MRNGGLRY 8. 9.

Crop 1: BEANS Variety: SS RT-447 Planting Date: 5-21-99
Planting Method: ROWS Rate: 130000 ACRE Depth: 1.00 IN
Perennial Age: Row Spacing: 30 INCH Seed Bed: CONVENTIONAL
Soil Temperature: 66 F Soil Moisture: WET Emergence Date: 5-28-99

Crop 2: Variety: Planting Date:
Planting Method: Rate: Depth:
Perennial Age: Row Spacing: Seed Bed:
Soil Temperature: Soil Moisture: Emergence Date:

Crop 3: Variety: Planting Date:
Planting Method: Rate: Depth:
Perennial Age: Row Spacing: Seed Bed:
Soil Temperature: Soil Moisture: Emergence Date:

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4

Site Type:
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: SPRING DISK
Trial Initiation Comments:

Previous: Crops	Pesticides	Year
1.		
2.		
3.		

SOIL DESCRIPTION

Texture: SILT LOAM % OM: 2.2 % Sand: % Silt: % Clay:
pH: 6.2 CEC: Soil Name: ROSS Fertility Level:

VPI & SU

NOVARTIS BROADSTRIKE/DUAL MAGNUM SOYBEANS

Trial ID: 99 NOVARTIS BEAN Investigator: E.S. HAGOOD
 Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: SEE ATTACHED RAINFALL DATA

Closest Weather Station: BLACKSBURG, VA. Distance: 12 Unit: MI

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	5-21-99	6-14-99	6-24-99	7-2-99	7-9-99	
Time of Day:	11-12NOON	1:00 PM	10-11 AM	7:30 AM	2:00 PM	
Application Method:	BROADCAST	BROADCAST	BROADCAST	BROADCAST	BROADCAST	
Application Timing:	PRE	E-POST	4 WEEK	5 WEEK	6 WEEK	
Applic. Placement:	SOIL	FOLIAGE	FOLIAGE	FOLIAGE	FOLIAGE	
Air Temp., Unit:	68 F	80 F	76 F	74 F	85 F	
% Relative Humidity:	35	60	40	85	90	
Wind Velocity, Unit:	5 MPH	5 MPH	3 MPH	0 MPH	3 MPH	
Dew Presence (Y/N):	N	N	N	Y	N	
Water Hardness:						
Soil Temp., Unit:	66 F	68 F	69 F	72 F	72 F	
Soil Moisture:	WET	VERY DRY	VERY DRY	DAMP	DRY	
% Cloud Cover:	10	60	15	40	85	

VPI & SU

NOVARTIS BROADSTRIKE/DUAL MAGNUM SOYBEANS

Trial ID: 99 NOVARTIS BEAN Investigator: E.S. HAGOOD
 Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 BEANS Stage:	PRE	E-POST	4 WEEK	5 WEEK	6 WEEK	
Stage Scale:		2-3 TRI	V-4	V-5	V-7	
Height, Unit:		3 INCH	5 INCH	7 INCH	9 INCH	
Crop 2 Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 SORHA Stage:	NONE	4 LEAF	8-10 LEAF	12 LEAF	12 LEAF	
Stage Scale:		2-3 INCH	12 INCH	14 INCH	24 INCH	
Density, Unit:		10 M2	8 M2	8 M2	8 M2	
Weed 2 AMBEL Stage:	NONE	6 LEAF	8 LEAF	10 LEAF	12 LEAF	
Stage Scale:		1-2 INCH	4 INCH	7 INCH	9 INCH	
Density, Unit:		20 M2	20 M2	15 M2	15 M2	
Weed 3 AMBTR Stage:	NONE	8 LEAF	10 LEAF	12 LEAF	12 LEAF	
Stage Scale:		2-3 INCH	4 INCH	6 INCH	6-7 INCH	
Density, Unit:		1 M2	1 M2	1 M2	1 M2	
Weed 4 CHEAL Stage:	NONE	8 LEAF	10 LEAF	12 LEAF	20 LEAF	
Stage Scale:		0.5-2"	2 INCH	4 INCH	6-8 INCH	
Density, Unit:		15 M2	15 M2	10 M2	10 M2	
Weed 5 DATST Stage:	NONE	5 LEAF	8 LEAF	10 LEAF	10 LEAF	
Stage Scale:		1-2 INCH	3 INCH	4 INCH	5 INCH	
Density, Unit:		5 M2	5 M2	5 M2	5 M2	
Weed 6 MOLVE Stage:	NONE	6 LEAF	ROSETTE	9 LEAF	6" ROSETT	
Stage Scale:		1"ROSETTE	1 INCH	2 INCH	9 LEAF	
Density, Unit:		15 M2	15 M2	5 M2	5 M2	
Weed 7 IPOLA Stage:	NONE	2 LEAF	COTY-4 LF	8 LEAF	RUNNING	
Stage Scale:		1 INCH	2 INCH	5 INCH	6-8 INCH	
Density, Unit:		3 M2	3 M2	3 M2	3 M2	
Weed 8 Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 Stage:						
Stage Scale:						
Density, Unit:						

VPI & SU

NOVARTIS BROADSTRIKE/DUAL MAGNUM SOYBEANS

Trial ID: 99 NOVARTIS BEAN Investigator: E.S. HAGOOD
 Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK	BACKPACK	BACKPACK	
Operating Pressure:	34 PSI	34 PSI	34 PSI	34 PSI	34 PSI	
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN	FLAT FAN	FLAT FAN	
Nozzle Size:	8003	8003	8003	8003	8003	
Nozzle Spacing, Unit:	18 INCH	18 INCH	18 INCH	18 INCH	18 INCH	
Nozzles/Row:	4	4	4	4	4	
Band Width, Unit:						
Boom Length, Unit:	72 INCH	72 INCH	72 INCH	72 INCH	72 INCH	
Boom Height, Unit:	20 INCH	20 INCH	20 INCH	20 INCH	20 INCH	
Ground Speed, Unit:	3.1 MPH	3.1 MPH	3.1 MPH	3.1 MPH	3.1 MPH	
Incorporation Equip.:						
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER	WATER	WATER	WATER	WATER	
Spray Volume, Unit:	22.5 GPA	22.5 GPA	22.5 GPA	22.5 GPA	22.5 GPA	
Spray pH:						
Propellant:	CO/2	CO/2	CO/2	CO/2	CO/2	
Tank Mix (Y/N):	Y	Y	Y	Y	Y	

Trt No Treatment Application Comment

Trt No	Treatment	Application	Comment

NOVARTIS BROADSTRIKE/DUAL MAGNUM SOYBEANS

Trial ID: 99 NOVARTIS BEAN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	INJURY	AMBEL	CHEAL	DATST	MOLVE
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-14-99	6-14-99	6-14-99	6-14-99	6-14-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg										
1	CONTROL				0.0	b	0.0	f	0.0	d	0.0	c	0.0	c
2	ROUNDUP ULTRA	.75	LB A/A	3WEEK	0.0	b	0.0	f	0.0	d	0.0	c	0.0	c
3	ROUNDUP ULTRA	.75	LB A/A	4WEEK	0.0	b	0.0	f	0.0	d	0.0	c	0.0	c
4	ROUNDUP ULTRA	.75	LB A/A	5WEEK	0.0	b	0.0	f	0.0	d	0.0	c	0.0	c
5	ROUNDUP ULTRA	.75	LB A/A	6WEEK	0.0	b	0.0	f	0.0	d	0.0	c	0.0	c
6	ROUNDUP ULTRA	.75	LB A/A	3WEEK	0.0	b	0.0	f	0.0	d	0.0	c	0.0	c
6	ROUNDUP ULTRA	.75	LB A/A	6WEEK										
7	BROAD/DUAL MAGNUM	1.57	LB A/A	PRE	5.0	ab	91.3	a	100.0	a	100.0	a	100.0	a
7	ROUNDUP ULTRA	.75	LB A/A	3WEEK										
8	BROAD/DUAL MAGNUM	1.57	LB A/A	PRE	7.5	a	88.8	ab	100.0	a	100.0	a	100.0	a
8	ROUNDUP ULTRA	.75	LB A/A	4WEEK										
9	BROAD/DUAL MAGNUM	1.57	LB A/A	PRE	7.5	a	82.5	abc	100.0	a	100.0	a	100.0	a
9	ROUNDUP ULTRA	.75	LB A/A	5WEEK										
10	BROAD/DUAL MAGNUM	1.57	LB A/A	PRE	6.3	ab	91.3	a	100.0	a	100.0	a	100.0	a
10	ROUNDUP ULTRA	.75	LB A/A	6WEEK										
11	BROAD/DUAL MAGNUM	.95	LB A/A	PRE	7.5	a	78.8	bc	95.0	ab	100.0	a	97.5	a
11	ROUNDUP ULTRA	.75	LB A/A	3WEEK										
12	BROAD/DUAL MAGNUM	.95	LB A/A	PRE	5.0	ab	81.3	abc	100.0	a	100.0	a	100.0	a
12	ROUNDUP ULTRA	.75	LB A/A	4WEEK										
13	BROAD/DUAL MAGNUM	.95	LB A/A	PRE	3.8	ab	80.0	abc	100.0	a	100.0	a	100.0	a
13	ROUNDUP ULTRA	.75	LB A/A	5WEEK										
14	BROAD/DUAL MAGNUM	.95	LB A/A	PRE	5.0	ab	86.3	abc	97.5	a	96.3	a	100.0	a
14	ROUNDUP ULTRA	.75	LB A/A	6WEEK										

NOVARTIS BROADSTRIKE/DUAL MAGNUM SOYBEANS

Trial ID: 99 NOVARTIS BEAN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	JASH2	WEMA	YERAP	INJURY	AMBEL	CHEAL	DATST	MOLVE
Crop Code	WASRYO	WASRYO	WASRYO	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated								
Rating Data Type				VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit				0-100	0-100	0-100	0-100	0-100
Rating Date				6-14-99	6-14-99	6-14-99	6-14-99	6-14-99
Footnote Number								
Trt-Eval Interval								
PRM Data Type								
# Subsamples, Dec.								

Trt No.	Treatment Name	Rate	Unit	Grow Stg					
15	BROAD/DUAL MAGNUM	.95	LB A/A	PRE	0.0 b	75.0 cd	97.5 a	97.5 a	97.5 a
15	FIRSTRATE	.016	LB A/A	4WEEK					
15	SELECT	.156	LB A/A	4WEEK					
16	PROWL	1.00	LB A/A	PRE	0.0 b	40.0 e	88.8 b	72.5 b	92.5 b
16	ROUNDUP ULTRA	.75	LB A/A	4WEEK					
17	CANOPY XL	.225	LB A/A	PRE	5.0 ab	91.3 a	97.5 a	96.3 a	100.0 a
17	ROUNDUP ULTRA	.75	LB A/A	4WEEK					
18	FIRSTRATE	.016	LB A/A	PRE	6.3 ab	88.8 ab	78.8 c	100.0 a	100.0 a
18	ROUNDUP ULTRA	.75	LB A/A	4WEEK					
19	PURSUIT	.0625	LB A/A	PRE	2.5 ab	66.3 d	77.5 c	93.8 a	93.8 b
19	ROUNDUP ULTRA	.75	LB A/A	4WEEK					
20	ROUNDUP ULTRA	.75	LB A/A	3WEEK	0.0 b	0.0 f	0.0 d	0.0 c	0.0 c
20	ROUNDUP ULTRA	.75	LB A/A	6WEEK					
LSD (P=.05)					6.69	11.63	7.53	7.75	3.62
Standard Deviation					4.73	8.23	5.32	5.48	2.56
CV					154.45	15.8	8.64	8.73	3.99
Replicate F					4.185	1.162	0.250	0.482	1.067
Replicate Prob(F)					0.0095	0.3322	0.8611	0.6962	0.3703
Treatment F					1.690	98.248	309.422	302.460	1425.201
Treatment Prob(F)					0.0656	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

NOVARTIS BROADSTRIKE/DUAL MAGNUM SOYBEANS

Trial ID: 99 NOVARTIS BEAN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	IPOLA	INJURY	AMBEL	CHEAL	DATST
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-14-99	6-25-99	6-25-99	6-25-99	6-25-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	IPOLA	INJURY	AMBEL	CHEAL	DATST
1	CONTROL				0.0 e	0.0 a	0.0 g	0.0 c	0.0 d
2	ROUNDUP ULTRA	.75	LB A/A 3WEEK		0.0 e	0.0 a	100.0 a	100.0 a	100.0 a
3	ROUNDUP ULTRA	.75	LB A/A 4WEEK		0.0 e	0.0 a	0.0 g	0.0 c	0.0 d
4	ROUNDUP ULTRA	.75	LB A/A 5WEEK		0.0 e	0.0 a	0.0 g	0.0 c	0.0 d
5	ROUNDUP ULTRA	.75	LB A/A 6WEEK		0.0 e	0.0 a	0.0 g	0.0 c	0.0 d
6	ROUNDUP ULTRA	.75	LB A/A 3WEEK		0.0 e	0.0 a	100.0 a	100.0 a	100.0 a
6	ROUNDUP ULTRA	.75	LB A/A 6WEEK						
7	BROAD/DUAL MAGNUM	1.57	LB A/A PRE	82.5 ab	0.0 a	0.0 a	100.0 a	100.0 a	100.0 a
7	ROUNDUP ULTRA	.75	LB A/A 3WEEK						
8	BROAD/DUAL MAGNUM	1.57	LB A/A PRE	80.0 abc	0.0 a	0.0 a	88.8 b	100.0 a	97.5 a
8	ROUNDUP ULTRA	.75	LB A/A 4WEEK						
9	BROAD/DUAL MAGNUM	1.57	LB A/A PRE	85.0 ab	0.0 a	0.0 a	83.8 bc	97.5 a	95.0 a
9	ROUNDUP ULTRA	.75	LB A/A 5WEEK						
10	BROAD/DUAL MAGNUM	1.57	LB A/A PRE	85.0 ab	0.0 a	0.0 a	88.8 b	98.8 a	93.8 a
10	ROUNDUP ULTRA	.75	LB A/A 6WEEK						
11	BROAD/DUAL MAGNUM	.95	LB A/A PRE	77.5 abc	0.0 a	0.0 a	100.0 a	100.0 a	100.0 a
11	ROUNDUP ULTRA	.75	LB A/A 3WEEK						
12	BROAD/DUAL MAGNUM	.95	LB A/A PRE	70.0 bc	0.0 a	0.0 a	85.0 bc	96.3 a	95.0 a
12	ROUNDUP ULTRA	.75	LB A/A 4WEEK						
13	BROAD/DUAL MAGNUM	.95	LB A/A PRE	73.8 abc	0.0 a	0.0 a	76.3 cd	100.0 a	93.8 a
13	ROUNDUP ULTRA	.75	LB A/A 5WEEK						
14	BROAD/DUAL MAGNUM	.95	LB A/A PRE	80.0 abc	0.0 a	0.0 a	83.8 bc	97.5 a	96.3 a
14	ROUNDUP ULTRA	.75	LB A/A 6WEEK						

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NOVARTIS BROADSTRIKE/DUAL MAGNUM SOYBEANS

Trial ID: 99 NOVARTIS BEAN Investigator: E.S. HAGOOD

Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	IPOLA	INJURY	AMBEL	CHEAL	DATST
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-14-99	6-25-99	6-25-99	6-25-99	6-25-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	IPOLA	INJURY	AMBEL	CHEAL	DATST
15	BROAD/DUAL MAGNUM	.95	LB A/A	PRE	70.0 bc	0.0 a	70.0 de	97.5 a	92.5 ab
15	FIRSTRATE	.016	LB A/A	4WEEK					
15	SELECT	.156	LB A/A	4WEEK					
16	PROWL	1.00	LB A/A	PRE	45.0 d	0.0 a	51.3 f	92.5 a	82.5 bc
16	ROUNDUP ULTRA	.75	LB A/A	4WEEK					
17	CANOPY XL	.225	LB A/A	PRE	88.8 a	0.0 a	90.0 ab	95.0 a	92.5 ab
17	ROUNDUP ULTRA	.75	LB A/A	4WEEK					
18	FIRSTRATE	.016	LB A/A	PRE	65.0 c	0.0 a	87.5 b	78.8 b	95.0 a
18	ROUNDUP ULTRA	.75	LB A/A	4WEEK					
19	PURSUIT	.0625	LB A/A	PRE	71.3 bc	0.0 a	61.3 ef	72.5 b	78.8 c
19	ROUNDUP ULTRA	.75	LB A/A	4WEEK					
20	ROUNDUP ULTRA	.75	LB A/A	3WEEK	0.0 e	0.0 a	100.0 a	100.0 a	100.0 a
20	ROUNDUP ULTRA	.75	LB A/A	6WEEK					
LSD (P=.05)					15.76	0.00	10.67	8.22	10.87
Standard Deviation					11.15	0.00	7.55	5.82	7.69
CV					22.89	0.0	11.05	7.62	10.17
Replicate F					1.546	0.000	3.870	1.512	1.163
Replicate Prob(F)					0.2126	1.0000	0.0137	0.2211	0.3318
Treatment F					45.922	0.000	98.072	187.372	103.876
Treatment Prob(F)					0.0001	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

NOVARTIS BROADSTRIKE/DUAL MAGNUM SOYBEANS

Trial ID: 99 NOVARTIS BEAN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	MOLVE	IPOLA	AMBEL	CHEAL	DATST
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-25-99	6-25-99	7-28-99	7-28-99	7-28-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg					
1	CONTROL				0.0 c	0.0 e	0.0 g	0.0 g	0.0 f
2	ROUNDUP ULTRA	.75	LB A/A 3WEEK	100.0 a	97.5 a	91.3 bcd	93.8 bcd	87.5 abc	
3	ROUNDUP ULTRA	.75	LB A/A 4WEEK	0.0 c	0.0 e	85.0 cd	95.0 abc	90.0 abc	
4	ROUNDUP ULTRA	.75	LB A/A 5WEEK	0.0 c	0.0 e	40.0 f	95.0 abc	57.5 e	
5	ROUNDUP ULTRA	.75	LB A/A 6WEEK	0.0 c	0.0 e	83.8 d	87.5 e	88.8 abc	
6	ROUNDUP ULTRA	.75	LB A/A 3WEEK	100.0 a	100.0 a	100.0 a	88.8 de	91.3 abc	
6	ROUNDUP ULTRA	.75	LB A/A 6WEEK						
7	BROAD/DUAL MAGNUM	1.57	LB A/A PRE	100.0 a	100.0 a	98.8 ab	100.0 a	90.0 abc	
7	ROUNDUP ULTRA	.75	LB A/A 3WEEK						
8	BROAD/DUAL MAGNUM	1.57	LB A/A PRE	100.0 a	81.3 bc	97.5 ab	98.8 ab	78.8 cd	
8	ROUNDUP ULTRA	.75	LB A/A 4WEEK						
9	BROAD/DUAL MAGNUM	1.57	LB A/A PRE	100.0 a	83.8 bc	62.5 e	100.0 a	85.0 a-d	
9	ROUNDUP ULTRA	.75	LB A/A 5WEEK						
10	BROAD/DUAL MAGNUM	1.57	LB A/A PRE	100.0 a	90.0 ab	98.8 ab	100.0 a	98.8 a	
10	ROUNDUP ULTRA	.75	LB A/A 6WEEK						
11	BROAD/DUAL MAGNUM	.95	LB A/A PRE	100.0 a	100.0 a	98.8 ab	93.8 bcd	81.3 bcd	
11	ROUNDUP ULTRA	.75	LB A/A 3WEEK						
12	BROAD/DUAL MAGNUM	.95	LB A/A PRE	100.0 a	76.3 c	92.5 abc	100.0 a	91.3 abc	
12	ROUNDUP ULTRA	.75	LB A/A 4WEEK						
13	BROAD/DUAL MAGNUM	.95	LB A/A PRE	97.5 a	80.0 bc	55.0 e	98.8 ab	70.0 de	
13	ROUNDUP ULTRA	.75	LB A/A 5WEEK						
14	BROAD/DUAL MAGNUM	.95	LB A/A PRE	97.5 a	83.8 bc	92.5 abc	100.0 a	96.3 ab	
14	ROUNDUP ULTRA	.75	LB A/A 6WEEK						

NOVARTIS BROADSTRIKE/DUAL MAGNUM SOYBEANS

Trial ID: 99 NOVARTIS BEAN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	MOLVE	IPOLA	AMBEL	CHEAL	DATST
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-25-99	6-25-99	7-28-99	7-28-99	7-28-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg										
15	BROAD/DUAL MAGNUM	.95	LB A/A	PRE	95.0	a	78.8	bc	96.3	ab	77.5	f	80.0	cd
15	FIRSTRATE	.016	LB A/A	4WEEK										
15	SELECT	.156	LB A/A	4WEEK										
16	PROWL	1.00	LB A/A	PRE	95.0	a	63.8	d	83.8	d	95.0	abc	83.8	a-d
16	ROUNDUP ULTRA	.75	LB A/A	4WEEK										
17	CANOPY XL	.225	LB A/A	PRE	100.0	a	88.8	ab	95.0	ab	100.0	a	88.8	abc
17	ROUNDUP ULTRA	.75	LB A/A	4WEEK										
18	FIRSTRATE	.016	LB A/A	PRE	97.5	a	82.5	bc	92.5	abc	93.8	bcd	80.0	cd
18	ROUNDUP ULTRA	.75	LB A/A	4WEEK										
19	PURSUIT	.0625	LB A/A	PRE	87.5	b	76.3	c	85.0	cd	100.0	a	93.8	abc
19	ROUNDUP ULTRA	.75	LB A/A	4WEEK										
20	ROUNDUP ULTRA	.75	LB A/A	3WEEK	100.0	a	100.0	a	100.0	a	90.0	cde	87.5	abc
20	ROUNDUP ULTRA	.75	LB A/A	6WEEK										
LSD (P=.05)					6.10		12.20		8.61		5.70		15.34	
Standard Deviation					4.31		8.62		6.08		4.03		10.85	
CV					5.49		12.48		7.38		4.46		13.39	
Replicate F					0.717		1.843		0.864		0.744		5.529	
Replicate Prob(F)					0.5459		0.1496		0.4652		0.5305		0.0021	
Treatment F					350.717		72.608		69.009		119.599		15.294	
Treatment Prob(F)					0.0001		0.0001		0.0001		0.0001		0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)

NOVARTIS BROADSTRIKE/DUAL MAGNUM SOYBEANS

Trial ID: 99 NOVARTIS BEAN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	MOLVE	IPOLA	INJURY	AMBEL	CHEAL
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	7-28-99	7-28-99	8-30-99	8-30-99	8-30-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg					
1	CONTROL				0.0 h	0.0 g	0.0 a	0.0 f	0.0 h
2	ROUNDUP ULTRA	.75	LB A/A 3WEEK		90.0 ef	81.3 a-d	0.0 a	87.5 abc	42.5 g
3	ROUNDUP ULTRA	.75	LB A/A 4WEEK		91.3 def	68.8 cde	0.0 a	76.3 cd	71.3 ef
4	ROUNDUP ULTRA	.75	LB A/A 5WEEK		96.3 a-d	42.5 f	0.0 a	40.0 e	81.3 b-e
5	ROUNDUP ULTRA	.75	LB A/A 6WEEK		93.8 b-f	81.3 a-d	0.0 a	72.5 d	42.5 g
6	ROUNDUP ULTRA	.75	LB A/A 3WEEK		88.8 f	92.5 a	0.0 a	85.0 a-d	53.8 g
6	ROUNDUP ULTRA	.75	LB A/A 6WEEK						
7	BROAD/DUAL MAGNUM	1.57	LB A/A PRE		98.8 ab	78.8 a-d	0.0 a	97.5 a	98.8 a
7	ROUNDUP ULTRA	.75	LB A/A 3WEEK						
8	BROAD/DUAL MAGNUM	1.57	LB A/A PRE		98.8 ab	76.3 a-d	0.0 a	96.3 a	98.8 a
8	ROUNDUP ULTRA	.75	LB A/A 4WEEK						
9	BROAD/DUAL MAGNUM	1.57	LB A/A PRE		98.8 ab	51.3 ef	0.0 a	45.0 e	95.0 abc
9	ROUNDUP ULTRA	.75	LB A/A 5WEEK						
10	BROAD/DUAL MAGNUM	1.57	LB A/A PRE		100.0 a	81.3 a-d	0.0 a	97.5 a	100.0 a
10	ROUNDUP ULTRA	.75	LB A/A 6WEEK						
11	BROAD/DUAL MAGNUM	.95	LB A/A PRE		97.5 abc	86.3 abc	0.0 a	97.5 a	92.5 abc
11	ROUNDUP ULTRA	.75	LB A/A 3WEEK						
12	BROAD/DUAL MAGNUM	.95	LB A/A PRE		100.0 a	78.8 a-d	0.0 a	91.3 ab	96.3 ab
12	ROUNDUP ULTRA	.75	LB A/A 4WEEK						
13	BROAD/DUAL MAGNUM	.95	LB A/A PRE		98.8 ab	67.5 cde	0.0 a	32.5 e	90.0 a-d
13	ROUNDUP ULTRA	.75	LB A/A 5WEEK						
14	BROAD/DUAL MAGNUM	.95	LB A/A PRE		97.5 abc	77.5 a-d	0.0 a	92.5 ab	95.0 abc
14	ROUNDUP ULTRA	.75	LB A/A 6WEEK						

NOVARTIS BROADSTRIKE/DUAL MAGNUM SOYBEANS

Trial ID: 99 NOVARTIS BEAN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	MOLVE	IPOLA	INJURY	AMBEL	CHEAL
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	7-28-99	7-28-99	8-30-99	8-30-99	8-30-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg					
15	BROAD/DUAL MAGNUM	.95	LB A/A	PRE	63.8 g	81.3 a-d	0.0 a	91.3 ab	75.0 de
15	FIRSTRATE	.016	LB A/A	4WEEK					
15	SELECT	.156	LB A/A	4WEEK					
16	PROWL	1.00	LB A/A	PRE	100.0 a	65.0 de	0.0 a	82.5 bcd	70.0 ef
16	ROUNDUP ULTRA	.75	LB A/A	4WEEK					
17	CANOPY XL	.225	LB A/A	PRE	100.0 a	78.8 a-d	0.0 a	92.5 ab	100.0 a
17	ROUNDUP ULTRA	.75	LB A/A	4WEEK					
18	FIRSTRATE	.016	LB A/A	PRE	95.0 a-e	68.8 cde	0.0 a	85.0 a-d	80.0 cde
18	ROUNDUP ULTRA	.75	LB A/A	4WEEK					
19	PURSUIT	.0625	LB A/A	PRE	93.8 b-f	72.5 bcd	0.0 a	80.0 bcd	93.8 abc
19	ROUNDUP ULTRA	.75	LB A/A	4WEEK					
20	ROUNDUP ULTRA	.75	LB A/A	3WEEK	92.5 c-f	91.3 ab	0.0 a	92.5 ab	56.3 fg
20	ROUNDUP ULTRA	.75	LB A/A	6WEEK					
LSD (P=.05)					5.09	18.91	0.00	13.29	15.37
Standard Deviation					3.60	13.37	0.00	9.40	10.87
CV					4.01	18.82	0.0	12.25	14.18
Replicate F					0.644	1.358	0.000	2.216	6.060
Replicate Prob(F)					0.5899	0.2648	1.0000	0.0961	0.0012
Treatment F					157.963	9.514	0.000	31.819	23.369
Treatment Prob(F)					0.0001	0.0001	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

NOVARTIS BROADSTRIKE/DUAL MAGNUM SOYBEANS

Trial ID: 99 NOVARTIS BEAN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	DATST	IPOLA	MOLVE
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated			
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	8-30-99	8-30-99	8-30-99
Footnote Number			
Trt-Eval Interval			
PRM Data Type			
# Subsamples, Dec.			

Trt No.	Treatment Name	Rate	Unit	Grow Stg			
1	CONTROL				0.0 g	0.0 h	0.0 e
2	ROUNDUP ULTRA	.75	LB A/A	3WEEK	70.0 ef	80.0 a-f	77.5 cd
3	ROUNDUP ULTRA	.75	LB A/A	4WEEK	86.3 a-d	63.8 g	72.5 d
4	ROUNDUP ULTRA	.75	LB A/A	5WEEK	83.8 a-e	70.0 d-g	86.3 abc
5	ROUNDUP ULTRA	.75	LB A/A	6WEEK	71.3 ef	68.8 efg	71.3 d
6	ROUNDUP ULTRA	.75	LB A/A	3WEEK	90.0 abc	88.8 abc	71.3 d
6	ROUNDUP ULTRA	.75	LB A/A	6WEEK			
7	BROAD/DUAL MAGNUM	1.57	LB A/A	PRE	72.5 def	75.0 b-g	91.3 ab
7	ROUNDUP ULTRA	.75	LB A/A	3WEEK			
8	BROAD/DUAL MAGNUM	1.57	LB A/A	PRE	87.5 abc	85.0 a-d	97.5 a
8	ROUNDUP ULTRA	.75	LB A/A	4WEEK			
9	BROAD/DUAL MAGNUM	1.57	LB A/A	PRE	93.8 a	85.0 a-d	92.5 ab
9	ROUNDUP ULTRA	.75	LB A/A	5WEEK			
10	BROAD/DUAL MAGNUM	1.57	LB A/A	PRE	91.3 ab	78.8 a-g	95.0 a
10	ROUNDUP ULTRA	.75	LB A/A	6WEEK			
11	BROAD/DUAL MAGNUM	.95	LB A/A	PRE	76.3 c-f	73.8 c-g	90.0 abc
11	ROUNDUP ULTRA	.75	LB A/A	3WEEK			
12	BROAD/DUAL MAGNUM	.95	LB A/A	PRE	86.3 a-d	82.5 a-e	93.8 a
12	ROUNDUP ULTRA	.75	LB A/A	4WEEK			
13	BROAD/DUAL MAGNUM	.95	LB A/A	PRE	90.0 abc	78.8 a-g	88.8 abc
13	ROUNDUP ULTRA	.75	LB A/A	5WEEK			
14	BROAD/DUAL MAGNUM	.95	LB A/A	PRE	78.8 b-f	77.5 a-g	87.5 abc
14	ROUNDUP ULTRA	.75	LB A/A	6WEEK			
15	BROAD/DUAL MAGNUM	.95	LB A/A	PRE	93.8 a	90.0 ab	88.8 abc
15	FIRSTRATE	.016	LB A/A	4WEEK			
15	SELECT	.156	LB A/A	4WEEK			

NOVARTIS BROADSTRIKE/DUAL MAGNUM SOYBEANS

Trial ID: 99 NOVARTIS BEAN Investigator: E.S. HAGOOD
Location: WHITETHORNE, VA. Study Dir.: Scott Hagood

Weed Code	DATST	IPOLA	MOLVE
Crop Code	SOYBEANS	SOYBEANS	SOYBEANS
Part Rated			
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	8-30-99	8-30-99	8-30-99
Footnote Number			
Trt-Eval Interval			
PRM Data Type			
# Subsamples, Dec.			

Trt No.	Treatment Name	Rate	Unit	Grow Stg			
16	PROWL	1.00	LB A/A	PRE	67.5	f	
16	ROUNDUP ULTRA	.75	LB A/A	4WEEK	65.0	fg	86.3 abc
17	CANOPY XL	.225	LB A/A	PRE	90.0	abc	
17	ROUNDUP ULTRA	.75	LB A/A	4WEEK	91.3	a	98.8 a
18	FIRSTRATE	.016	LB A/A	PRE	80.0	a-f	
18	ROUNDUP ULTRA	.75	LB A/A	4WEEK	68.8	efg	77.5 cd
19	PURSUIT	.0625	LB A/A	PRE	86.3	a-d	
19	ROUNDUP ULTRA	.75	LB A/A	4WEEK	73.8	c-g	80.0 bcd
20	ROUNDUP ULTRA	.75	LB A/A	3WEEK	78.8	b-f	
20	ROUNDUP ULTRA	.75	LB A/A	6WEEK	82.5	a-e	86.3 abc
	LSD (P=.05)				13.97		13.59
	Standard Deviation				9.88		9.61
	CV				12.55		11.77
	Replicate F				10.822		2.081
	Replicate Prob(F)				0.0001		0.1128
	Treatment F				16.748		19.046
	Treatment Prob(F)				0.0001		0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

(OATGRASS)
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Site Description Page 1 of 4

CONTROL OF BULBOUS TALL OATGRASS IN WHEAT

Trial ID: OATGRASS
Location: NEW KENT

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: KEVIN BRADLEY
Affiliation: VPI & SU

Title: GRADUATE RESEARCH ASST
Postal Code: 24060

Other Investigator: PAUL DAVIS
Affiliation: VPI & SU

Title: EXTENSION AGENT
Postal Code: _____

Trial Status: ONGOING
City: NEW KENT COUNTY

Initiation Date: 3-18-98
State/Prov.: VIRGINIA

Country: USA
Postal Code: 23124

CROP AND PEST DESCRIPTION

Weed 1. APREL BULBOUS OATGRASS 2. _____ 3. _____
4. _____ 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: TRZAW WHEAT Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 20 FT Reps: 4

Site Type: _____

Tillage Type: NO-TILL

Study Design: RANDOMIZED COMPLETE BLOCK

Field Prep./Maintenance: _____

Trial Initiation Comments: _____

Previous: Crops	Pesticides	Year
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

SOIL DESCRIPTION

Texture: _____ % OM: _____ % Sand: _____ % Silt: _____ % Clay: _____
pH: _____ CEC: _____ Soil Name: _____ Fertility Level: _____

(OATGRASS)
VPI & SU

CONTROL OF BULBOUS TALL OATGRASS IN WHEAT

Trial ID: OATGRASS
Location: NEW KENT

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: _____
Closest Weather Station: _____ Distance: _____ Unit: _____

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	3-18-99	3-27-99				
Time of Day:	11:00 AM	10:30 AM				
Application Method:	BROADCAST	BROADCAST				
Application Timing:	POST2-6	POST1				
Applic. Placement:						
Air Temp., Unit:	70 F	68 F				
% Relative Humidity:	30	30				
Wind Velocity, Unit:	5 MPH	5 MPH				
Dew Presence (Y/N):	N	N				
Water Hardness:	N/A	N/A				
Soil Temp., Unit:	55 F	57 F				
Soil Moisture:	DAMP	DAMP				
% Cloud Cover:	0	0				

CONTROL OF BULBOUS TALL OATGRASS IN WHEAT

Trial ID: OATGRASS
Location: NEW KENT

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 TRZAW Stage:	TILLERING	TILLERING				
Stage Scale:	FEEKES 30	FEEKES 35				
Height, Unit:	4.5 INCH	4.5 INCH				
Crop 2 _____ Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 _____ Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 APREL Stage:	1-1.5'DIA	1-2'DIAME				
Stage Scale:	2-3" TALL	2-3" TALL				
Density, Unit:	75% GC	75% GC				
Weed 2 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 3 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 4 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 5 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 6 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 7 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 8 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 _____ Stage:						
Stage Scale:						
Density, Unit:						

CONTROL OF BULBOUS TALL OATGRASS IN WHEAT

Trial ID: OATGRASS
Location: NEW KENT

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK				
Operating Pressure:	34 PSI	34 PSI				
Nozzle Type:	FLAT FAN	FLAT FAN				
Nozzle Size:	8003	8003				
Nozzle Spacing, Unit:	18 INCH	18 INCH				
Nozzles/Row:	4	4				
Band Width, Unit:						
Boom Length, Unit:	72 INCH	72 INCH				
Boom Height, Unit:	20 INCH	20 INCH				
Ground Speed, Unit:	3.1 MPH	3.1 MPH				
Incorporation Equip.:	N/A	N/A				
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER	WATER				
Spray Volume, Unit:	22.5 GPA	22.5 GPA				
Spray pH:						
Propellant:	CO/2	CO/2				
Tank Mix (Y/N):	Y	Y				

Trt No Treatment Application Comment

Trt No	Treatment Application Comment

CONTROL OF BULBOUS TALL OATGRASS IN WHEAT

Trial ID: OATGRASS

Investigator: KEVIN BRADLEY

Location: NEW KENT

Study Dir.: Scott Hagood

Weed Code	APREL	APREL	APREL	APREL	APREL
Crop Code	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW
Part Rated	INJURY	INJURY	INJURY	INJURY	INJURY
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	4-2-99	4-15-99	4-30-99	5-19-99	5-29-99
Trt-Eval Interval	2 WAT	1 MAT	1.5 MAT	2 MAT	2.25 MAT

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate Rate Unit	Grow Stg					
1	ASSERT	2.5 L	L	1.5 PT/A	POST	0.0 c	15.0 a	75.0 a	75.0 a	67.5 a
1	NIS		L	0.5 % V/V	POST					
2	HOELON	3.0 EC	EC	1.3 PT/A	POST	7.5 b	10.0 a	11.3 c	7.5 c	7.5 c
2	COC		L	1.0 % V/V	POST					
3	HOELON	3.0 EC	EC	2.6 PT/A	POST	12.5 a	15.0 a	23.8 b	22.5 b	20.0 b
3	COC		L	1.0 % V/V	POST					
4	GLEAN	75 DF	DF	0.33 OZ WT/A	POST	0.0 c	0.0 b	0.0 d	0.0 c	0.0 c
4	NIS		L	0.5 % V/V	POST					
5	FINESSE	75 DF	DF	0.4 OZ WT/A	POST	1.3 c	1.3 b	2.5 d	5.0 c	5.0 c
5	NIS		L	0.5 % V/V	POST					
6	CONTROL					0.0 c	0.0 b	0.0 d	0.0 c	0.0 c
LSD (P=.05)						3.15	7.00	8.63	12.04	9.98
Standard Deviation						2.09	4.65	5.73	7.99	6.62
CV						59.06	67.6	30.53	43.6	39.75
Replicate F						0.238	0.691	0.720	0.478	0.696
Replicate Prob(F)						0.8684	0.5714	0.5552	0.7022	0.5686
Treatment F						25.381	9.926	102.814	52.539	61.443
Treatment Prob(F)						0.0001	0.0002	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Control of Roughstalk Bluegrass in Barley with Postemergence Herbicides

Trial ID: 98-BLUGR Investigator: Kevin Bradley/Paul Davis
Location: CHARLES CITY, VA Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: Kevin Bradley Title: Graduate Research Asst
Affiliation: VPI & SU Postal Code: 24060

Other Investigator: Paul Davis Title: Extension Agent
Affiliation: VPI & SU Postal Code: 23124

Trial Status: ONGOING Initiation Date: 3-11-99 Country: USA
City: CHARLES CITY State/Prov.: VIRGINIA Postal Code: _____

CROP AND PEST DESCRIPTION

Weed 1. POATR RGHSTLK BLGRSS 2. _____ 3. _____
4. _____ 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: HORVW BARLEY Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4
Site Type: _____
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: _____
Trial Initiation Comments: _____

Previous: Crops	Pesticides	Year
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

SOIL DESCRIPTION

Texture: _____ % OM: _____ % Sand: _____ % Silt: _____ % Clay: _____
pH: _____ CEC: _____ Soil Name: _____ Fertility Level: _____

Control of Roughstalk Bluegrass in Barley with Postemergence Herbicides

Trial ID: 98-BLUGR Investigator: Kevin Bradley/Paul Davis
Location: CHARLES CITY, VA Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: _____
Closest Weather Station: _____ Distance: _____ Unit: _____

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	3-11-99					
Time of Day:	3:00 PM					
Application Method:	BROADCAST					
Application Timing:	POST					
Applic. Placement:						
Air Temp., Unit:	45 F					
% Relative Humidity:	30					
Wind Velocity, Unit:	3.5 MPH					
Dew Presence (Y/N):	N					
Water Hardness:	N/A					
Soil Temp., Unit:	55 F					
Soil Moisture:	MOIST					
% Cloud Cover:	60					

Control of Roughstalk Bluegrass in Barley with Postemergence Herbicides

Trial ID: 98-BLUGR Investigator: Kevin Bradley/Paul Davis
Location: CHARLES CITY, VA Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 HORVW Stage:	TILLERING					
Stage Scale:	FEEKES 23					
Height, Unit:	2.5 INCH					
Crop 2 _____ Stage:						
Stage Scale:						
Height, Unit:						
Crop 3 _____ Stage:						
Stage Scale:						
Height, Unit:						

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 POATR Stage:	STLN&SEED					
Stage Scale:	3" BUNCHS					
Density, Unit:	1 FT DIAM					
Weed 2 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 3 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 4 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 5 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 6 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 7 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 8 _____ Stage:						
Stage Scale:						
Density, Unit:						
Weed 9 _____ Stage:						
Stage Scale:						
Density, Unit:						

Control of Roughstalk Bluegrass in Barley with Postemergence Herbicides

Trial ID: 98-BLUGR

Investigator: Kevin Bradley/Paul Davis

Location: CHARLES CITY, VA

Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	_____	_____	_____	_____	_____
Operating Pressure:	34 PSI	_____	_____	_____	_____	_____
Nozzle Type:	FLAT FAN	_____	_____	_____	_____	_____
Nozzle Size:	8003	_____	_____	_____	_____	_____
Nozzle Spacing, Unit:	18 INCH	_____	_____	_____	_____	_____
Nozzles/Row:	4	_____	_____	_____	_____	_____
Band Width, Unit:	N/A	_____	_____	_____	_____	_____
Boom Length, Unit:	72 INCH	_____	_____	_____	_____	_____
Boom Height, Unit:	20 INCH	_____	_____	_____	_____	_____
Ground Speed, Unit:	3.1 MPH	_____	_____	_____	_____	_____
Incorporation Equip.:	N/A	_____	_____	_____	_____	_____
Hours to Incorp.:	_____	_____	_____	_____	_____	_____
Incorp. Depth, Unit:	N/A	_____	_____	_____	_____	_____
Carrier:	WATER	_____	_____	_____	_____	_____
Spray Volume, Unit:	22.5 GPA	_____	_____	_____	_____	_____
Spray pH:	_____	_____	_____	_____	_____	_____
Propellant:	CO/2	_____	_____	_____	_____	_____
Tank Mix (Y/N):	Y	_____	_____	_____	_____	_____

Trt No Treatment Application Comment

Trt No	Treatment Application Comment
_____	_____
_____	_____
_____	_____

Control of Roughstalk Bluegrass in Barley with Postemergence Herbicides

Trial ID: 98-BLUGR
Location: CHARLES CITY, VAInvestigator: Kevin Bradley/Paul Davis
Study Dir.: Scott Hagood

						POATR		POATR		POATR	
						HORVW		HORVW			
Weed Code						INJURY %	INJURY %	INJURY %	INJURY %	INJURY %	
Crop Code						VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	
Part Rated						0-100	0-100	0-100	0-100	0-100	
Rating Data Type						4-2-99	4-2-99	4-16-99	4-16-99	4-30-99	
Rating Unit						2 WAT	2 WAT	1 MAT	1 MAT	2 MAT	
Rating Date											
Trt-Eval Interval											
Trt No.	Treatment Name	Form Amt	Fm Ds	Rate Rate	Unit Unit	Grow Stg					
1	CONTROL					POST 0.0 k	0.0 g	0.0 j	0.0 g	0.0 g	
2	HOELON	3.00	L	0.50	LB A/A	POST 12.5 hij	0.0 g	0.0 j	0.0 g	0.0 g	
3	HOELON	3.00	L	1.00	LB A/A	POST 18.8 f-j	1.3 g	10.0 ij	0.0 g	8.8 g	
4	DISCOVER	2.00	L	0.05	LB A/A	POST 41.3 cd	10.0 f	73.8 f	12.5 f	68.3 e	
4	SCORE		L	1.00	% V/V	POST					
5	DISCOVER	2.00	L	0.075	LB A/A	POST 55.0 b	15.0 f	84.0 b-f	25.0 e	83.0 b-e	
5	SCORE		L	1.00	% V/V	POST					
6	DISCOVER	2.00	L	0.112	LB A/A	POST 61.3 b	26.3 e	89.3 a-e	33.8 d	91.3 abc	
6	SCORE		L	1.00	% V/V	POST					
7	MAVERICK	75	D	0.031	LB A/A	POST 48.8 bc	25.0 e	78.3 def	35.0 d	70.8 e	
7	X-77		L	0.5	% V/V	POST					
8	MAVERICK	75	D	0.062	LB A/A	POST 58.8 b	27.5 e	90.0 a-d	56.3 c	87.3 a-d	
8	X-77		L	0.5	% V/V	POST					
9	ACHEIVE	40	D	0.188	LB A/A	POST 21.3 e-j	0.0 g	13.8 hij	0.0 g	2.5 g	
9	SUPERCHARGE		L	1.00	% V/V	POST					
10	ACHEIVE	40	D	0.219	LB A/A	POST 11.3 ijk	0.0 g	2.5 ij	0.0 g	3.8 g	
10	SUPERCHARGE		L	1.00	% V/V	POST					
11	ACHEIVE	40	D	0.250	LB A/A	POST 23.8 e-i	0.0 g	15.0 hij	0.0 g	2.5 g	
11	SUPERCHARGE		L	1.00	% V/V	POST					
12	GLEAN	75	D	0.014	LB A/A	POST 13.8 hij	0.0 g	2.5 ij	0.0 g	2.5 g	
12	X-77		L	0.5	% V/V	POST					
13	GLEAN	75	D	0.019	LB A/A	POST 20.0 f-j	1.3 g	8.8 ij	5.0 fg	2.5 g	
13	X-77		L	0.5	% V/V	POST					
14	GLEAN	75	D	0.023	LB A/A	POST 20.0 f-j	0.0 g	10.0 ij	0.0 g	6.3 g	
14	X-77		L	0.5	% V/V	POST					
15	FINESSE	75	D	0.014	LB A/A	POST 27.4 efg	0.2 g	7.0 ij	0.5 g	5.0 g	
15	X-77		L	0.5	% V/V	POST					
16	FINESSE	75	D	0.019	LB A/A	POST 33.8 de	0.0 g	16.3 hi	0.0 g	8.8 g	
16	X-77		L	0.5	% V/V	POST					
17	FINESSE	75	D	0.023	LB A/A	POST 28.8 ef	0.0 g	15.0 hij	0.0 g	7.5 g	
17	X-77		L	0.5	% V/V	POST					

Control of Roughstalk Bluegrass in Barley with Postemergence Herbicides

Trial ID: 98-BLUGR Investigator: Kevin Bradley/Paul Davis
Location: CHARLES CITY, VA Study Dir.: Scott Hagood

Weed Code		Form Fm		Rate	Grow	POATR	HORVW		POATR	HORVW		POATR
Crop Code	Part Rated	Amt	Ds	Rate	Unit	Stg	INJURY %	INJURY %	INJURY %	INJURY %	INJURY %	INJURY %
Rating Data Type	Rating Unit						VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Date	Trt-Eval Interval						0-100	0-100	0-100	0-100	0-100	0-100
							4-2-99	4-2-99	4-16-99	4-16-99	4-30-99	
							2 WAT	2 WAT	1 MAT	1 MAT	2 MAT	
18	ACCLAIM	0.57	L	0.04	LB A/A	POST	42.5 cd	35.0 d	75.0 ef	93.8 a	72.5 de	
18	X-77		L	0.5	% V/V	POST						
19	ACCLAIM	0.57	L	0.08	LB A/A	POST	56.9 b	38.4 d	82.8 c-f	94.9 a	75.8 cde	
19	X-77		L	0.5	% V/V	POST						
20	ACCLAIM	0.57	L	0.12	LB A/A	POST	55.9 b	36.6 d	88.9 a-e	95.4 a	83.5 b-e	
20	X-77		L	0.5	% V/V	POST						
21	ASSERT	2.5	L	1.5	PT/A	POST	15.0 g-j	0.0 g	26.3 gh	0.0 g	27.5 f	
21	NIS		L	0.5	% V/V	POST						
22	ASSERT	2.5	L	1.2	PT/A	POST	25.0 e-h	0.0 g	31.3 g	0.0 g	32.5 f	
22	NIS		L	0.5	% V/V	POST						
23	ROUNDUP	4.0	L	1.0	LB A/A	POST	96.5 a	98.8 a	97.8 ab	99.5 a	94.5 ab	
24	ROUNDUP ULTRA	4.0	L	2.0	LB A/A	POST	98.3 a	100.0 a	100.0 a	100.0 a	99.5 a	
25	GRAMOXONE EXTRA	2.5	L	2.5	PT/A	POST	95.0 a	83.8 b	95.8 abc	65.0 b	94.5 ab	
25	NIS		L	0.5	% V/V	POST						
26	LIBERTY	1.67	L	.365	LB A/A	POST	94.5 a	77.5 c	80.0 def	60.0 bc	75.0 de	
26	AMMONIUM SULFATE	100	D	3.00	LB A/A	POST						
27	CONTROL						10.0 jk	0.0 g	3.8 ij	0.0 g	0.0 g	
LSD (P=.05)							11.37	5.76	12.97	7.93	14.05	
Standard Deviation							8.04	4.07	9.17	5.61	9.93	
CV							19.99	19.07	20.69	19.5	24.26	
Replicate F							1.471	0.684	0.764	2.435	0.067	
Replicate Prob(F)							0.2294	0.5648	0.5176	0.0714	0.9772	
Treatment F							52.514	249.539	73.127	188.910	63.420	
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001	0.0001	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Control of Roughstalk Bluegrass in Barley with Postemergence Herbicides

Trial ID: 98-BLUGR Investigator: Kevin Bradley/Paul Davis
Location: CHARLES CITY, VA Study Dir.: Scott Hagood

Weed Code
Crop Code HORVW
Part Rated INJURY %
Rating Data Type VISUAL
Rating Unit 0-100
Rating Date 4-30-99
Trt-Eval Interval 2 MAT

Trt No.	Treatment Name	Form	Fm	Rate	Unit	Grow	Stg
1	CONTROL					POST	0.0 g
2	HOELON	3.00	L	0.50	LB A/A	POST	0.0 g
3	HOELON	3.00	L	1.00	LB A/A	POST	0.0 g
4	DISCOVER	2.00	L	0.05	LB A/A	POST	16.3 f
4	SCORE		L	1.00	% V/V	POST	
5	DISCOVER	2.00	L	0.075	LB A/A	POST	27.5 e
5	SCORE		L	1.00	% V/V	POST	
6	DISCOVER	2.00	L	0.112	LB A/A	POST	32.5 de
6	SCORE		L	1.00	% V/V	POST	
7	MAVERICK	75	D	0.031	LB A/A	POST	36.3 d
7	X-77		L	0.5	% V/V	POST	
8	MAVERICK	75	D	0.062	LB A/A	POST	50.0 c
8	X-77		L	0.5	% V/V	POST	
9	ACHEIVE	40	D	0.188	LB A/A	POST	0.0 g
9	SUPERCHARGE		L	1.00	% V/V	POST	
10	ACHEIVE	40	D	0.219	LB A/A	POST	0.0 g
10	SUPERCHARGE		L	1.00	% V/V	POST	
11	ACHEIVE	40	D	0.250	LB A/A	POST	0.0 g
11	SUPERCHARGE		L	1.00	% V/V	POST	
12	GLEAN	75	D	0.014	LB A/A	POST	0.0 g
12	X-77		L	0.5	% V/V	POST	
13	GLEAN	75	D	0.019	LB A/A	POST	3.8 g
13	X-77		L	0.5	% V/V	POST	
14	GLEAN	75	D	0.023	LB A/A	POST	0.0 g
14	X-77		L	0.5	% V/V	POST	
15	FINESSE	75	D	0.014	LB A/A	POST	0.3 g
15	X-77		L	0.5	% V/V	POST	
16	FINESSE	75	D	0.019	LB A/A	POST	0.0 g
16	X-77		L	0.5	% V/V	POST	
17	FINESSE	75	D	0.023	LB A/A	POST	0.0 g
17	X-77		L	0.5	% V/V	POST	

Control of Roughstalk Bluegrass in Barley with Postemergence Herbicides

Trial ID: 98-BLUGR Investigator: Kevin Bradley/Paul Davis
Location: CHARLES CITY, VA Study Dir.: Scott Hagood

Weed Code
Crop Code HORVW
Part Rated INJURY %
Rating Data Type VISUAL
Rating Unit 0-100
Rating Date 4-30-99
Trt-Eval Interval 2 MAT

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Unit	Grow Stg	
18	ACCLAIM	0.57	L	0.04	LB A/A	POST	85.0 b
18	X-77		L	0.5	% V/V	POST	
19	ACCLAIM	0.57	L	0.08	LB A/A	POST	89.5 b
19	X-77		L	0.5	% V/V	POST	
20	ACCLAIM	0.57	L	0.12	LB A/A	POST	89.0 b
20	X-77		L	0.5	% V/V	POST	
21	ASSERT	2.5	L	1.5	PT/A	POST	0.0 g
21	NIS		L	0.5	% V/V	POST	
22	ASSERT	2.5	L	1.2	PT/A	POST	0.0 g
22	NIS		L	0.5	% V/V	POST	
23	ROUNDUP	4.0	L	1.0	LB A/A	POST	97.5 a
24	ROUNDUP ULTRA	4.0	L	2.0	LB A/A	POST	100.0 a
25	GRAMOXONE EXTRA	2.5	L	2.5	PT/A	POST	55.0 c
25	NIS		L	0.5	% V/V	POST	
26	LIBERTY	1.67	L	.365	LB A/A	POST	47.5 c
26	AMMONIUM SULFATE	100	D	3.00	LB A/A	POST	
27	CONTROL						0.0 g
LSD (P=.05)							7.33
Standard Deviation							5.18
CV							19.17
Replicate F							3.317
Replicate Prob(F)							0.0244
Treatment F							195.354
Treatment Prob(F)							0.0001

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

VPI & SU

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL HERBICIDES

Trial ID: MUGLOG2.DAT

Investigator: KEVIN BRADLEY

Location: VPI & SU

Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: KEVIN BRADLEY

Title: GRADUATE RESEARCH ASST

Affiliation: VPI & SU

Postal Code: 24060

Other Investigator: SCOTT HAGOOD

Title: PROFESSOR

Affiliation: VPI & SU

Postal Code: 24060

Trial Status: ONGOING

Initiation Date: 9-9-99

Country: USA

City: NELSON COUNTY

State/Prov.: VIRGINIA

Postal Code: _____

CROP AND PEST DESCRIPTION

Weed 1. ARTVU	MUGWORT	2. _____	3. _____
4. _____	5. _____	6. _____	7. _____
7. _____	8. _____	9. _____	

Crop 1: _____ Variety: _____ Planting Date: _____
 Planting Method: _____ Rate: _____ Depth: _____
 Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
 Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 2: _____ Variety: _____ Planting Date: _____
 Planting Method: _____ Rate: _____ Depth: _____
 Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
 Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
 Planting Method: _____ Rate: _____ Depth: _____
 Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
 Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 8 FT Plot Length, Unit: 80 FT Reps: 3
 Site Type: _____
 Tillage Type: NONE Study Design: RANDOMIZED COMPLETE BLOCK
 Field Prep./Maintenance: _____
 Trial Initiation Comments: _____

Previous: Crops	Pesticides	Year
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

SOIL DESCRIPTION

Texture: _____ % OM: _____ % Sand: _____ % Silt: _____ % Clay: _____
 pH: _____ CEC: _____ Soil Name: _____ Fertility Level: _____

VPI & SU

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL HERBICIDES

Trial ID: MUGLOG2.DAT

Investigator: KEVIN BRADLEY

Location: VPI & SU

Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: _____
 Closest Weather Station: _____ Distance: _____ Unit: _____

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	9-9-99					
Time of Day:	10-12 AM					
Application Method:	BROADCAST					
Application Timing:	POST					
Applic. Placement:						
Air Temp., Unit:	89 F					
% Relative Humidity:	70					
Wind Velocity, Unit:	1.5 MPH					
Dew Presence (Y/N):	Y					
Water Hardness:	N/A					
Soil Temp., Unit:	61 F					
Soil Moisture:	DRY/DAMP					
% Cloud Cover:	25					

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL HERBICIDES

Trial ID: MUGLOG2.DAT

Investigator: KEVIN BRADLEY

Location: VPI & SU

Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 ARTVU Stage: VEGETATIV	_____	_____	_____	_____	_____	_____
Stage Scale: 1-2'AV15"	_____	_____	_____	_____	_____	_____
Density, Unit: 95% GC	_____	_____	_____	_____	_____	_____
Weed 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 4 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 5 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 6 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 7 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 8 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 9 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL
HERBICIDES

Trial ID: MUGLOG2.DAT
Location: VPI & SU

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	LOG SPRYR					
Operating Pressure:	34 PSI					
Nozzle Type:	FLAT FAN					
Nozzle Size:	8006					
Nozzle Spacing, Unit:	18 INCH					
Nozzles/Row:	4					
Band Width, Unit:	N/A					
Boom Length, Unit:	60 INCH					
Boom Height, Unit:	20 INCH					
Ground Speed, Unit:	3.1 MPH					
Incorporation Equip.:	N/A					
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER					
Spray Volume, Unit:	36 GPA					
Spray pH:						
Propellant:	CO/2					
Tank Mix (Y/N):	Y					

Trt No	Treatment Application Comment

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL
HERBICIDES

Trial ID: MUGLOG2.DAT
Location: VPI & SU

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	8 LBS	4 LBS	2 LBS	1 LB	0.5 LB	0.25 LB
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	9-14-99	9-14-99	9-14-99	9-14-99	9-14-99	9-14-99
Trt-Eval Interval	1 WAT	1 WAT	1 WAT	1 WAT	1 WAT	1 WAT

Trt No.	Treatment Name	Rate	Unit						
1	2,4-D AMINE	8 LB A/A	25.0 c	25.0 de	25.0 d	25.0 c	25.0 cd	25.0 de	
2	2,4-D ESTER	8 LB A/A	30.0 c	30.0 d	30.0 d	30.0 c	30.0 c	30.0 cd	
3	LIBERTY	8 LB A/A	86.7 a	81.7 ab	75.0 ab	73.3 a	73.3 a	71.7 a	
4	ROUNDUP ULTRA	8 LB A/A	11.7 e	10.0 fg	8.3 ef	8.3 d	8.3 e	8.3 f	
5	BANVEL	8 LB A/A	15.0 de	15.0 ef	13.3 e	8.3 d	8.3 e	6.7 fg	
6	GARLON3	8 LB A/A	8.3 ef	8.3 fg	6.7 ef	5.0 d	5.0 ef	3.3 fg	
7	STINGER	8 LB A/A	23.3 cd	23.3 de	23.3 d	23.3 c	21.7 d	21.7 e	
8	TORDON	8 LB A/A	28.3 c	28.3 d	28.3 d	28.3 c	28.3 c	28.3 cde	
9	ALLY	.056 LB A/A	8.3 ef	5.0 fg	5.0 ef	5.0 d	5.0 ef	5.0 fg	
9	X-77	.25 % V/V							
10	SCYTHE	20 % V/V	85.0 a	73.3 bc	60.0 c	55.0 b	40.0 b	31.7 cd	
10	2,4-D AMINE	2 LB A/A							
11	SCYTHE	20 % V/V	93.3 a	86.7 a	81.7 a	80.0 a	73.3 a	60.0 b	
11	LIBERTY	2 LB A/A							
12	SCYTHE	20 % V/V	75.0 b	70.0 c	68.3 bc	56.7 b	45.0 b	33.3 c	
12	ROUNDUP ULTRA	2 LB A/A							
13	CONTROL		0.0 f	0.0 g	0.0 f	0.0 d	0.0 f	0.0 g	
LSD (P=.05)			9.33	9.93	9.90	8.28	6.28	6.60	
Standard Deviation			5.54	5.89	5.87	4.91	3.73	3.92	
CV			14.69	16.77	17.97	16.04	13.33	15.66	
Replicate F			1.317	1.680	2.006	0.425	2.400	0.502	
Replicate Prob(F)			0.2866	0.2076	0.1564	0.6587	0.1122	0.6117	
Treatment F			113.944	84.298	71.421	91.836	129.815	92.495	
Treatment Prob(F)			0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL HERBICIDES

Trial ID: MUGLOG2.DAT
Location: VPI & SU

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	8 LBS	4 LBS	2 LBS	1 LB	0.5 LB	0.25 LB
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	9-23-99	9-23-99	9-23-99	9-23-99	9-23-99	9-23-99
Trt-Eval Interval	2 WAT	2 WAT	2 WAT	2 WAT	2 WAT	2 WAT

Trt No.	Treatment Name	Rate	Unit						
1	2,4-D AMINE	8 LB A/A		38.3 d	38.3 d	36.7 de	31.7 de	28.3 de	25.0 d
2	2,4-D ESTER	8 LB A/A		40.0 d	40.0 d	40.0 d	40.0 d	40.0 cd	40.0 bc
3	LIBERTY	8 LB A/A		100.0 a	98.3 a	98.3 a	96.7 a	95.0 a	90.0 a
4	ROUNDUP ULTRA	8 LB A/A		93.3 b	91.7 ab	80.0 bc	55.0 c	23.3 e	11.7 e
5	BANVEL	8 LB A/A		21.7 e	21.7 e	20.0 f	15.0 fg	6.7 fg	3.3 ef
6	GARLON3	8 LB A/A		10.0 f	10.0 f	5.0 g	5.0 gh	5.0 g	3.3 ef
7	STINGER	8 LB A/A		26.7 e	26.7 e	26.7 ef	23.3 ef	20.0 ef	11.7 e
8	TORDON	8 LB A/A		43.3 d	43.3 d	43.3 d	43.3 cd	43.3 c	43.3 b
9	ALLY	.056 LB A/A		10.0 f	6.7 fg	5.0 g	5.0 gh	1.7 g	0.0 f
9	X-77	.25 % V/V							
10	SCYTHE	20 % V/V		91.7 b	88.3 bc	80.0 bc	70.0 b	61.7 b	46.7 b
10	2,4-D AMINE	2 LB A/A							
11	SCYTHE	20 % V/V		96.7 ab	96.7 a	91.7 ab	90.0 a	91.7 a	88.3 a
11	LIBERTY	2 LB A/A							
12	SCYTHE	20 % V/V		85.0 c	81.7 c	73.3 c	55.0 c	43.3 c	33.3 cd
12	ROUNDUP ULTRA	2 LB A/A							
13	CONTROL			0.0 g	0.0 g	0.0 g	0.0 h	0.0 g	0.0 f
LSD (P=.05)				6.03	7.69	11.29	12.22	13.80	9.23
Standard Deviation				3.58	4.56	6.70	7.25	8.19	5.48
CV				7.09	9.22	14.51	17.79	23.15	17.96
Replicate F				0.350	0.400	0.814	0.037	0.545	1.046
Replicate Prob(F)				0.7082	0.6747	0.4548	0.9642	0.5871	0.3667
Treatment F				328.400	195.892	81.014	57.427	45.193	95.644
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL HERBICIDES

Trial ID: MUGLOG2.DAT
Location: VPI & SU

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	8 LBS	4 LBS	2 LBS	1 LB	0.5 LB	0.25 LB
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	10-6-99	10-6-99	10-6-99	10-6-99	10-6-99	10-6-99
Trt-Eval Interval	4 WAT	4 WAT	4 WAT	4 WAT	4 WAT	4 WAT

Trt No.	Treatment Name	Rate	Rate Unit						
1	2,4-D AMINE	8 LB A/A		48.3 e	48.3 d	43.3 e	36.7 d	23.3 d	21.7 d
2	2,4-D ESTER	8 LB A/A		63.3 d	63.3 bc	63.3 cd	60.0 c	56.7 c	41.7 c
3	LIBERTY	8 LB A/A		96.7 ab	96.7 a	93.3 a	93.3 a	80.0 abc	71.7 b
4	ROUNDUP ULTRA	8 LB A/A		100.0 a	100.0 a	96.7 a	90.0 a	66.7 bc	46.7 c
5	BANVEL	8 LB A/A		30.0 f	30.0 e	28.3 f	28.3 d	16.7 d	11.7 de
6	GARLON3	8 LB A/A		8.3 g	6.7 f	3.3 g	3.3 e	0.0 d	0.0 e
7	STINGER	8 LB A/A		95.0 ab	95.0 a	95.0 a	85.0 a	83.3 ab	46.7 c
8	TORDON	8 LB A/A		98.3 ab	98.3 a	98.3 a	98.3 a	98.3 a	98.3 a
9	ALLY	.056 LB A/A		6.7 g	5.0 f	3.3 g	0.0 e	0.0 d	0.0 e
9	X-77	.25 % V/V							
10	SCYTHE	20 % V/V		88.3 b	91.7 a	83.3 ab	83.3 ab	71.7 bc	55.0 c
10	2,4-D AMINE	2 LB A/A							
11	SCYTHE	20 % V/V		73.3 c	73.3 b	76.7 bc	80.0 abc	83.3 ab	88.3 a
11	LIBERTY	2 LB A/A							
12	SCYTHE	20 % V/V		61.7 d	55.0 cd	55.0 de	63.3 bc	60.0 bc	56.7 c
12	ROUNDUP ULTRA	2 LB A/A							
13	CONTROL			0.0 g	0.0 f	0.0 g	0.0 e	0.0 d	0.0 e
LSD (P=.05)				9.54	10.88	14.91	19.31	21.71	14.71
Standard Deviation				5.66	6.45	8.85	11.46	12.88	8.73
CV				9.56	10.99	15.54	20.64	26.17	21.08
Replicate F				1.260	1.400	1.843	3.111	2.862	1.446
Replicate Prob(F)				0.3018	0.2660	0.1801	0.0629	0.0768	0.2552
Treatment F				130.850	104.038	54.908	31.919	23.595	43.452
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL
HERBICIDES

Trial ID: MUGLOG.DAT
Location: VPI & SU

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: KEVIN BRADLEY
Affiliation: VPI & SU

Title: GRADUATE RESEARCH ASST
Postal Code: 24060

Other Investigator: SCOTT HAGOOD
Affiliation: VPI & SU

Title: PROFESSOR
Postal Code: 24060

Trial Status: ONGOING
City: NELSON COUNTY

Initiation Date: 6-28-99
State/Prov.: VIRGINIA

Country: USA
Postal Code: _____

CROP AND PEST DESCRIPTION

Weed 1. ARTVU MUGWORT 2. _____ 3. _____
4. _____ 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 8 FT Plot Length, Unit: 80 FT Reps: 3

Site Type: _____

Tillage Type: NONE

Study Design: RANDOMIZED COMPLETE BLOCK

Field Prep./Maintenance: _____

Trial Initiation Comments: _____

Previous:	Crops	Pesticides	Year
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

SOIL DESCRIPTION

Texture: _____ % OM: _____ % Sand: _____ % Silt: _____ % Clay: _____
pH: _____ CEC: _____ Soil Name: _____ Fertility Level: _____

(MUGLOG)
VPI & SU

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL
HERBICIDES

Trial ID: MUGLOG.DAT
Location: VPI & SU

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 ARTVU Stage: VEGETATIV	_____	_____	_____	_____	_____	_____
Stage Scale: 12-20"	_____	_____	_____	_____	_____	_____
Density, Unit: 90% GC	_____	_____	_____	_____	_____	_____
Weed 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 4 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 5 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 6 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 7 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 8 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 9 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL HERBICIDES

Trial ID: MUGLOG.DAT
Location: VPI & SU

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	LOG SPRYR	_____	_____	_____	_____	_____
Operating Pressure:	34 PSI	_____	_____	_____	_____	_____
Nozzle Type:	FLAT FAN	_____	_____	_____	_____	_____
Nozzle Size:	8006	_____	_____	_____	_____	_____
Nozzle Spacing, Unit:	18 INCH	_____	_____	_____	_____	_____
Nozzles/Row:	4	_____	_____	_____	_____	_____
Band Width, Unit:	N/A	_____	_____	_____	_____	_____
Boom Length, Unit:	60 INCH	_____	_____	_____	_____	_____
Boom Height, Unit:	20 INCH	_____	_____	_____	_____	_____
Ground Speed, Unit:	3.1 MPH	_____	_____	_____	_____	_____
Incorporation Equip.:	N/A	_____	_____	_____	_____	_____
Hours to Incorp.:	_____	_____	_____	_____	_____	_____
Incorp. Depth, Unit:	_____	_____	_____	_____	_____	_____
Carrier:	WATER	_____	_____	_____	_____	_____
Spray Volume, Unit:	36 GPA	_____	_____	_____	_____	_____
Spray pH:	_____	_____	_____	_____	_____	_____
Propellant:	CO/2	_____	_____	_____	_____	_____
Tank Mix (Y/N):	Y	_____	_____	_____	_____	_____

Trt No Treatment Application Comment

Trt No	Treatment Application Comment
_____	_____
_____	_____
_____	_____

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL
HERBICIDESTrial ID: MUGLOG.DAT
Location: VPI & SUInvestigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	8 LBS	4 LBS	2 LBS	1 LB	0.5 LB	0.25 LB
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	7-7-99	7-7-99	7-7-99	7-7-99	7-7-99	7-7-99
Trt-Eval Interval	1 WAT	1 WAT	1 WAT	1 WAT	1 WAT	1 WAT

Trt No.	Treatment Name	Rate	Unit						
1	2,4-D AMINE	8 LB A/A		61.7 cd	61.7 c	55.0 c	50.0 cd	36.7 def	31.7 c
2	2,4-D ESTER	8 LB A/A		63.3 cd	58.3 cd	56.7 c	53.3 cd	41.7 de	31.7 c
3	LIBERTY	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
4	ROUNDUP ULTRA	8 LB A/A		78.3 bc	78.3 b	75.0 b	58.3 c	43.3 d	33.3 c
5	BANVEL	8 LB A/A		43.3 e	45.0 de	35.0 d	28.3 e	28.3 f	23.3 cd
6	GARLON3	8 LB A/A		41.7 e	31.7 ef	31.7 d	28.3 e	30.0 ef	28.3 c
7	STINGER	8 LB A/A		55.0 de	53.3 cd	51.7 c	43.3 d	31.7 def	25.0 cd
8	TORDON	8 LB A/A		55.0 de	56.7 cd	56.7 c	60.0 c	56.7 c	56.7 b
9	ALLY	.056 LB A/A		20.0 f	21.7 f	16.7 e	15.0 f	15.0 g	15.0 d
9	X-77	.25 % V/V							
10	SCYTHE	20 % V/V		91.7 ab	85.0 ab	86.7 ab	88.3 ab	90.0 a	90.0 a
10	2,4-D AMINE	2 LB A/A							
11	SCYTHE	20 % V/V		98.3 a	100.0 a	99.3 a	99.3 a	100.0 a	100.0 a
11	LIBERTY	2 LB A/A							
12	SCYTHE	20 % V/V		93.3 ab	94.3 a	86.7 ab	81.7 b	73.3 b	65.0 b
12	ROUNDUP ULTRA	2 LB A/A							
13	CONTROL			0.0 g	0.0 g	0.0 f	0.0 g	0.0 h	0.0 e
LSD (P=.05)				16.05	14.47	13.94	11.19	11.09	9.94
Standard Deviation				9.53	8.59	8.27	6.64	6.58	5.90
CV				15.45	14.2	14.31	12.22	13.22	12.78
Replicate F				8.567	10.373	6.786	7.513	3.215	2.378
Replicate Prob(F)				0.0016	0.0006	0.0046	0.0029	0.0579	0.1142
Treatment F				31.295	38.976	42.964	68.400	71.704	94.590
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL HERBICIDES

Trial ID: MUGLOG.DAT
Location: VPI & SU

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	8 LBS	4 LBS	2 LBS	1 LB	0.5 LB	0.25 LB
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	7-22-99	7-22-99	7-22-99	7-22-99	7-22-99	7-22-99
Trt-Eval Interval	3 WAT	3 WAT	3 WAT	3 WAT	3 WAT	3 WAT

Trt No.	Treatment Name	Rate	Unit												
1	2,4-D AMINE	8 LB	A/A	88.3	abc	85.0	abc	73.3	de	76.7	cde	73.3	c	66.7	b
2	2,4-D ESTER	8 LB	A/A	90.0	abc	86.7	abc	78.3	bcd	76.7	cde	75.0	c	73.3	b
3	LIBERTY	8 LB	A/A	80.0	abc	71.7	cd	75.0	cde	73.3	de	71.7	c	71.7	b
4	ROUNDUP ULTRA	8 LB	A/A	100.0	a	95.0	ab	91.7	abc	90.0	abc	80.0	bc	70.0	b
5	BANVEL	8 LB	A/A	95.0	ab	95.0	ab	93.3	ab	91.7	ab	91.7	ab	61.7	bc
6	GARLON3	8 LB	A/A	78.3	bc	76.7	bcd	76.7	b-e	66.7	def	70.0	c	63.3	b
7	STINGER	8 LB	A/A	100.0	a	100.0	a	100.0	a	98.3	a	93.3	ab	78.3	ab
8	TORDON	8 LB	A/A	100.0	a	100.0	a	100.0	a	100.0	a	100.0	a	100.0	a
9	ALLY	.056 LB	A/A	70.0	c	63.3	d	60.0	e	55.0	f	48.3	d	36.7	c
9	X-77	.25 %	V/V												
10	SCYTHE	20 %	V/V	73.3	c	73.3	cd	73.3	de	80.0	bcd	80.0	bc	73.3	b
10	2,4-D AMINE	2 LB	A/A												
11	SCYTHE	20 %	V/V	70.0	c	68.3	cd	61.7	de	61.7	ef	66.7	c	71.7	b
11	LIBERTY	2 LB	A/A												
12	SCYTHE	20 %	V/V	78.3	bc	75.0	cd	61.7	de	65.0	def	68.3	c	60.0	bc
12	ROUNDUP ULTRA	2 LB	A/A												
13	CONTROL			0.0	d	0.0	e	0.0	f	0.0	g	0.0	e	0.0	d
LSD (P=.05)				18.30		17.41		15.73		13.46		14.95		24.55	
Standard Deviation				10.86		10.33		9.33		7.99		8.87		14.57	
CV				13.8		13.57		12.84		11.11		12.56		22.91	
Replicate F				5.239		3.459		1.677		1.838		1.768		1.543	
Replicate Prob(F)				0.0129		0.0478		0.2080		0.1809		0.1922		0.2342	
Treatment F				17.429		18.952		23.012		31.153		23.927		7.889	
Treatment Prob(F)				0.0001		0.0001		0.0001		0.0001		0.0001		0.0001	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL HERBICIDES

Trial ID: MUGLOG.DAT
Location: VPI & SU

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	8 LBS	4 LBS	2 LBS	1 LB	0.5 LB	0.25 LB
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	8-4-99	8-4-99	8-4-99	8-4-99	8-4-99	8-20-99
Trt-Eval Interval	4 WAT	4 WAT	4 WAT	4 WAT	4 WAT	4 WAT

Trt No.	Treatment Name	Rate	Rate Unit						
1	2,4-D AMINE	8 LB A/A		96.7 a	93.3 a	90.0 abc	91.7 a	91.7 a	88.3 ab
2	2,4-D ESTER	8 LB A/A		95.0 a	95.0 a	91.7 ab	91.7 a	91.7 a	88.3 ab
3	LIBERTY	8 LB A/A		71.7 b	70.0 b	73.3 bcd	70.0 b	70.0 bc	66.7 bcd
4	ROUNDUP ULTRA	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	98.3 a	93.3 a
5	BANVEL	8 LB A/A		100.0 a	100.0 a	100.0 a	95.0 a	95.0 a	85.0 ab
6	GARLON3	8 LB A/A		100.0 a	100.0 a	100.0 a	98.3 a	96.7 a	83.3 ab
7	STINGER	8 LB A/A		100.0 a	100.0 a	100.0 a	98.3 a	95.0 a	88.3 ab
8	TORDON	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
9	ALLY	.056 LB A/A		90.0 ab	83.3 ab	83.3 a-d	83.3 ab	81.7 abc	76.7 abc
9	X-77	.25 % V/V							
10	SCYTHE	20 % V/V		71.7 b	71.7 b	71.7 cd	81.7 ab	68.3 c	60.0 cd
10	2,4-D AMINE	2 LB A/A							
11	SCYTHE	20 % V/V		43.3 c	43.3 c	40.0 e	43.3 c	46.7 d	51.7 d
11	LIBERTY	2 LB A/A							
12	SCYTHE	20 % V/V		71.7 b	71.7 b	65.0 d	66.7 b	86.7 ab	83.3 ab
12	ROUNDUP ULTRA	2 LB A/A							
13	CONTROL			0.0 d	0.0 d	0.0 f	0.0 d	0.0 e	0.0 e
LSD (P=.05)				18.10	18.74	17.71	16.05	16.22	20.61
Standard Deviation				10.74	11.12	10.51	9.52	9.63	12.23
CV				13.42	14.06	13.46	12.13	12.25	16.47
Replicate F				2.451	1.685	0.749	1.973	3.016	1.711
Replicate Prob(F)				0.1075	0.2066	0.4838	0.1610	0.0679	0.2021
Treatment F				22.881	21.007	23.848	27.509	25.638	13.698
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL HERBICIDES

Trial ID: MUGLOG.DAT
Location: VPI & SU

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	8 LBS	4 LBS	2 LBS	1 LB	0.5 LB	0.25 LB
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	8-20-99	8-20-99	8-20-99	8-20-99	8-20-99	8-20-99
Trt-Eval Interval	7 WAT	7 WAT	7 WAT	7 WAT	7 WAT	7 WAT

Trt No.	Treatment Name	Rate	Unit						
1	2,4-D AMINE	8 LB A/A	100.0 a	96.7 a	95.0 ab	95.0 a	95.0 a	95.0 a	
2	2,4-D ESTER	8 LB A/A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	
3	LIBERTY	8 LB A/A	86.7 ab	91.7 a	86.7 ab	81.7 a	81.7 a	81.7 a	
4	ROUNDUP ULTRA	8 LB A/A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	
5	BANVEL	8 LB A/A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	96.7 a	
6	GARLON3	8 LB A/A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	
7	STINGER	8 LB A/A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	
8	TORDON	8 LB A/A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	
9	ALLY	.056 LB A/A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	95.0 a	
9	X-77	.25 % V/V							
10	SCYTHE	20 % V/V	66.7 b	70.0 b	81.7 ab	98.3 a	86.7 a	83.3 a	
10	2,4-D AMINE	2 LB A/A							
11	SCYTHE	20 % V/V	66.7 b	66.7 b	70.0 b	83.3 a	86.7 a	90.0 a	
11	LIBERTY	2 LB A/A							
12	SCYTHE	20 % V/V	86.7 ab	86.7 ab	91.7 ab	95.0 a	98.3 a	98.3 a	
12	ROUNDUP ULTRA	2 LB A/A							
13	CONTROL		0.0 c	0.0 c	0.0 c	0.0 b	0.0 b	0.0 b	
LSD (P=.05)				21.42	20.53	22.78	19.36	22.10	22.78
Standard Deviation				12.71	12.18	13.52	11.49	13.11	13.52
CV				14.93	14.25	15.62	12.95	14.85	15.42
Replicate F				3.063	2.544	0.453	0.121	0.552	0.768
Replicate Prob(F)				0.0653	0.0995	0.6413	0.8862	0.5831	0.4749
Treatment F				15.016	16.073	12.525	17.068	13.012	12.050
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL HERBICIDES

Trial ID: MUGLOG.DAT
Location: VPI & SU

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	8 LBS	4 LBS	2 LBS	1 LB	0.5 LB	0.25 LB	
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	
Rating Date	8-31-99	8-31-99	8-31-99	8-31-99	8-31-99	8-31-99	
Trt-Eval Interval	8 WAT	8 WAT	8 WAT	8 WAT	8 WAT	8 WAT	

Trt No.	Treatment Name	Rate	Unit						
1	2,4-D AMINE	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
2	2,4-D ESTER	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
3	LIBERTY	8 LB A/A		86.7 abc	90.0 ab	90.0 a	86.7 a	81.7 ab	80.0 ab
4	ROUNDUP ULTRA	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
5	BANVEL	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
6	GARLON3	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
7	STINGER	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
8	TORDON	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
9	ALLY	.056 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
9	X-77	.25 % V/V							
10	SCYTHE	20 % V/V		65.0 bc	70.0 bc	86.7 ab	100.0 a	93.3 a	90.0 ab
10	2,4-D AMINE	2 LB A/A							
11	SCYTHE	20 % V/V		60.0 c	68.3 bc	78.3 ab	78.3 ab	88.3 a	88.3 ab
11	LIBERTY	2 LB A/A							
12	SCYTHE	20 % V/V		91.7 ab	91.7 ab	91.7 a	95.0 a	100.0 a	100.0 a
12	ROUNDUP ULTRA	2 LB A/A							
13	CONTROL			63.3 c	63.3 c	63.3 b	63.3 b	63.3 b	63.3 b
LSD (P=.05)				25.82	24.32	22.67	20.58	23.36	24.93
Standard Deviation				15.32	14.43	13.45	12.21	13.86	14.79
CV				17.07	15.85	14.45	12.98	14.69	15.74
Replicate F				4.402	2.164	0.893	0.739	0.924	0.987
Replicate Prob(F)				0.0235	0.1368	0.4228	0.4880	0.4106	0.3872
Treatment F				3.248	2.844	2.125	2.622	1.883	1.724
Treatment Prob(F)				0.0068	0.0141	0.0561	0.0214	0.0904	0.1239

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL HERBICIDES

Trial ID: MUGLOG.DAT
Location: VPI & SU

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	8 LBS	4 LBS	2 LBS	1 LB	0.5 LB	0.25 LB
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	9-14-99	9-14-99	9-14-99	9-14-99	9-14-99	9-14-99
Trt-Eval Interval	10 WAT	10 WAT	10 WAT	10 WAT	10 WAT	10 WAT

Trt No.	Treatment Name	Rate	Rate Unit						
1	2,4-D AMINE	8 LB A/A		96.7 a	95.0 a	100.0 a	100.0 a	100.0 a	96.7 a
2	2,4-D ESTER	8 LB A/A		99.3 a	98.3 a	100.0 a	100.0 a	100.0 a	100.0 a
3	LIBERTY	8 LB A/A		90.0 a	100.0 a	100.0 a	93.3 ab	86.7 a	86.7 a
4	ROUNDUP ULTRA	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
5	BANVEL	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
6	GARLON3	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
7	STINGER	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
8	TORDON	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
9	ALLY	.056 LB A/A		100.0 a	100.0 a	88.3 ab	91.7 ab	95.0 a	95.0 a
9	X-77	.25 % V/V							
10	SCYTHE	20 % V/V		78.3 ab	75.0 bc	83.3 ab	95.0 ab	91.7 a	88.3 a
10	2,4-D AMINE	2 LB A/A							
11	SCYTHE	20 % V/V		63.3 b	70.0 c	78.3 b	81.7 b	90.0 a	86.7 a
11	LIBERTY	2 LB A/A							
12	SCYTHE	20 % V/V		90.0 a	90.0 ab	90.0 ab	93.3 ab	95.0 a	95.0 a
12	ROUNDUP ULTRA	2 LB A/A							
13	CONTROL			0.0 c	0.0 d	0.0 c	0.0 c	0.0 b	0.0 b
LSD (P=.05)				19.72	17.28	16.14	12.75	15.78	18.18
Standard Deviation				11.70	10.25	9.57	7.57	9.37	10.79
CV				13.61	11.81	10.92	8.52	10.51	12.21
Replicate F				3.167	2.823	1.091	2.116	1.586	2.253
Replicate Prob(F)				0.0602	0.0792	0.3520	0.1425	0.2255	0.1268
Treatment F				17.291	22.320	24.584	38.864	25.234	18.873
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL
HERBICIDES

Trial ID: MUGLOG.DAT
Location: VPI & SU

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	8 LBS	4 LBS	2 LBS	1 LB	0.5 LB	0.25 LB	
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	10-6-99	10-6-99	10-6-99	10-6-99	10-6-99	10-6-99	10-6-99
Trt-Eval Interval	12 WAT	12 WAT	12 WAT	12 WAT	12 WAT	12 WAT	12 WAT

Trt No.	Treatment Name	Rate	Rate Unit						
1	2,4-D AMINE	8 LB A/A		75.0 a-d	75.0 abc	68.3 bc	71.7 bcd	68.3 bcd	61.7 bc
2	2,4-D ESTER	8 LB A/A		86.7 abc	85.0 ab	61.7 c	58.3 d	63.3 bcd	58.3 bc
3	LIBERTY	8 LB A/A		68.3 a-d	61.7 bc	65.0 c	56.7 d	51.7 cd	48.3 c
4	ROUNDUP ULTRA	8 LB A/A		100.0 a	100.0 a	93.3 a	86.7 abc	73.3 bcd	68.3 bc
5	BANVEL	8 LB A/A		95.0 ab	85.0 ab	68.3 bc	68.3 bcd	71.7 bcd	65.0 bc
6	GARLON3	8 LB A/A		91.7 ab	86.7 ab	88.3 ab	85.0 abc	75.0 bc	75.0 abc
7	STINGER	8 LB A/A		100.0 a	100.0 a	93.3 a	88.3 ab	88.3 ab	85.0 ab
8	TORDON	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
9	ALLY	.056 LB A/A		71.7 a-d	68.3 bc	55.0 c	51.7 d	48.3 d	51.7 c
9	X-77	.25 % V/V							
10	SCYTHE	20 % V/V		63.3 bcd	55.0 c	55.0 c	68.3 bcd	76.7 abc	65.0 bc
10	2,4-D AMINE	2 LB A/A							
11	SCYTHE	20 % V/V		53.3 cd	53.3 c	66.7 bc	63.3 cd	60.0 cd	56.7 bc
11	LIBERTY	2 LB A/A							
12	SCYTHE	20 % V/V		51.7 d	51.7 c	58.3 c	68.3 bcd	75.0 bc	71.7 abc
12	ROUNDUP ULTRA	2 LB A/A							
13	CONTROL			0.0 e	0.0 d	0.0 d	0.0 e	0.0 e	0.0 d
LSD (P=.05)				29.98	25.04	20.60	21.29	22.56	26.52
Standard Deviation				17.79	14.86	12.22	12.63	13.39	15.74
CV				24.18	20.96	18.2	18.95	20.43	25.36
Replicate F				1.059	0.648	1.163	0.269	0.368	1.059
Replicate Prob(F)				0.3624	0.5322	0.3296	0.7664	0.6957	0.3625
Treatment F				7.499	10.481	13.083	11.277	9.675	6.536
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

USE OF A LOGARITHMIC SPRAYER TO EVALUATE MUGWORT CONTROL WITH SEVERAL
HERBICIDESTrial ID: MUGLOG.DAT
Location: VPI & SUInvestigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	8 LBS	4 LBS	2 LBS	1 LB	0.5 LB	0.25 LB
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	11-5-99	11-5-99	11-5-99	11-5-99	11-5-99	11-5-99
Trt-Eval Interval	16 WAT	16 WAT	16 WAT	16 WAT	16 WAT	16 WAT

Trt No.	Treatment Name	Rate	Rate Unit						
1	2,4-D AMINE	8 LB A/A		41.7 c	36.7 c	31.7 d	28.3 cd	21.7 cde	20.0 cd
2	2,4-D ESTER	8 LB A/A		30.0 c	30.0 cd	20.0 de	18.3 de	0.0 e	0.0 d
3	LIBERTY	8 LB A/A		6.7 e	0.0 f	0.0 f	0.0 e	0.0 e	0.0 d
4	ROUNDUP ULTRA	8 LB A/A		100.0 a	100.0 a	88.3 ab	60.0 b	36.7 c	30.0 c
5	BANVEL	8 LB A/A		90.0 a	90.0 a	73.3 b	61.7 b	58.3 b	53.3 b
6	GARLON3	8 LB A/A		61.7 b	58.3 b	50.0 c	43.3 bc	33.3 cd	28.3 c
7	STINGER	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	95.0 a	86.7 a
8	TORDON	8 LB A/A		100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
9	ALLY	.056 LB A/A		26.7 cd	18.3 de	15.0 def	0.0 e	0.0 e	0.0 d
9	X-77	.25 % V/V							
10	SCYTHE	20 % V/V		43.3 c	26.7 cd	28.3 d	56.7 b	15.0 de	8.3 cd
10	2,4-D AMINE	2 LB A/A							
11	SCYTHE	20 % V/V		10.0 de	10.0 ef	8.3 ef	0.0 e	0.0 e	0.0 d
11	LIBERTY	2 LB A/A							
12	SCYTHE	20 % V/V		3.3 e	10.0 ef	21.7 de	43.3 bc	58.3 b	31.7 c
12	ROUNDUP ULTRA	2 LB A/A							
13	CONTROL			0.0 e	0.0 f	0.0 f	0.0 e	0.0 e	0.0 d
LSD (P=.05)				17.65	14.77	15.13	19.09	19.63	21.25
Standard Deviation				10.47	8.76	8.98	11.33	11.65	12.61
CV				22.2	19.64	21.74	28.78	36.19	45.75
Replicate F				0.532	2.103	3.207	0.664	1.026	0.996
Replicate Prob(F)				0.5944	0.1440	0.0583	0.5238	0.3738	0.3842
Treatment F				41.802	62.218	51.192	29.946	28.605	21.464
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

(CUTSTUMP)
VPI & SU

Site Description Page 1 of 4

EVALUATION OF CUT-STUMP TREATMENTS VS. 3 DIFFERENT GROWTH STAGE TREATMENTS
FOR THE CONTROL OF MUGWORT (*Artemisia vulgaris*)

Trial ID: CUTSTUMP.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: KEVIN BRADLEY Title: GRADUATE RESEARCH ASST
Affiliation: VPI & SU Postal Code: 24060

Other Investigator: SCOTT HAGOOD Title: PROFESSOR
Affiliation: VPI & SU Postal Code: 24060

Trial Status: ONGOING Initiation Date: 6-15-99 Country: USA
City: NELSON COUNTY State/Prov.: VIRGINIA Postal Code: _____

CROP AND PEST DESCRIPTION

Weed 1. ARTVU MUGWORT 2. _____ 3. _____
4. _____ 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 10 FT Reps: 3

Site Type: _____
Tillage Type: NONE Study Design: SPLIT-PLOT
Field Prep./Maintenance: _____
Trial Initiation Comments: _____

Previous: Crops	Pesticides	Year
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

SOIL DESCRIPTION

Texture: _____ % OM: _____ % Sand: _____ % Silt: _____ % Clay: _____
pH: _____ CEC: _____ Soil Name: _____ Fertility Level: _____

VPI & SU

EVALUATION OF CUT-STUMP TREATMENTS VS. 3 DIFFERENT GROWTH STAGE TREATMENTS FOR THE CONTROL OF MUGWORT (*Artemisia vulgaris*)

Trial ID: CUTSTUMP.DAT Investigator: KEVIN BRADLEY

Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: _____
 Closest Weather Station: _____ Distance: _____ Unit: _____

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	6-15-99	7-22-99	8-31-99			
Time of Day:	4:30-5:00	11:45 AM	9:45 AM			
Application Method:	BROADCAST	BROADCAST	BROADCAST			
Application Timing:	1ST TIMNG	2ND TIMNG	3RD TIMNG			
Applic. Placement:						
Air Temp., Unit:	81 F	88 F	60 F			
% Relative Humidity:	75	90	55			
Wind Velocity, Unit:	1.5 MPH	1.5 MPH	1 MPH			
Dew Presence (Y/N):	N	N	N			
Water Hardness:	N/A	N/A	N/A			
Soil Temp., Unit:	61 F	61 F	61 F			
Soil Moisture:	DAMP	MOIST	DRY/DAMP			
% Cloud Cover:	60	80	85			

EVALUATION OF CUT-STUMP TREATMENTS VS. 3 DIFFERENT GROWTH STAGE TREATMENTS
FOR THE CONTROL OF MUGWORT (*Artemisia vulgaris*)

Trial ID: CUTSTUMP.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 ARTVU Stage:	VEGETATIV	VEGETATIV	VEGETATIV	_____	_____	_____
Stage Scale:	3-12 INCH	AVG 5 IN	AVG 6 IN	_____	_____	_____
Density, Unit:	85 % GC	65 % GC	0-10 % GC	_____	_____	_____
Weed 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 4 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 5 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 6 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 7 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 8 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 9 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____

VPI & SU

EVALUATION OF CUT-STUMP TREATMENTS VS. 3 DIFFERENT GROWTH STAGE TREATMENTS FOR THE CONTROL OF MUGWORT (*Artemisia vulgaris*)

Trial ID: CUTSTUMP.DAT Investigator: KEVIN BRADLEY

Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

	APPLICATION EQUIPMENT								
	A		B		C		D	E	F
Appl. Equipment:	BACKPACK		BACKPACK		BACKPACK		_____	_____	_____
Operating Pressure:	34 PSI		34 PSI		34 PSI		_____	_____	_____
Nozzle Type:	FLAT FAN		FLAT FAN		FLAT FAN		_____	_____	_____
Nozzle Size:	8003		8003		8003		_____	_____	_____
Nozzle Spacing, Unit:	18	INCH	18	INCH	18	INCH	_____	_____	_____
Nozzles/Row:	4		4		4		_____	_____	_____
Band Width, Unit:	_____		_____		_____		_____	_____	_____
Boom Length, Unit:	72	INCH	72	INCH	72	INCH	_____	_____	_____
Boom Height, Unit:	20	INCH	20	INCH	20	INCH	_____	_____	_____
Ground Speed, Unit:	3.1	MPH	3.1	MPH	3.1	MPH	_____	_____	_____
Incorporation Equip.:	N/A		N/A		N/A		_____	_____	_____
Hours to Incorp.:	_____		_____		_____		_____	_____	_____
Incorp. Depth, Unit:	_____		_____		_____		_____	_____	_____
Carrier:	WATER		WATER		WATER		_____	_____	_____
Spray Volume, Unit:	22.5	GPA	22.5	GPA	22.5	GPA	_____	_____	_____
Spray pH:	_____		_____		_____		_____	_____	_____
Propellant:	CO/2		CO/2		CO/2		_____	_____	_____
Tank Mix (Y/N):	Y		Y		Y		_____	_____	_____

Trt No Treatment Application Comment

1/2 OF MUGWORT PLOTS MOWED TO CUT STUMPS AND APPLICATIONS MADE TO CUT STUMPS AT EACH TIMING AND TO MUGWORT AT THREE DIFFERENT GROWTH STAGES

EVALUATION OF CUT-STUMP TREATMENTS VS. 3 DIFFERENT GROWTH STAGE TREATMENTS
FOR THE CONTROL OF MUGWORT (*Artemisia vulgaris*)

Trial ID: CUTSTUMP.DAT Investigator: KEVIN BRADLEY

Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	MOWED	UNMOWED	MOWED	UNMOWED	MOWED	UNMOWED
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-22-99	6-22-99	7-7-99	7-7-99	7-22-99	7-22-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Unit	Grow Stg
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TABLE OF R MEANS

Replicate 1	29.5	11.7	29.2	19.8	25.0	24.8
Replicate 2	29.5	12.4	29.5	22.2	26.8	30.5
Replicate 3	29.7	12.0	29.8	22.2	26.7	28.2

TABLE OF A MEANS

1	2,4-D AMINE	3.8 L	4.0 LB A/A	POST	33.3	15.6	33.3	29.4	28.3	31.7
2	2,4-D ESTER	3.76 L	4.0 LB A/A	POST	32.8	15.0	33.3	32.2	30.0	32.2
3	TORDON	2.0 L	1.0 LB A/A	POST	32.2	12.8	33.3	33.3	33.3	33.3
4	ROUNDUP ULTRA	4.0 L	4.0 LB A/A	POST	33.3	10.0	31.1	32.2	21.1	31.1
5	LIBERTY	1.67 L	1.5 LB A/A	POST	33.3	33.1	31.7	33.3	21.7	31.1
6	GARLON	4.0 L	2.0 LB A/A	POST	32.8	8.3	32.8	14.4	29.4	37.2
7	STINGER	3.0 L	0.25 LB A/A	POST	32.2	9.4	33.3	11.7	33.3	31.7
8	BANVEL	4.0 L	2.0 LB A/A	POST	32.8	10.0	33.3	20.0	33.3	33.3
9	ALLY	60 DF	.0112 LB A/A	POST	32.8	6.1	32.8	7.2	31.1	16.7
9	X-77	L	0.25 % V/V	POST						
10	CONTROL				0.0	0.0	0.0	0.0	0.0	0.0

TABLE OF B MEANS

1	FIRST TIMING				88.7	36.1	88.5	64.2	78.5	80.2
2	SECOND TIMING				0.0	0.0	0.0	0.0	0.0	3.3
3	THIRD TIMING				0.0	0.0	0.0	0.0	0.0	0.0

TABLE OF AB MEANS

1	2,4-D AMINE	3.8 L	4.0 LB A/A	POST	100.0	46.7	100.0	88.3	85.0	95.0
1	FIRST TIMING									
2	2,4-D ESTER	3.76 L	4.0 LB A/A	POST	98.3	45.0	100.0	96.7	90.0	96.7
1	FIRST TIMING									
3	TORDON	2.0 L	1.0 LB A/A	POST	96.7	38.3	100.0	100.0	100.0	100.0
1	FIRST TIMING									
4	ROUNDUP ULTRA	4.0 L	4.0 LB A/A	POST	100.0	30.0	93.3	96.7	63.3	93.3
1	FIRST TIMING									
5	LIBERTY	1.67 L	1.5 LB A/A	POST	100.0	99.3	95.0	100.0	65.0	93.3
1	FIRST TIMING									

EVALUATION OF CUT-STUMP TREATMENTS VS. 3 DIFFERENT GROWTH STAGE TREATMENTS
FOR THE CONTROL OF MUGWORT (*Artemisia vulgaris*)

Trial ID: CUTSTUMP.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	MOWED	UNMOWED	MOWED	UNMOWED	MOWED	UNMOWED
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-22-99	6-22-99	7-7-99	7-7-99	7-22-99	7-22-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Unit	Grow Stg	ARTVU MOWED CONTRL %	ARTVU UNMOWED CONTRL %	ARTVU MOWED CONTRL %	ARTVU UNMOWED CONTRL %	ARTVU MOWED CONTRL %	ARTVU UNMOWED CONTRL %
6	GARLON	4.0	L	2.0	LB A/A	POST	98.3	25.0	98.3	43.3	88.3	78.3
1	FIRST TIMING											
7	STINGER	3.0	L	0.25	LB A/A	POST	96.7	28.3	100.0	35.0	100.0	95.0
1	FIRST TIMING											
8	BANVEL	4.0	L	2.0	LB A/A	POST	98.3	30.0	100.0	60.0	100.0	100.0
1	FIRST TIMING											
9	ALLY	60	DF	.0112	LB A/A	POST	98.3	18.3	98.3	21.7	93.3	50.0
9	X-77	L	L	0.25	% V/V	POST						
1	FIRST TIMING											
10	CONTROL						0.0	0.0	0.0	0.0	0.0	0.0
1	FIRST TIMING											
1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
2	SECOND TIMING											
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
2	SECOND TIMING											
3	TORDON	2.0	L	1.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
2	SECOND TIMING											
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
2	SECOND TIMING											
5	LIBERTY	1.67	L	1.5	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
2	SECOND TIMING											
6	GARLON	4.0	L	2.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	33.3
2	SECOND TIMING											
7	STINGER	3.0	L	0.25	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
2	SECOND TIMING											
8	BANVEL	4.0	L	2.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
2	SECOND TIMING											
9	ALLY	60	DF	.0112	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
9	X-77	L	L	0.25	% V/V	POST						
2	SECOND TIMING											
10	CONTROL						0.0	0.0	0.0	0.0	0.0	0.0
2	SECOND TIMING											
1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING											
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING											

EVALUATION OF CUT-STUMP TREATMENTS VS. 3 DIFFERENT GROWTH STAGE TREATMENTS FOR THE CONTROL OF MUGWORT (*Artemisia vulgaris*)

Trial ID: CUTSTUMP.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	MOWED	UNMOWED	MOWED	UNMOWED	MOWED	UNMOWED
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-22-99	6-22-99	7-7-99	7-7-99	7-22-99	7-22-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Form	Fm Amt	Fm Ds	Rate	Rate Unit	Grow Stg	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
3	TORDON		2.0	L	1.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING												
4	ROUNDUP ULTRA		4.0	L	4.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING												
5	LIBERTY		1.67	L	1.5	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING												
6	GARLON		4.0	L	2.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING												
7	STINGER		3.0	L	0.25	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING												
8	BANVEL		4.0	L	2.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING												
9	ALLY		60	DF	.0112	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
9	X-77			L	0.25	% V/V	POST						
3	THIRD TIMING												
10	CONTROL							0.0	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING												

EVALUATION OF CUT-STUMP TREATMENTS VS. 3 DIFFERENT GROWTH STAGE TREATMENTS
FOR THE CONTROL OF MUGWORT (*Artemisia vulgaris*)

Trial ID: CUTSTUMP.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 6-22-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	183582.222222				
R	2	0.555556	0.277778	0.167	0.8471	0.7
A	9	8748.888889	972.098765	533.831	0.0001	1.3
ERROR A	18	32.777778	1.820988	1.093	0.3933	2.1
B	2	157235.555556	78617.777778	47170.670	0.0001	0.7
AB	18	17497.777778	972.098765	583.259	0.0001	2.1
ERROR B	40	66.666667	1.666667			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 6-22-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	44646.900000				
R	2	8.866667	4.433333	0.720	0.4928	1.3
A	9	6071.122222	674.569136	106.283	0.0001	2.5
ERROR A	18	114.244444	6.346914	1.031	0.4496	4.1
B	2	26064.200000	13032.100000	2117.128	0.0001	1.3
AB	18	12142.244444	674.569136	109.587	0.0001	4.1
ERROR B	40	246.222222	6.155556			

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 7-7-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	183052.500000				
R	2	6.666667	3.333333	1.333	0.2751	0.8
A	9	8752.500000	972.500000	403.962	0.0001	1.5
ERROR A	18	43.333333	2.407407	0.963	0.5167	2.6
B	2	156645.000000	78322.500000	31329.000	0.0001	0.8
AB	18	17505.000000	972.500000	389.000	0.0001	2.6
ERROR B	40	100.000000	2.500000			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 7-7-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	121051.388889				
R	2	108.888889	54.444444	2.649	0.0831	2.4
A	9	12490.277778	1387.808642	82.656	0.0001	4.1
ERROR A	18	302.222222	16.790123	0.817	0.6707	7.5
B	2	82347.222222	41173.611111	2003.041	0.0001	2.4
AB	18	24980.555556	1387.808642	67.515	0.0001	7.5
ERROR B	40	822.222222	20.555556			

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 7-22-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	149952.500000				
R	2	61.666667	30.833333	1.370	0.2657	2.5
A	9	8452.500000	939.166667	43.532	0.0001	4.6
ERROR A	18	388.333333	21.574074	0.959	0.5209	7.8
B	2	123245.000000	61622.500000	2738.778	0.0001	2.5
AB	18	16905.000000	939.166667	41.741	0.0001	7.8
ERROR B	40	900.000000	22.500000			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 7-22-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	162502.500000				
R	2	486.666667	243.333333	1.647	0.2055	6.3
A	9	10063.611111	1118.179012	9.425	0.0001	10.8
ERROR A	18	2135.555556	118.641975	0.803	0.6855	20.1
B	2	123411.666667	61705.833333	417.558	0.0001	6.3
AB	18	20493.888889	1138.549383	7.704	0.0001	20.1
ERROR B	40	5911.111111	147.777778			

EVALUATION OF CUT-STUMP TREATMENTS VS. 3 DIFFERENT GROWTH STAGE TREATMENTS
FOR THE CONTROL OF MUGWORT (*Artemisia vulgaris*)

Trial ID: CUTSTUMP.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	MOWED	UNMOWED	MOWED	UNMOWED	MOWED	UNMOWED
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	8-4-99	8-4-99	8-20-99	8-20-99	8-31-99	8-31-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Rate Unit	Grow Stg
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TABLE OF R MEANS

Replicate 1	54.3	52.4	53.2	58.8	57.3	65.8
Replicate 2	56.5	53.5	58.0	60.0	64.0	66.0
Replicate 3	58.3	60.0	60.0	60.0	66.3	66.2

TABLE OF A MEANS

1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	62.8	61.1	61.1	65.6	60.0	66.7
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	63.3	65.6	61.7	66.7	58.9	66.7
3	TORDON	2.0	L	1.0	LB A/A	POST	66.7	64.4	66.7	66.7	66.7	66.7
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	53.9	63.3	53.3	66.7	51.1	66.7
5	LIBERTY	1.67	L	1.5	LB A/A	POST	53.9	66.7	61.1	66.7	58.9	66.7
6	GARLON	4.0	L	2.0	LB A/A	POST	65.0	54.2	66.7	66.7	66.7	66.7
7	STINGER	3.0	L	0.25	LB A/A	POST	66.7	59.4	66.7	66.7	66.7	66.7
8	BANVEL	4.0	L	2.0	LB A/A	POST	66.7	65.0	66.7	66.7	66.7	66.7
9	ALLY	60	DF	.0112	LB A/A	POST	65.0	53.3	66.7	63.9	66.7	66.7
9	X-77	L		0.25	% V/V	POST						
10	CONTROL						0.0	0.0	0.0	0.0	63.3	60.0

TABLE OF B MEANS

1	FIRST TIMING	79.2	87.3	81.2	90.0	88.0	98.7
2	SECOND TIMING	90.0	78.7	90.0	88.8	99.7	99.3
3	THIRD TIMING	0.0	0.0	0.0	0.0	0.0	0.0

TABLE OF AB MEANS

1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	88.3	100.0	83.3	100.0	80.0	100.0
1	FIRST TIMING											
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	90.0	100.0	85.0	100.0	80.0	100.0
1	FIRST TIMING											
3	TORDON	2.0	L	1.0	LB A/A	POST	100.0	100.0	100.0	100.0	100.0	100.0
1	FIRST TIMING											
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	61.7	90.0	60.0	100.0	53.3	100.0
1	FIRST TIMING											
5	LIBERTY	1.67	L	1.5	LB A/A	POST	61.7	100.0	83.3	100.0	76.7	100.0
1	FIRST TIMING											

EVALUATION OF CUT-STUMP TREATMENTS VS. 3 DIFFERENT GROWTH STAGE TREATMENTS
FOR THE CONTROL OF MUGWORT (*Artemisia vulgaris*)

Trial ID: CUTSTUMP.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	MOWED	UNMOWED	MOWED	UNMOWED	MOWED	UNMOWED
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	8-4-99	8-4-99	8-20-99	8-20-99	8-31-99	8-31-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Unit	Rate Unit	Grow Stg	95.0	96.0	100.0	100.0	100.0	100.0
6	GARLON	4.0	L	2.0	LB A/A	POST		95.0	96.0	100.0	100.0	100.0	100.0
1	FIRST TIMING												
7	STINGER	3.0	L	0.25	LB A/A	POST		100.0	100.0	100.0	100.0	100.0	100.0
1	FIRST TIMING												
8	BANVEL	4.0	L	2.0	LB A/A	POST		100.0	100.0	100.0	100.0	100.0	100.0
1	FIRST TIMING												
9	ALLY	60	DF	.0112	LB A/A	POST		95.0	86.7	100.0	100.0	100.0	100.0
9	X-77	L		0.25	% V/V	POST							
1	FIRST TIMING												
10	CONTROL							0.0	0.0	0.0	0.0	90.0	86.7
1	FIRST TIMING												
1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST		100.0	83.3	100.0	96.7	100.0	100.0
2	SECOND TIMING												
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST		100.0	96.7	100.0	100.0	96.7	100.0
2	SECOND TIMING												
3	TORDON	2.0	L	1.0	LB A/A	POST		100.0	93.3	100.0	100.0	100.0	100.0
2	SECOND TIMING												
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST		100.0	100.0	100.0	100.0	100.0	100.0
2	SECOND TIMING												
5	LIBERTY	1.67	L	1.5	LB A/A	POST		100.0	100.0	100.0	100.0	100.0	100.0
2	SECOND TIMING												
6	GARLON	4.0	L	2.0	LB A/A	POST		100.0	66.7	100.0	100.0	100.0	100.0
2	SECOND TIMING												
7	STINGER	3.0	L	0.25	LB A/A	POST		100.0	78.3	100.0	100.0	100.0	100.0
2	SECOND TIMING												
8	BANVEL	4.0	L	2.0	LB A/A	POST		100.0	95.0	100.0	100.0	100.0	100.0
2	SECOND TIMING												
9	ALLY	60	DF	.0112	LB A/A	POST		100.0	73.3	100.0	91.7	100.0	100.0
9	X-77	L		0.25	% V/V	POST							
2	SECOND TIMING												
10	CONTROL							0.0	0.0	0.0	0.0	100.0	93.3
2	SECOND TIMING												
1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST		0.0	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING												
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST		0.0	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING												

EVALUATION OF CUT-STUMP TREATMENTS VS. 3 DIFFERENT GROWTH STAGE TREATMENTS
FOR THE CONTROL OF MUGWORT (*Artemesia vulgaris*)

Trial ID: CUTSTUMP.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	MOWED	UNMOWED	MOWED	UNMOWED	MOWED	UNMOWED
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	8-4-99	8-4-99	8-20-99	8-20-99	8-31-99	8-31-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Form	Fm	Rate	Grow	ARTVU MOWED	ARTVU UNMOWED	ARTVU MOWED	ARTVU UNMOWED	ARTVU MOWED	ARTVU UNMOWED
		Amt	Ds	Rate	Unit	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
3	TORDON	2.0	L	1.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING										
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING										
5	LIBERTY	1.67	L	1.5	LB A/A	POST	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING										
6	GARLON	4.0	L	2.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING										
7	STINGER	3.0	L	0.25	LB A/A	POST	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING										
8	BANVEL	4.0	L	2.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING										
9	ALLY	60	DF	.0112	LB A/A	POST	0.0	0.0	0.0	0.0	0.0
9	X-77		L	0.25	% V/V	POST					
3	THIRD TIMING										
10	CONTROL						0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING										

EVALUATION OF CUT-STUMP TREATMENTS VS. 3 DIFFERENT GROWTH STAGE TREATMENTS
FOR THE CONTROL OF MUGWORT (*Artemisia vulgaris*)

Trial ID: CUTSTUMP.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 8-4-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	201651.388889				
R	2	240.555556	120.277778	2.291	0.1143	3.8
A	9	33718.055556	3746.450617	83.312	0.0001	6.6
ERROR A	18	809.444444	44.969136	0.857	0.6283	12.0
B	2	144847.222222	72423.611111	1379.497	0.0001	3.8
AB	18	19936.111111	1107.561728	21.096	0.0001	12.0
ERROR B	40	2100.000000	52.500000			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 8-4-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	202255.288889				
R	2	1006.422222	503.211111	2.391	0.1045	7.6
A	9	32316.177778	3590.686420	17.297	0.0001	14.3
ERROR A	18	3736.688889	207.593827	0.986	0.4933	23.9
B	2	138778.755556	69389.377778	329.658	0.0001	7.6
AB	18	17997.688889	999.871605	4.750	0.0001	23.9
ERROR B	40	8419.555556	210.488889			

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 8-20-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	208244.722222				
R	2	740.555556	370.277778	3.136	0.0543	5.7
A	9	34066.944444	3785.216049	42.044	0.0001	9.4
ERROR A	18	1620.555556	90.030864	0.763	0.7277	17.9
B	2	147660.555556	73830.277778	625.386	0.0001	5.7
AB	18	19433.888889	1079.660494	9.145	0.0001	17.9
ERROR B	40	4722.222222	118.055556			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 8-20-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	213911.388889				
R	2	27.222222	13.611111	1.690	0.1975	1.5
A	9	35600.277778	3955.586420	531.788	0.0001	2.7
ERROR A	18	133.888889	7.438272	0.923	0.5576	4.7
B	2	159927.222222	79963.611111	9926.518	0.0001	1.5
AB	18	17900.555556	994.475309	123.452	0.0001	4.7
ERROR B	40	322.222222	8.055556			

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 8-31-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	196512.222222				
R	2	1308.888889	654.444444	3.444	0.0417	7.2
A	9	2245.555556	249.506173	1.553	0.2036	12.6
ERROR A	18	2891.111111	160.617284	0.845	0.6403	22.7
B	2	178135.555556	89067.777778	468.778	0.0001	7.2
AB	18	4331.111111	240.617284	1.266	0.2604	22.7
ERROR B	40	7600.000000	190.000000			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 8-31-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	196810.000000				
R	2	1.666667	0.833333	0.200	0.8195	1.1
A	9	360.000000	40.000000	48.000	0.0001	0.9
ERROR A	18	15.000000	0.833333	0.200	0.9997	3.4
B	2	196026.666667	98013.333333	23523.200	0.0001	1.1
AB	18	240.000000	13.333333	3.200	0.0011	3.4
ERROR B	40	166.666667	4.166667			

EVALUATION OF CUT-STUMP TREATMENTS VS. 3 DIFFERENT GROWTH STAGE TREATMENTS
FOR THE CONTROL OF MUGWORT (*Artemisia vulgaris*)

Trial ID: CUTSTUMP.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	MOWED	UNMOWED	MOWED	UNMOWED	MOWED	UNMOWED
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	9-14-99	9-14-99	10-6-99	10-6-99	11-3-99	11-3-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Unit	Grow Stg
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TABLE OF R MEANS

Replicate 1				74.8	83.0	33.2	52.2	37.3	46.8
Replicate 2				87.3	89.8	69.8	77.7	62.0	66.5
Replicate 3				90.0	90.0	67.0	68.7	54.2	57.5

TABLE OF A MEANS

1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	90.0	98.9	58.3	68.3	54.4	52.8
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	90.6	97.8	58.3	71.7	56.7	65.6
3	TORDON	2.0	L	1.0	LB A/A	POST	100.0	100.0	100.0	100.0	100.0	98.3
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	78.9	97.8	60.0	87.8	51.1	77.8
5	LIBERTY	1.67	L	1.5	LB A/A	POST	87.8	96.7	46.1	61.7	40.6	45.0
6	GARLON	4.0	L	2.0	LB A/A	POST	98.3	99.4	44.4	55.0	31.1	37.2
7	STINGER	3.0	L	0.25	LB A/A	POST	98.3	92.8	75.0	76.1	60.6	66.1
8	BANVEL	4.0	L	2.0	LB A/A	POST	98.3	98.3	72.2	80.0	66.1	69.4
9	ALLY	60	DF	.0112	LB A/A	POST	98.3	94.4	52.2	61.1	51.1	57.2
9	X-77	L		0.25	% V/V	POST						
10	CONTROL						0.0	0.0	0.0	0.0	0.0	0.0

TABLE OF B MEANS

1	FIRST TIMING						76.0	88.3	56.7	67.8	55.5	64.5
2	SECOND TIMING						86.8	88.2	52.2	63.3	48.3	52.3
3	THIRD TIMING						89.3	86.3	61.2	67.3	49.7	54.0

TABLE OF AB MEANS

1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	73.3	98.3	56.7	66.7	70.0	66.7
1	FIRST TIMING											
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	78.3	100.0	60.0	76.7	75.0	83.3
1	FIRST TIMING											
3	TORDON	2.0	L	1.0	LB A/A	POST	100.0	100.0	100.0	100.0	100.0	100.0
1	FIRST TIMING											
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	45.0	96.7	33.3	83.3	13.3	68.3
1	FIRST TIMING											
5	LIBERTY	1.67	L	1.5	LB A/A	POST	73.3	98.3	50.0	76.7	65.0	75.0
1	FIRST TIMING											

EVALUATION OF CUT-STUMP TREATMENTS VS. 3 DIFFERENT GROWTH STAGE TREATMENTS
FOR THE CONTROL OF MUGWORT (*Artemisia vulgaris*)

Trial ID: CUTSTUMP.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	MOWED	UNMOWED	MOWED	UNMOWED	MOWED	UNMOWED
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	9-14-99	9-14-99	10-6-99	10-6-99	11-3-99	11-3-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Unit	Grow Stg	100.0	100.0	48.3	60.0	23.3	35.0
6	GARLON	4.0	L	2.0	LB A/A	POST	100.0	100.0	48.3	60.0	23.3	35.0
1	FIRST TIMING											
7	STINGER	3.0	L	0.25	LB A/A	POST	96.7	95.0	85.0	71.7	78.3	75.0
1	FIRST TIMING											
8	BANVEL	4.0	L	2.0	LB A/A	POST	96.7	100.0	75.0	85.0	65.0	78.3
1	FIRST TIMING											
9	ALLY	60	DF	.0112	LB A/A	POST	96.7	95.0	58.3	58.3	65.0	63.3
9	X-77	L		0.25	% V/V	POST						
1	FIRST TIMING											
10	CONTROL						0.0	0.0	0.0	0.0	0.0	0.0
1	FIRST TIMING											
1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	96.7	98.3	50.0	70.0	50.0	45.0
2	SECOND TIMING											
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	93.3	93.3	43.3	60.0	41.7	43.3
2	SECOND TIMING											
3	TORDON	2.0	L	1.0	LB A/A	POST	100.0	100.0	100.0	100.0	100.0	100.0
2	SECOND TIMING											
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	91.7	100.0	53.3	90.0	53.3	76.7
2	SECOND TIMING											
5	LIBERTY	1.67	L	1.5	LB A/A	POST	91.7	95.0	35.0	48.3	26.7	28.3
2	SECOND TIMING											
6	GARLON	4.0	L	2.0	LB A/A	POST	98.3	98.3	41.7	50.0	36.7	41.7
2	SECOND TIMING											
7	STINGER	3.0	L	0.25	LB A/A	POST	100.0	100.0	78.3	88.3	66.7	73.3
2	SECOND TIMING											
8	BANVEL	4.0	L	2.0	LB A/A	POST	98.3	100.0	71.7	73.3	58.3	60.0
2	SECOND TIMING											
9	ALLY	60	DF	.0112	LB A/A	POST	98.3	96.7	48.3	53.3	50.0	55.0
9	X-77	L		0.25	% V/V	POST						
2	SECOND TIMING											
10	CONTROL						0.0	0.0	0.0	0.0	0.0	0.0
2	SECOND TIMING											
1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	100.0	100.0	68.3	68.3	43.3	46.7
3	THIRD TIMING											
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	100.0	100.0	71.7	78.3	53.3	70.0
3	THIRD TIMING											

EVALUATION OF CUT-STUMP TREATMENTS VS. 3 DIFFERENT GROWTH STAGE TREATMENTS
FOR THE CONTROL OF MUGWORT (*Artemesia vulgaris*)

Trial ID: CUTSTUMP.DAT Investigator: KEVIN BRADLEY

Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN
Crop Code	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN
Part Rated	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN
Rating Data Type	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN
Rating Unit	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN
Rating Date	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN
Footnote Number	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN
Trt-Eval Interval	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN
PRM Data Type	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN
# Subsamples, Dec.	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN	UNTRN

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Rate Unit	Grow Stg	ARTVU MOWED CONTRL % VISUAL	ARTVU UNMOWED CONTRL % VISUAL	ARTVU MOWED CONTRL % VISUAL	ARTVU UNMOWED CONTRL % VISUAL	ARTVU MOWED CONTRL % VISUAL	ARTVU UNMOWED CONTRL % VISUAL
3	TORDON	2.0	L	1.0	LB A/A	POST	100.0	100.0	100.0	100.0	100.0	95.0
3	THIRD TIMING											
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	100.0	96.7	93.3	90.0	86.7	88.3
3	THIRD TIMING											
5	LIBERTY	1.67	L	1.5	LB A/A	POST	98.3	96.7	53.3	60.0	30.0	31.7
3	THIRD TIMING											
6	GARLON	4.0	L	2.0	LB A/A	POST	96.7	100.0	43.3	55.0	33.3	35.0
3	THIRD TIMING											
7	STINGER	3.0	L	0.25	LB A/A	POST	98.3	83.3	61.7	68.3	36.7	50.0
3	THIRD TIMING											
8	BANVEL	4.0	L	2.0	LB A/A	POST	100.0	95.0	70.0	81.7	75.0	70.0
3	THIRD TIMING											
9	ALLY	60	DF	.0112	LB A/A	POST	100.0	91.7	50.0	71.7	38.3	53.3
9	X-77		L	0.25	% V/V	POST						
3	THIRD TIMING											
10	CONTROL						0.0	0.0	0.0	0.0	0.0	0.0
3	THIRD TIMING											

EVALUATION OF CUT-STUMP TREATMENTS VS. 3 DIFFERENT GROWTH STAGE TREATMENTS
FOR THE CONTROL OF MUGWORT (*Artemisia vulgaris*)

Trial ID: CUTSTUMP.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 9-14-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	100044.722222				
R	2	3933.888889	1966.944444	8.774	0.0007	7.8
A	9	74278.055556	8253.117284	32.895	0.0001	15.7
ERROR A	18	4516.111111	250.895062	1.119	0.3703	24.7
B	2	3013.888889	1506.944444	6.722	0.0030	7.8
AB	18	5336.111111	296.450617	1.322	0.2259	24.7
ERROR B	40	8966.666667	224.166667			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 9-14-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	81061.388889				
R	2	957.222222	478.611111	14.358	0.0001	3.0
A	9	77161.388889	8573.487654	163.689	0.0001	7.2
ERROR A	18	942.777778	52.376543	1.571	0.1161	9.5
B	2	73.888889	36.944444	1.108	0.3400	3.0
AB	18	592.777778	32.932099	0.988	0.4916	9.5
ERROR B	40	1333.333333	33.333333			

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 10-6-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	122100.000000				
R	2	24971.666667	12485.833333	30.433	0.0001	10.6
A	9	53677.777778	5964.197531	5.970	0.0007	31.3
ERROR A	18	17983.888889	999.104938	2.435	0.0096	33.4
B	2	1215.000000	607.500000	1.481	0.2397	10.6
AB	18	7840.555556	435.586420	1.062	0.4210	33.4
ERROR B	40	16411.111111	410.277778			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 10-6-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	93002.500000				
R	2	10035.000000	5017.500000	24.036	0.0001	7.5
A	9	58369.166667	6485.462963	9.181	0.0001	26.3
ERROR A	18	12715.000000	706.388889	3.384	0.0007	23.8
B	2	365.000000	182.500000	0.874	0.4250	7.5
AB	18	3168.333333	176.018519	0.843	0.6425	23.8
ERROR B	40	8350.000000	208.750000			

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 11-3-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	94352.500000				
R	2	9531.666667	4765.833333	23.503	0.0001	7.4
A	9	52830.277778	5870.030864	18.677	0.0001	17.6
ERROR A	18	5657.222222	314.290123	1.550	0.1232	23.5
B	2	871.666667	435.833333	2.149	0.1298	7.4
AB	18	17350.555556	963.919753	4.754	0.0001	23.5
ERROR B	40	8111.111111	202.777778			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 11-3-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	89	86534.722222				
R	2	5815.555556	2907.777778	21.429	0.0001	6.1
A	9	56279.166667	6253.240741	12.520	0.0001	22.1
ERROR A	18	8990.000000	499.444444	3.681	0.0003	19.2
B	2	2610.555556	1305.277778	9.619	0.0004	6.1
AB	18	7411.666667	411.759259	3.034	0.0017	19.2
ERROR B	40	5427.777778	135.694444			

EVALUATION OF SEQUENTIAL HERBICIDE TREATMENTS FOR THE CONTROL OF MUGWORT

Trial ID: SEQHERB.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: KEVIN BRADLEY Title: GRADUATE RESEARCH ASST
Affiliation: VPI & SU Postal Code: 24060

Other Investigator: SCOTT HAGOOD Title: PROFESSOR
Affiliation: VPI & su Postal Code: 24060

Trial Status: ONGOING Initiation Date: 6-15-99 Country: USA
City: NELSON COUNTY State/Prov.: VIRGINIA Postal Code: _____

CROP AND PEST DESCRIPTION

Weed 1. ARTVU MUGWORT 2. _____ 3. _____
4. _____ 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 15 FT Reps: 4
Site Type: _____
Tillage Type: NONEE Study Design: FACTORIAL
Field Prep./Maintenance: _____
Trial Initiation Comments: _____

Previous: Crops	Pesticides	Year
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

SOIL DESCRIPTION

Texture: _____ % OM: _____ % Sand: _____ % Silt: _____ % Clay: _____
pH: _____ CEC: _____ Soil Name: _____ Fertility Level: _____

EVALUATION OF SEQUENTIAL HERBICIDE TREATMENTS FOR THE CONTROL OF MUGWORT

Trial ID: SEQHERB.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: _____
Closest Weather Station: _____ Distance: _____ Unit: _____

APPLICATION DESCRIPTION

	A		B		C		D	E	F
Application Date:	6-15-99		8-4-99		9-23-99				
Time of Day:	4:45 PM		9-10 AM		10-11 AM				
Application Method:	BROADCAST		BROADCAST		BROADCAST				
Application Timing:	POST ONCE		POST TWICE		POST THRE				
Applic. Placement:									
Air Temp., Unit:	81 F		83 F		74 F				
% Relative Humidity:	75		40		30				
Wind Velocity, Unit:	1.5 MPH		1.5 MPH		1 MPH				
Dew Presence (Y/N):	N		N		N				
Water Hardness:	N/A		N/A		N/A				
Soil Temp., Unit:	61 F		61 F		60 F				
Soil Moisture:	DAMP		DRY		DAMP				
% Cloud Cover:	60		20		0				

EVALUATION OF SEQUENTIAL HERBICIDE TREATMENTS FOR THE CONTROL OF MUGWORT

Trial ID: SEQHERB.DAT

Investigator: KEVIN BRADLEY

Location: NELSON COUNTY, VA

Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 ARTVU Stage:	VEGETATIV	VEGETATIV	VEGETATIV	_____	_____	_____
Stage Scale:	3 INCH	4 INCH	1-3 INCH	_____	_____	_____
Density, Unit:	85 %GC	85 %GC	VARY %GC	_____	_____	_____
Weed 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 4 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 5 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 6 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 7 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 8 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 9 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____

EVALUATION OF SEQUENTIAL HERBICIDE TREATMENTS FOR THE CONTROL OF MUGWORT

Trial ID: SEQHERB.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

	APPLICATION EQUIPMENT					
	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK	_____	_____	_____
Operating Pressure:	34 PSI	34 PSI	34 PSI	_____	_____	_____
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN	_____	_____	_____
Nozzle Size:	8003	8003	8003	_____	_____	_____
Nozzle Spacing, Unit:	18 INCH	18 INCH	18 INCH	_____	_____	_____
Nozzles/Row:	4	4	4	_____	_____	_____
Band Width, Unit:	_____	_____	_____	_____	_____	_____
Boom Length, Unit:	72 INCH	72 INCH	72 INCH	_____	_____	_____
Boom Height, Unit:	20 INCH	20 INCH	20 INCH	_____	_____	_____
Ground Speed, Unit:	3.1 MPH	3.1 MPH	3.1 MPH	_____	_____	_____
Incorporation Equip.:	N/A	N/A	N/A	_____	_____	_____
Hours to Incorp.:	_____	_____	_____	_____	_____	_____
Incorp. Depth, Unit:	_____	_____	_____	_____	_____	_____
Carrier:	WATER	WATER	WATER	_____	_____	_____
Spray Volume, Unit:	22.5 GPA	22.5 GPA	22.5 GPA	_____	_____	_____
Spray pH:	_____	_____	_____	_____	_____	_____
Propellant:	CO/2	CO/2	CO/2	_____	_____	_____
Tank Mix (Y/N):	Y	Y	Y	_____	_____	_____

Trt No Treatment Application Comment
— EACH HERBICIDE WAS APPLIED TO MUGWORT EITHER ONE, TWO, OR THREE TIMES,
— SEQUENTIALLY
—

EVALUATION OF SEQUENTIAL HERBICIDE TREATMENTS FOR THE CONTROL OF MUGWORT

Trial ID: SEQHERB.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code					
Part Rated					
Rating Data Type	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Unit	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Date	0-100	0-100	0-100	0-100	0-100
Footnote Number	6-22-99	7-7-99	7-22-99	8-4-99	8-19-99
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Unit	Grow Stg
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TABLE OF R MEANS

Replicate 1				31.3	46.3	61.5	73.5	84.8
Replicate 2				30.8	52.2	60.8	65.8	84.0
Replicate 3				29.2	60.3	76.1	76.2	89.0
Replicate 4				30.8	57.8	72.9	73.3	87.0

TABLE OF A MEANS

1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	39.6	69.6	80.4	84.2	97.5
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	37.9	75.8	88.3	88.3	99.6
3	TORDON	2.0	L	1.0	LB A/A	POST	38.3	97.1	100.0	100.0	100.0
4	ROUNDUP	4.0	L	4.0	LB A/A	POST	13.8	86.3	92.8	97.1	99.2
5	LIBERTY	1.67	L	1.5	LB A/A	POST	96.3	97.1	84.0	75.0	95.4
6	GARLON	4.0	L	2.0	LB A/A	POST	21.3	25.4	50.8	56.7	90.0
7	STINGER	3.0	L	0.25	LB A/A	POST	27.1	29.6	65.8	86.7	99.2
8	BANVEL	4.0	L	2.0	LB A/A	POST	25.8	42.9	88.8	93.3	100.0
9	ALLY	60	DF	.0112	LB A/A	POST	5.4	17.9	27.5	40.8	81.3
9	NIS		L	0.25	% V/V	POST					
10	CONTROL						0.0	0.0	0.0	0.0	0.0

TABLE OF B MEANS

1	TREAT ONCE						31.1	53.6	67.6	73.4	82.0
2	TREAT TWICE						29.8	54.5	69.3	72.4	88.5
3	TREAT THREE						30.7	54.4	66.7	70.9	88.1

TABLE OF AB MEANS

1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	40.0	68.8	78.8	83.8	92.5
1	TREAT ONCE										
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	36.3	71.3	88.8	96.3	98.8
1	TREAT ONCE										

EVALUATION OF SEQUENTIAL HERBICIDE TREATMENTS FOR THE CONTROL OF MUGWORT

Trial ID: SEQHERB.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code					
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100
Rating Date	6-22-99	7-7-99	7-22-99	8-4-99	8-19-99
Footnote Number					
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Unit	Grow Stg	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
3	TORDON	2.0 L		1.0 LB	A/A	POST	40.0	100.0	100.0	100.0	100.0
1	TREAT ONCE										
4	ROUNDUP	4.0 L		4.0 LB	A/A	POST	13.8	86.3	94.5	97.5	97.5
1	TREAT ONCE										
5	LIBERTY	1.67 L		1.5 LB	A/A	POST	95.0	97.5	87.5	77.5	86.3
1	TREAT ONCE										
6	GARLON	4.0 L		2.0 LB	A/A	POST	27.5	26.3	50.0	57.5	72.5
1	TREAT ONCE										
7	STINGER	3.0 L		0.25 LB	A/A	POST	28.8	33.8	65.0	86.3	100.0
1	TREAT ONCE										
8	BANVEL	4.0 L		2.0 LB	A/A	POST	23.8	36.3	86.3	92.5	100.0
1	TREAT ONCE										
9	ALLY	60 DF		.0112 LB	A/A	POST	6.3	16.3	25.0	42.5	72.5
9	NIS	L		0.25 %	V/V	POST					
1	TREAT ONCE										
10	CONTROL						0.0	0.0	0.0	0.0	0.0
1	TREAT ONCE										
1	2,4-D AMINE	3.8 L		4.0 LB	A/A	POST	41.3	68.8	78.8	83.8	100.0
2	TREAT TWICE										
2	2,4-D ESTER	3.76 L		4.0 LB	A/A	POST	38.8	73.8	87.5	86.3	100.0
2	TREAT TWICE										
3	TORDON	2.0 L		1.0 LB	A/A	POST	32.5	95.0	100.0	100.0	100.0
2	TREAT TWICE										
4	ROUNDUP	4.0 L		4.0 LB	A/A	POST	12.5	83.8	91.3	95.0	100.0
2	TREAT TWICE										
5	LIBERTY	1.67 L		1.5 LB	A/A	POST	98.3	96.3	81.3	73.8	100.0
2	TREAT TWICE										
6	GARLON	4.0 L		2.0 LB	A/A	POST	20.0	30.0	60.0	62.5	97.5
2	TREAT TWICE										
7	STINGER	3.0 L		0.25 LB	A/A	POST	26.3	26.3	68.8	88.8	100.0
2	TREAT TWICE										

EVALUATION OF SEQUENTIAL HERBICIDE TREATMENTS FOR THE CONTROL OF MUGWORT

Trial ID: SEQHERB.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU						
Crop Code	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %						
Part Rated	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL						
Rating Data Type	0-100	0-100	0-100	0-100	0-100						
Rating Unit	6-22-99	7-7-99	7-22-99	8-4-99	8-19-99						
Rating Date											
Footnote Number											
Trt-Eval Interval											
PRM Data Type											
# Subsamples, Dec.											
Trt No.	Treatment Name	Form Amt	Fm Ds	Rate Rate	Unit	Grow Stg	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
8	BANVEL	4.0 L		2.0 LB A/A		POST	23.8	51.3	90.0	92.5	100.0
2	TREAT TWICE										
9	ALLY	60 DF		.0112 LB A/A		POST	5.0	20.0	35.0	41.3	87.5
9	NIS	L		0.25 % V/V		POST					
2	TREAT TWICE										
10	CONTROL						0.0	0.0	0.0	0.0	0.0
2	TREAT TWICE										
1	2,4-D AMINE	3.8 L		4.0 LB A/A		POST	37.5	71.3	83.8	85.0	100.0
3	TREAT THREE										
2	2,4-D ESTER	3.76 L		4.0 LB A/A		POST	38.8	82.5	88.8	82.5	100.0
3	TREAT THREE										
3	TORDON	2.0 L		1.0 LB A/A		POST	42.5	96.3	100.0	100.0	100.0
3	TREAT THREE										
4	ROUNDUP	4.0 L		4.0 LB A/A		POST	15.0	88.8	92.5	98.8	100.0
3	TREAT THREE										
5	LIBERTY	1.67 L		1.5 LB A/A		POST	95.8	97.5	83.3	73.8	100.0
3	TREAT THREE										
6	GARLON	4.0 L		2.0 LB A/A		POST	16.3	20.0	42.5	50.0	100.0
3	TREAT THREE										
7	STINGER	3.0 L		0.25 LB A/A		POST	26.3	28.8	63.8	85.0	97.5
3	TREAT THREE										
8	BANVEL	4.0 L		2.0 LB A/A		POST	30.0	41.3	90.0	95.0	100.0
3	TREAT THREE										
9	ALLY	60 DF		.0112 LB A/A		POST	5.0	17.5	22.5	38.8	83.8
9	NIS	L		0.25 % V/V		POST					
3	TREAT THREE										
10	CONTROL						0.0	0.0	0.0	0.0	0.0
3	TREAT THREE										

EVALUATION OF SEQUENTIAL HERBICIDE TREATMENTS FOR THE CONTROL OF MUGWORT

Trial ID: SEQHERB.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

COMPLETE FACTORIAL AOV For ARTVU CONTRL CONTRL % VISUAL 0-100 6-22-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	79961.700000				
R	3	77.900000	25.966667	1.712	0.1755	2.0
A	9	77902.533333	8655.837037	800.551	0.0001	2.8
RA	27	291.933333	10.812346	0.713	0.8294	6.4
B	2	35.150000	17.575000	0.572	0.5926	3.0
RB	6	184.450000	30.741667	2.026	0.0779	3.5
AB	18	650.516667	36.139815	2.382	0.0073	5.5
RAB	54	819.216667	15.170679			

COMPLETE FACTORIAL AOV For ARTVU CONTRL CONTRL % VISUAL 0-100 7-7-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	150566.666667				
R	3	3505.000000	1168.333333	15.122	0.0001	4.5
A	9	134708.333333	14967.592593	63.276	0.0001	12.9
RA	27	6386.666667	236.543210	3.062	0.0002	14.4
B	2	17.916667	8.958333	0.094	0.9119	5.4
RB	6	573.750000	95.625000	1.238	0.3019	7.9
AB	18	1202.916667	66.828704	0.865	0.6198	12.4
RAB	54	4172.083333	77.260802			

COMPLETE FACTORIAL AOV For ARTVU CONTRL CONTRL % VISUAL 0-100 7-22-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	137213.991667				
R	3	5503.758333	1834.586111	29.748	0.0001	4.1
A	9	113449.575000	12605.508333	25.586	0.0001	18.6
RA	27	13301.991667	492.666358	7.989	0.0001	12.8
B	2	134.316667	67.158333	1.017	0.4165	4.4
RB	6	396.216667	66.036111	1.071	0.3915	7.0
AB	18	1097.850000	60.991667	0.989	0.4857	11.1
RAB	54	3330.283333	61.671914			

COMPLETE FACTORIAL AOV For ARTVU CONTRL CONTRL % VISUAL 0-100 8-4-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	122889.791667				
R	3	1777.291667	592.430556	8.745	0.0001	4.3
A	9	106766.875000	11862.986111	35.344	0.0001	15.3
RA	27	9062.291667	335.640432	4.954	0.0001	13.4
B	2	126.666667	63.333333	0.501	0.6291	6.2
RB	6	758.333333	126.388889	1.866	0.1037	7.4
AB	18	740.000000	41.111111	0.607	0.8785	11.6
RAB	54	3658.333333	67.746914			

EVALUATION OF SEQUENTIAL HERBICIDE TREATMENTS FOR THE CONTROL OF MUGWORT

Trial ID: SEQHERB.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

COMPLETE FACTORIAL AOV For ARTVU CONTRL CONTRL % VISUAL 0-100 8-19-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	111799.791667				
R	3	455.625000	151.875000	3.204	0.0303	3.6
A	9	102939.375000	11437.708333	118.558	0.0001	8.2
RA	27	2604.791667	96.473765	2.035	0.0132	11.2
B	2	1065.416667	532.708333	15.130	0.0045	3.2
RB	6	211.250000	35.208333	0.743	0.6176	6.2
AB	18	1963.750000	109.097222	2.302	0.0095	9.7
RAB	54	2559.583333	47.399691			

Source	DF	Sum of Squares	Mean Square	F	Prob(F)	LSD (.05)
Total	119	111799.791667				
R	3	455.625000	151.875000	3.204	0.0303	3.6
A	9	102939.375000	11437.708333	118.558	0.0001	8.2
RA	27	2604.791667	96.473765	2.035	0.0132	11.2
B	2	1065.416667	532.708333	15.130	0.0045	3.2
RB	6	211.250000	35.208333	0.743	0.6176	6.2
AB	18	1963.750000	109.097222	2.302	0.0095	9.7
RAB	54	2559.583333	47.399691			

EVALUATION OF SEQUENTIAL HERBICIDE TREATMENTS FOR THE CONTROL OF MUGWORT

Trial ID: SEQHERB.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code					
Part Rated					
Rating Data Type	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Unit	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Date	0-100	0-100	0-100	0-100	0-100
Footnote Number	8-31-99	9-14-99	9-23-99	10-6-99	11-2-99
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Form	Fm Amt	Fm Ds	Rate	Unit	Grow Stg	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
TABLE OF R MEANS												
	Replicate 1							92.8	80.8	76.8	74.0	63.7
	Replicate 2							91.7	80.1	77.2	72.5	64.4
	Replicate 3							96.8	78.7	75.0	73.5	63.8
	Replicate 4							96.0	78.9	75.3	71.2	62.7

Trt No.	Treatment Name	Form	Fm Amt	Fm Ds	Rate	Unit	Grow Stg	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
TABLE OF A MEANS												
1	2,4-D AMINE	L	3.8		4.0	LB A/A	POST	100.0	83.3	77.9	72.1	61.7
2	2,4-D ESTER	L	3.76		4.0	LB A/A	POST	99.6	83.3	77.9	75.4	63.2
3	TORDON	L	2.0		1.0	LB A/A	POST	100.0	100.0	100.0	100.0	100.0
4	ROUNDUP	L	4.0		4.0	LB A/A	POST	100.0	97.4	94.2	92.5	85.8
5	LIBERTY	L	1.67		1.5	LB A/A	POST	95.4	87.1	83.8	82.9	62.1
6	GARLON	L	4.0		2.0	LB A/A	POST	95.8	77.1	70.4	63.8	44.2
7	STINGER	L	3.0		0.25	LB A/A	POST	98.3	97.9	95.0	92.9	89.6
8	BANVEL	L	4.0		2.0	LB A/A	POST	100.0	97.1	93.8	85.0	78.3
9	ALLY	DF	60		.0112	LB A/A	POST	92.1	72.9	67.9	63.3	51.7
9	NIS	L			0.25	% V/V	POST					
10	CONTROL							62.1	0.0	0.0	0.0	0.0

Trt No.	Treatment Name	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
TABLE OF B MEANS						
1	TREAT ONCE	92.3	77.9	72.4	64.5	52.1
2	TREAT TWICE	96.1	81.4	79.1	70.1	57.6
3	TREAT THREE	94.6	79.6	76.8	83.8	81.2

Trt No.	Treatment Name	Form	Fm Amt	Fm Ds	Rate	Unit	Grow Stg	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
TABLE OF AB MEANS												
1	2,4-D AMINE	L	3.8		4.0	LB A/A	POST	100.0	80.0	71.3	60.0	51.3
1	TREAT ONCE											
2	2,4-D ESTER	L	3.76		4.0	LB A/A	POST	100.0	95.0	86.3	77.5	70.0
1	TREAT ONCE											

EVALUATION OF SEQUENTIAL HERBICIDE TREATMENTS FOR THE CONTROL OF MUGWORT

Trial ID: SEQHERB.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code					
Part Rated					
Rating Data Type	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Unit	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Date	0-100	0-100	0-100	0-100	0-100
Footnote Number	8-31-99	9-14-99	9-23-99	10-6-99	11-2-99
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Form	Fm	Rate	Unit	Grow Stg	100.0	100.0	100.0	100.0	100.0
3	TORDON	2.0	L	1.0	LB A/A	POST	100.0	100.0	100.0	100.0	100.0
1	TREAT ONCE										
4	ROUNDUP	4.0	L	4.0	LB A/A	POST	100.0	100.0	97.5	92.5	85.0
1	TREAT ONCE										
5	LIBERTY	1.67	L	1.5	LB A/A	POST	86.3	90.0	85.0	77.5	40.0
1	TREAT ONCE										
6	GARLON	4.0	L	2.0	LB A/A	POST	87.5	63.8	52.5	37.5	16.3
1	TREAT ONCE										
7	STINGER	3.0	L	0.25	LB A/A	POST	96.3	93.8	88.8	81.3	75.0
1	TREAT ONCE										
8	BANVEL	4.0	L	2.0	LB A/A	POST	100.0	92.5	85.0	71.3	60.0
1	TREAT ONCE										
9	ALLY	60	DF	.0112	LB A/A	POST	87.5	63.8	57.5	47.5	23.8
9	NIS	L		0.25	% V/V	POST					
1	TREAT ONCE										
10	CONTROL						65.0	0.0	0.0	0.0	0.0
1	TREAT ONCE										
1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	100.0	82.5	77.5	61.3	43.8
2	TREAT TWICE										
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	100.0	75.0	71.3	57.5	25.0
2	TREAT TWICE										
3	TORDON	2.0	L	1.0	LB A/A	POST	100.0	100.0	100.0	100.0	100.0
2	TREAT TWICE										
4	ROUNDUP	4.0	L	4.0	LB A/A	POST	100.0	99.0	95.0	86.3	76.3
2	TREAT TWICE										
5	LIBERTY	1.67	L	1.5	LB A/A	POST	100.0	87.5	85.0	72.5	53.8
2	TREAT TWICE										
6	GARLON	4.0	L	2.0	LB A/A	POST	100.0	87.5	85.0	72.5	52.5
2	TREAT TWICE										
7	STINGER	3.0	L	0.25	LB A/A	POST	100.0	100.0	98.8	98.8	97.5
2	TREAT TWICE										

EVALUATION OF SEQUENTIAL HERBICIDE TREATMENTS FOR THE CONTROL OF MUGWORT

Trial ID: SEQHERB.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code					
Part Rated					
Rating Data Type	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Unit	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Date	0-100	0-100	0-100	0-100	0-100
Footnote Number	8-31-99	9-14-99	9-23-99	10-6-99	11-2-99
Trt-Eval Interval					
PRM Data Type					
# Subsamples, Dec.					

Trt No.	Treatment Name	Form	Fm Ds	Rate	Unit	Grow Stg	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
8	BANVEL	4.0 L		2.0 LB A/A	POST		100.0	98.8	98.8	85.0	80.0
2	TREAT TWICE										
9	ALLY	60 DF		.0112 LB A/A	POST		93.8	83.8	80.0	67.5	47.5
9	NIS	L		0.25 % V/V	POST						
2	TREAT TWICE										
10	CONTROL						67.5	0.0	0.0	0.0	0.0
2	TREAT TWICE										
1	2,4-D AMINE	3.8 L		4.0 LB A/A	POST		100.0	87.5	85.0	95.0	90.0
3	TREAT THREE										
2	2,4-D ESTER	3.76 L		4.0 LB A/A	POST		98.8	80.0	76.3	91.3	94.5
3	TREAT THREE										
3	TORDON	2.0 L		1.0 LB A/A	POST		100.0	100.0	100.0	100.0	100.0
3	TREAT THREE										
4	ROUNDUP	4.0 L		4.0 LB A/A	POST		100.0	93.3	90.0	98.8	96.3
3	TREAT THREE										
5	LIBERTY	1.67 L		1.5 LB A/A	POST		100.0	83.8	81.3	98.8	92.5
3	TREAT THREE										
6	GARLON	4.0 L		2.0 LB A/A	POST		100.0	80.0	73.8	81.3	63.8
3	TREAT THREE										
7	STINGER	3.0 L		0.25 LB A/A	POST		98.8	100.0	97.5	98.8	96.3
3	TREAT THREE										
8	BANVEL	4.0 L		2.0 LB A/A	POST		100.0	100.0	97.5	98.8	95.0
3	TREAT THREE										
9	ALLY	60 DF		.0112 LB A/A	POST		95.0	71.3	66.3	75.0	83.8
9	NIS	L		0.25 % V/V	POST						
3	TREAT THREE										
10	CONTROL						53.8	0.0	0.0	0.0	0.0
3	TREAT THREE										

EVALUATION OF SEQUENTIAL HERBICIDE TREATMENTS FOR THE CONTROL OF MUGWORT

Trial ID: SEQHERB.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

COMPLETE FACTORIAL AOV For ARTVU CONTRL CONTRL % VISUAL 0-100 8-31-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	22346.66667				
R	3	551.666667	183.888889	3.717	0.0167	3.6
A	9	14646.66667	1627.407407	16.803	0.0001	8.2
RA	27	2615.000000	96.851852	1.958	0.0179	11.5
B	2	305.416667	152.708333	2.621	0.1520	4.2
RB	6	349.583333	58.263889	1.178	0.3319	6.3
AB	18	1207.083333	67.060185	1.356	0.1927	9.9
RAB	54	2671.250000	49.467593			

COMPLETE FACTORIAL AOV For ARTVU CONTRL CONTRL % VISUAL 0-100 9-14-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	104754.366667				
R	3	87.766667	29.255556	0.413	0.7443	4.3
A	9	94149.533333	10461.059259	98.790	0.0001	8.6
RA	27	2859.066667	105.891358	1.495	0.1040	13.7
B	2	248.616667	124.308333	1.714	0.2578	4.7
RB	6	435.183333	72.530556	1.024	0.4199	7.5
AB	18	3149.216667	174.956481	2.470	0.0054	11.9
RAB	54	3824.983333	70.833025			

COMPLETE FACTORIAL AOV For ARTVU CONTRL CONTRL % VISUAL 0-100 9-23-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	104159.166667				
R	3	104.166667	34.722222	0.377	0.7697	5.0
A	9	90263.333333	10029.259259	81.034	0.0001	9.3
RA	27	3341.666667	123.765432	1.345	0.1753	15.7
B	2	937.916667	468.958333	4.918	0.0544	5.3
RB	6	572.083333	95.347222	1.036	0.4124	8.6
AB	18	3970.416667	220.578704	2.397	0.0070	13.6
RAB	54	4969.583333	92.029321			

COMPLETE FACTORIAL AOV For ARTVU CONTRL CONTRL % VISUAL 0-100 10-6-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	113689.791667				
R	3	140.625000	46.875000	0.423	0.7370	5.4
A	9	87150.208333	9683.356481	55.838	0.0001	11.0
RA	27	4682.291667	173.418210	1.566	0.0803	17.2
B	2	7837.916667	3918.958333	131.545	0.0001	3.0
RB	6	178.750000	29.791667	0.269	0.9490	9.4
AB	18	7720.416667	428.912037	3.873	0.0001	14.9
RAB	54	5979.583333	110.733025			

EVALUATION OF SEQUENTIAL HERBICIDE TREATMENTS FOR THE CONTROL OF MUGWORT

Trial ID: SEQHERB.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

COMPLETE FACTORIAL AOV For ARTVU CONTRL CONTRL % VISUAL 0-100 11-2-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	130195.300000				
R	3	48.433333	16.144444	0.297	0.8273	3.8
A	9	87392.466667	9710.274074	132.520	0.0001	7.2
RA	27	1978.400000	73.274074	1.348	0.1732	12.0
B	2	19085.150000	9542.575000	220.964	0.0001	3.6
RB	6	259.116667	43.186111	0.795	0.5782	6.6
AB	18	18497.183333	1027.621296	18.910	0.0001	10.4
RAB	54	2934.550000	54.343519			

Effect of Sequential Mowings & Herbicide Treatments on Mugwort Control

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: KEVIN BRADLEY Title: GRADUATE RESEARCH ASST
Affiliation: VPI & SU Postal Code: 24060

Other Investigator: SCOTT HAGOOD Title: PROFESSOR
Affiliation: VPI & SU Postal Code: 24060

Trial Status: ONGOING Initiation Date: 4-15-99 Country: USA
City: NELSON COUNTY State/Prov.: VIRGINIA Postal Code: _____

CROP AND PEST DESCRIPTION

Weed 1. MOWED MUGWORT 2. UNMOWD MUGWORT 3. _____
4. _____ 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 10 FT Reps: 4

Site Type: _____
Tillage Type: NONE Study Design: SPLIT-PLOT

Field Prep./Maintenance: _____
Trial Initiation Comments: 1/2 OF MUGWORT PLOTS MOWED 1, 2, OR 3 TIMES, ALLOWED TO REGROW, AND THEN TREATED

Previous:	Crops	Pesticides	Year
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

SOIL DESCRIPTION

Texture: _____ % OM: _____ % Sand: _____ % Silt: _____ % Clay: _____
pH: _____ CEC: _____ Soil Name: _____ Fertility Level: _____

EFFECT OF SEQUENTIAL MOWINGS AND HERBICIDE TREATMENTS ON MUGWORT CONTROL

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: _____
Closest Weather Station: _____ Distance: _____ Unit: _____

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	4-15-99	5-21-99	6-2-99	7-7-99	7-22-99	8-20-99
Time of Day:	9:00 AM	2:00 PM	8:00 AM	8:30 AM	1:30 PM	10:30 AM
Application Method:	MOWING	BROADCAST	MOWING	BROADCAST	MOWING	BROADCAST
Application Timing:	1ST MOW	POST1	2ND MOW	POST2	3RD MOW	POST3
Applic. Placement:						
Air Temp., Unit:	___	82 F	___	85 F	90 F	88 F
% Relative Humidity:	___	85	___	90	95	50
Wind Velocity, Unit:	___	2 MPH	___	1 MPH	1 MPH	2 MPH
Dew Presence (Y/N):	-	N	-	Y	N	N
Water Hardness:	___	N/A	___	N/A	N/A	N/A
Soil Temp., Unit:	___	59 F	___	61 F	61 F	61 F
Soil Moisture:	___	DRY/DAMP	___	DRY	MOIST	DRY
% Cloud Cover:	___	25	___	85	80	0

EFFECT OF SEQUENTIAL MOWINGS AND HERBICIDE TREATMENTS ON MUGWORT CONTROL

Trial ID: SEQMOW.DAT

Investigator: KEVIN BRADLEY

Location: NELSON COUNTY, VA

Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 MOWED Stage:	VEGETATIV	VEGETATIV	VEGETATIV	_____	_____	_____
Stage Scale:	1-4" 9 LF	1-5" 9 LF	1-4" 9 LF	_____	_____	_____
Density, Unit:	95% GC	95% GC	95% GC	_____	_____	_____
Weed 2 UNMOWD Stage:	VEGETATIV	VEGETATIV	EARLY BLM	_____	_____	_____
Stage Scale:	10-24"	18-40"	3-5 FT	_____	_____	_____
Density, Unit:	95% GC	95% GC	95% GC	_____	_____	_____
Weed 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 4 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 5 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 6 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 7 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 8 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 9 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____

EFFECT OF SEQUENTIAL MOWINGS AND HERBICIDE TREATMENTS ON MUGWORT CONTROL

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK	_____	_____	_____
Operating Pressure:	34 PSI	34 PSI	34 PSI	_____	_____	_____
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN	_____	_____	_____
Nozzle Size:	8003	8003	8003	_____	_____	_____
Nozzle Spacing, Unit:	18 INCH	18 INCH	18 INCH	_____	_____	_____
Nozzles/Row:	4	4	4	_____	_____	_____
Band Width, Unit:	_____ N/A	_____ N/A	_____ N/A	_____	_____	_____
Boom Length, Unit:	60 INCH	60 INCH	60 INCH	_____	_____	_____
Boom Height, Unit:	20 INCH	20 INCH	20 INCH	_____	_____	_____
Ground Speed, Unit:	3.1 MPH	3.1 MPH	3.1 MPH	_____	_____	_____
Incorporation Equip.:	N/A	N/A	N/A	_____	_____	_____
Hours to Incorp.:	_____	_____	_____	_____	_____	_____
Incorp. Depth, Unit:	_____	_____	_____	_____	_____	_____
Carrier:	WATER	WATER	WATER	_____	_____	_____
Spray Volume, Unit:	22.5 GPA	22.5 GPA	22.5 GPA	_____	_____	_____
Spray pH:	_____	_____	_____	_____	_____	_____
Propellant:	CO/2	CO/2	CO/2	_____	_____	_____
Tank Mix (Y/N):	Y	Y	Y	_____	_____	_____

Trt No	Treatment Application Comment
—	1/2 OF MUGWORT PLOTS MOWED 1, 2, OR 3 TIMES, ALLOWED TO REGROW, AND THEN SPRAYED
—	
—	

Effect of Sequential Mowings & Herbicide Treatments on Mugwort Control

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	MOWED	UNMOWED	MOWED	UNMOWED	MOWED	UNMOWED
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-2-99	6-2-99	6-11-99	6-11-99	6-22-99	6-22-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Unit	Grow Stg
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TABLE OF R MEANS

Replicate 1	12.6	11.6	14.1	13.2	19.7	16.6
Replicate 2	11.6	11.3	15.2	14.7	19.5	16.2
Replicate 3	11.2	9.8	15.3	14.4	19.3	16.7
Replicate 4	11.1	9.8	15.6	14.2	19.5	16.6

TABLE OF A MEANS

1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	10.4	10.4	15.4	14.2	24.6	17.9
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	11.7	11.3	22.9	20.0	27.5	22.5
3	TORDON	2.0	L	1.0	LB A/A	POST	14.2	11.7	24.6	22.1	32.1	31.7
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	29.2	25.4	31.3	30.8	31.7	31.9
5	LIBERTY	1.67	L	1.5	LB A/A	POST	32.4	31.9	30.8	31.9	30.4	30.7
6	GARLON	4.0	L	2.0	LB A/A	POST	5.0	4.2	5.8	5.4	6.7	4.2
7	STINGER	3.0	L	0.25	LB A/A	POST	5.4	5.0	7.9	7.5	10.8	9.6
8	BANVEL	4.0	L	2.0	LB A/A	POST	5.8	4.6	9.6	7.5	24.2	11.7
9	ALLY	60	DF	.0112	LB A/A	POST	2.1	2.1	2.1	1.7	7.1	5.0
9	X-77		L	0.25	% V/V	POST						
10	CONTROL						0.0	0.0	0.0	0.0	0.0	0.0

TABLE OF B MEANS

1	MOWED ONCE	34.8		32.0		45.1	42.3	58.5	49.5
2	MOWED TWICE	0.0		0.0		0.0	0.0	0.0	0.0
3	MOWED THREE	0.0		0.0		0.0	0.0	0.0	0.0

TABLE OF AB MEANS

1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	31.3	31.3	46.3	42.5	73.8	53.8
1	MOWED ONCE											
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	35.0	33.8	68.8	60.0	82.5	67.5
1	MOWED ONCE											
3	TORDON	2.0	L	1.0	LB A/A	POST	42.5	35.0	73.8	66.3	96.3	95.0
1	MOWED ONCE											
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	87.5	76.3	93.8	92.5	95.0	95.8
1	MOWED ONCE											

Effect of Sequential Mowings & Herbicide Treatments on Mugwort Control

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	MOWED	UNMOWED	MOWED	UNMOWED	MOWED	UNMOWED
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	6-2-99	6-2-99	6-11-99	6-11-99	6-22-99	6-22-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Rate Unit	Grow Stg						
5	LIBERTY	1.67	L	1.5	LB A/A	POST	97.3	95.8	92.5	95.8	91.3	92.0
1	MOWED ONCE											
6	GARLON	4.0	L	2.0	LB A/A	POST	15.0	12.5	17.5	16.3	20.0	12.5
1	MOWED ONCE											
7	STINGER	3.0	L	0.25	LB A/A	POST	16.3	15.0	23.8	22.5	32.5	28.8
1	MOWED ONCE											
8	BANVEL	4.0	L	2.0	LB A/A	POST	17.5	13.8	28.8	22.5	72.5	35.0
1	MOWED ONCE											
9	ALLY	60	DF	.0112	LB A/A	POST	6.3	6.3	6.3	5.0	21.3	15.0
9	X-77		L	0.25	% V/V	POST						
1	MOWED ONCE											
10	CONTROL						0.0	0.0	0.0	0.0	0.0	0.0
1	MOWED ONCE											
1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
2	MOWED TWICE											
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
2	MOWED TWICE											
3	TORDON	2.0	L	1.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
2	MOWED TWICE											
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
2	MOWED TWICE											
5	LIBERTY	1.67	L	1.5	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
2	MOWED TWICE											
6	GARLON	4.0	L	2.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
2	MOWED TWICE											
7	STINGER	3.0	L	0.25	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
2	MOWED TWICE											
8	BANVEL	4.0	L	2.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
2	MOWED TWICE											
9	ALLY	60	DF	.0112	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
9	X-77		L	0.25	% V/V	POST						
2	MOWED TWICE											
10	CONTROL						0.0	0.0	0.0	0.0	0.0	0.0
2	MOWED TWICE											
1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											

Effect of Sequential Mowings & Herbicide Treatments on Mugwort Control

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code ARTVU ARTVU ARTVU ARTVU ARTVU ARTVU
Crop Code MOWED UNMOWED MOWED UNMOWED MOWED UNMOWED
Part Rated CONTRL % CONTRL % CONTRL % CONTRL % CONTRL % CONTRL %
Rating Data Type VISUAL VISUAL VISUAL VISUAL VISUAL VISUAL
Rating Unit 0-100 0-100 0-100 0-100 0-100 0-100
Rating Date 6-2-99 6-2-99 6-11-99 6-11-99 6-22-99 6-22-99
Footnote Number
Trt-Eval Interval
PRM Data Type
Subsamples, Dec.

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Rate Unit	Grow Stg	ARTVU MOWED CONTRL % VISUAL	ARTVU UNMOWED CONTRL % VISUAL	ARTVU MOWED CONTRL % VISUAL	ARTVU UNMOWED CONTRL % VISUAL	ARTVU MOWED CONTRL % VISUAL	ARTVU UNMOWED CONTRL % VISUAL
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											
3	TORDON	2.0	L	1.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											
5	LIBERTY	1.67	L	1.5	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											
6	GARLON	4.0	L	2.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											
7	STINGER	3.0	L	0.25	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											
8	BANVEL	4.0	L	2.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											
9	ALLY	60	DF	.0112	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
9	X-77		L	0.25	% V/V	POST						
3	MOWED THREE											
10	CONTROL						0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											

Effect of Sequential Mowings & Herbicide Treatments on Mugwort Control

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
 Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 6-2-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	72218.366667				
R	3	43.100000	14.366667	2.199	0.0975	1.3
A	9	13081.033333	1453.448148	256.659	0.0001	2.0
ERROR A	27	152.900000	5.662963	0.867	0.6510	4.2
B	2	32387.266667	16193.633333	2478.617	0.0001	1.1
AB	18	26162.066667	1453.448148	222.467	0.0001	3.6
ERROR B	60	392.000000	6.533333			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 6-2-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	63393.300000				
R	3	81.100000	27.033333	1.907	0.1380	1.9
A	9	11632.133333	1292.459259	101.423	0.0001	3.0
ERROR A	27	344.066667	12.743210	0.899	0.6097	6.1
B	2	27221.400000	13610.700000	960.379	0.0001	1.7
AB	18	23264.266667	1292.459259	91.197	0.0001	5.3
ERROR B	60	850.333333	14.172222			

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 6-11-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	100092.791667				
R	3	37.891667	12.630556	0.669	0.5744	2.2
A	9	14697.708333	1633.078704	83.427	0.0001	3.7
ERROR A	27	528.525000	19.575000	1.037	0.4398	7.1
B	2	54300.416667	27150.208333	1437.998	0.0001	1.9
AB	18	29395.416667	1633.078704	86.495	0.0001	6.1
ERROR B	60	1132.833333	18.880556			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 6-11-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	93343.591667				
R	3	39.225000	13.075000	0.605	0.6142	2.4
A	9	14542.841667	1615.871296	71.656	0.0001	4.0
ERROR A	27	608.858333	22.550309	1.044	0.4317	7.6
B	2	47770.816667	23885.408333	1105.664	0.0001	2.1
AB	18	29085.683333	1615.871296	74.799	0.0001	6.6
ERROR B	60	1296.166667	21.602778			

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 6-22-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	139520.000000				
R	3	1.666667	0.555556	0.048	0.9861	1.8
A	9	15736.666667	1748.518519	135.531	0.0001	3.0
ERROR A	27	348.333333	12.901235	1.106	0.3637	5.6
B	2	91260.000000	45630.000000	3911.143	0.0001	1.5
AB	18	31473.333333	1748.518519	149.873	0.0001	4.8
ERROR B	60	700.000000	11.666667			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 6-22-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	115019.991667				
R	3	4.758333	1.586111	0.090	0.9652	2.2
A	9	16010.575000	1778.952778	91.899	0.0001	3.7
ERROR A	27	522.658333	19.357716	1.101	0.3687	6.8
B	2	65406.016667	32703.008333	1860.181	0.0001	1.9
AB	18	32021.150000	1778.952778	101.189	0.0001	5.9
ERROR B	60	1054.833333	17.580556			

Effect of Sequential Mowings & Herbicide Treatments on Mugwort Control

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU MOWED	ARTVU UNMOWED	ARTVU MOWED	ARTVU UNMOWED	ARTVU MOWED	ARTVU UNMOWED
Crop Code	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Part Rated	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Data Type	0-100	0-100	0-100	0-100	0-100	0-100
Rating Unit	7-7-99	7-7-99	7-22-99	7-22-99	8-4-99	8-4-99
Rating Date						
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Unit	Grow Stg
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TABLE OF R MEANS

Replicate 1	20.8	19.2	32.5	30.3	41.0	36.3
Replicate 2	20.0	17.5	31.2	30.0	38.7	34.7
Replicate 3	19.8	18.3	31.8	29.5	36.7	33.3
Replicate 4	19.5	17.2	30.8	25.5	32.7	32.8

TABLE OF A MEANS

1	2,4-D AMINE	3.8 L	4.0 LB A/A	POST	26.7	21.7	38.8	37.5	47.1	42.9
2	2,4-D ESTER	3.76 L	4.0 LB A/A	POST	25.4	26.7	40.8	40.0	48.8	51.7
3	TORDON	2.0 L	1.0 LB A/A	POST	33.3	33.3	55.8	47.5	65.8	63.3
4	ROUNDUP ULTRA	4.0 L	4.0 LB A/A	POST	30.7	32.1	50.0	42.5	47.1	47.1
5	LIBERTY	1.67 L	1.5 LB A/A	POST	26.3	27.7	52.5	52.5	47.5	50.4
6	GARLON	4.0 L	2.0 LB A/A	POST	9.6	7.1	13.8	12.5	19.6	20.4
7	STINGER	3.0 L	0.25 LB A/A	POST	12.9	10.0	17.9	15.4	36.3	24.2
8	BANVEL	4.0 L	2.0 LB A/A	POST	27.3	14.2	39.2	32.9	53.3	39.2
9	ALLY	60 DF	.0112 LB A/A	POST	8.3	7.9	7.1	7.5	7.1	3.8
9	X-77	L	0.25 % V/V	POST						
10	CONTROL				0.0	0.0	0.0	0.0	0.0	0.0

TABLE OF B MEANS

1	MOWED ONCE	60.2	54.2	57.6	56.5	60.8	60.8
2	MOWED TWICE	0.0	0.0	37.1	30.0	51.0	42.1
3	MOWED THREE	0.0	0.0	0.0	0.0	0.0	0.0

TABLE OF AB MEANS

1	2,4-D AMINE	3.8 L	4.0 LB A/A	POST	80.0	65.0	75.0	77.5	82.5	87.5
1	MOWED ONCE									
2	2,4-D ESTER	3.76 L	4.0 LB A/A	POST	76.3	80.0	71.3	78.8	65.0	75.0
1	MOWED ONCE									
3	TORDON	2.0 L	1.0 LB A/A	POST	100.0	100.0	100.0	100.0	100.0	100.0
1	MOWED ONCE									
4	ROUNDUP ULTRA	4.0 L	4.0 LB A/A	POST	92.0	96.3	90.0	93.8	88.8	98.8
1	MOWED ONCE									

Effect of Sequential Mowings & Herbicide Treatments on Mugwort Control

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
 Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	MOWED	UNMOWED	MOWED	UNMOWED	MOWED	UNMOWED
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	7-7-99	7-7-99	7-22-99	7-22-99	8-4-99	8-4-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Rate Unit	Grow Stg	ARTVU MOWED	ARTVU UNMOWED	ARTVU MOWED	ARTVU UNMOWED	ARTVU MOWED	ARTVU UNMOWED
5	LIBERTY	1.67	L	1.5	LB A/A	POST	78.8	83.0	63.8	67.5	51.3	61.3
1	MOWED ONCE											
6	GARLON	4.0	L	2.0	LB A/A	POST	28.8	21.3	31.3	27.5	41.3	43.8
1	MOWED ONCE											
7	STINGER	3.0	L	0.25	LB A/A	POST	38.8	30.0	36.3	30.0	72.5	48.8
1	MOWED ONCE											
8	BANVEL	4.0	L	2.0	LB A/A	POST	82.0	42.5	93.8	76.3	92.5	87.5
1	MOWED ONCE											
9	ALLY	60	DF	.0112	LB A/A	POST	25.0	23.8	15.0	13.8	13.8	5.0
9	X-77		L	0.25	% V/V	POST						
1	MOWED ONCE											
10	CONTROL						0.0	0.0	0.0	0.0	0.0	0.0
1	MOWED ONCE											
1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	0.0	0.0	41.3	35.0	58.8	41.3
2	MOWED TWICE											
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	0.0	0.0	51.3	41.3	81.3	80.0
2	MOWED TWICE											
3	TORDON	2.0	L	1.0	LB A/A	POST	0.0	0.0	67.5	42.5	97.5	90.0
2	MOWED TWICE											
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	0.0	0.0	60.0	33.8	52.5	42.5
2	MOWED TWICE											
5	LIBERTY	1.67	L	1.5	LB A/A	POST	0.0	0.0	93.8	90.0	91.3	90.0
2	MOWED TWICE											
6	GARLON	4.0	L	2.0	LB A/A	POST	0.0	0.0	10.0	10.0	17.5	17.5
2	MOWED TWICE											
7	STINGER	3.0	L	0.25	LB A/A	POST	0.0	0.0	17.5	16.3	36.3	23.8
2	MOWED TWICE											
8	BANVEL	4.0	L	2.0	LB A/A	POST	0.0	0.0	23.8	22.5	67.5	30.0
2	MOWED TWICE											
9	ALLY	60	DF	.0112	LB A/A	POST	0.0	0.0	6.3	8.8	7.5	6.3
9	X-77		L	0.25	% V/V	POST						
2	MOWED TWICE											
10	CONTROL						0.0	0.0	0.0	0.0	0.0	0.0
2	MOWED TWICE											
1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											

Effect of Sequential Mowings & Herbicide Treatments on Mugwort Control

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	UNTRA	UNTRA	UNTRA	UNTRA	UNTRA	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	MU	TERNOB	CEWABAS	CEWAB	TERNO	MOWED	UNMOWED	MOWED	UNMOWED	MOWED	UNMOWED
Part Rated	30	30	30	30	30	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	30	30	30	30	30	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	8-4-99	8-4-99	8-4-99	8-4-99	8-4-99	7-7-99	7-7-99	7-22-99	7-22-99	8-4-99	8-4-99
Footnote Number											
Trt-Eval Interval											
PRM Data Type											
# Subsamples, Dec.											

Trt No.	Treatment Name	Form	Fm	Rate	Unit	Grow Stg	ARTVU MOWED	ARTVU UNMOWED	ARTVU MOWED	ARTVU UNMOWED	ARTVU MOWED	ARTVU UNMOWED
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											
3	TORDON	2.0	L	1.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											
5	LIBERTY	1.67	L	1.5	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											
6	GARLON	4.0	L	2.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											
7	STINGER	3.0	L	0.25	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											
8	BANVEL	4.0	L	2.0	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											
9	ALLY	60	DF	.0112	LB A/A	POST	0.0	0.0	0.0	0.0	0.0	0.0
9	X-77		L	0.25	% V/V	POST						
3	MOWED THREE											
10	CONTROL						0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											

Effect of Sequential Mowings & Herbicide Treatments on Mugwort Control

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 7-7-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	139057.700000				
R	3	27.900000	9.300000	0.782	0.5089	1.8
A	9	13835.366667	1537.262963	126.120	0.0001	2.9
ERROR A	27	329.100000	12.188889	1.024	0.4544	5.6
B	2	96480.600000	48240.300000	4053.807	0.0001	1.5
AB	18	27670.733333	1537.262963	129.182	0.0001	4.9
ERROR B	60	714.000000	11.900000			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 7-7-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	123656.591667				
R	3	76.891667	25.630556	2.923	0.0411	1.5
A	9	14867.508333	1651.945370	239.552	0.0001	2.2
ERROR A	27	186.191667	6.895988	0.786	0.7504	4.8
B	2	78264.816667	39132.408333	4462.359	0.0001	1.3
AB	18	29735.016667	1651.945370	188.375	0.0001	4.2
ERROR B	60	526.166667	8.769444			

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 7-22-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	150099.166667				
R	3	49.166667	16.388889	0.374	0.7720	3.4
A	9	43940.833333	4882.314815	100.692	0.0001	5.8
ERROR A	27	1309.166667	48.487654	1.107	0.3630	10.8
B	2	68255.416667	34127.708333	778.826	0.0001	3.0
AB	18	33915.416667	1884.189815	42.999	0.0001	9.4
ERROR B	60	2629.166667	43.819444			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 7-22-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	136686.666667				
R	3	455.000000	151.666667	3.825	0.0142	3.3
A	9	36540.833333	4060.092593	100.494	0.0001	5.3
ERROR A	27	1090.833333	40.401235	1.019	0.4608	10.3
B	2	63926.666667	31963.333333	806.081	0.0001	2.8
AB	18	32294.166667	1794.120370	45.246	0.0001	8.9
ERROR B	60	2379.166667	39.652778			

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 8-4-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	179492.500000				
R	3	1122.500000	374.166667	4.494	0.0065	4.7
A	9	49405.000000	5489.444444	43.190	0.0001	9.4
ERROR A	27	3431.666667	127.098765	1.526	0.0877	14.9
B	2	85155.000000	42577.500000	511.356	0.0001	4.1
AB	18	35382.500000	1965.694444	23.608	0.0001	12.9
ERROR B	60	4995.833333	83.263889			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 8-4-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	169064.791667				
R	3	220.625000	73.541667	1.976	0.1272	3.2
A	9	48850.208333	5427.800926	142.657	0.0001	5.2
ERROR A	27	1027.291667	38.047840	1.022	0.4569	10.0
B	2	77492.916667	38746.458333	1040.950	0.0001	2.7
AB	18	39240.416667	2180.023148	58.568	0.0001	8.6
ERROR B	60	2233.333333	37.222222			

Effect of Sequential Mowings & Herbicide Treatments on Mugwort Control

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
 Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	MOWED	UNMOWED	MOWED	UNMOWED	MOWED	UNMOWED
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	8-19-99	8-19-99	8-31-99	8-31-99	9-14-99	9-14-99
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Rate Unit	Grow Stg
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TABLE OF R MEANS

Replicate 1					43.3	38.8	57.3	54.3	60.0	56.5
Replicate 2					44.2	38.3	56.0	47.8	57.5	46.8
Replicate 3					40.7	36.0	53.5	44.2	57.0	50.2
Replicate 4					39.2	35.7	48.0	42.0	50.3	46.5

TABLE OF A MEANS

1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	55.4	47.5	67.9	59.2	67.1	67.1
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	50.8	54.2	70.0	67.9	67.9	72.9
3	TORDON	2.0	L	1.0	LB A/A	POST	66.7	65.4	86.3	77.1	98.8	85.8
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	56.7	55.0	86.3	64.2	90.0	66.3
5	LIBERTY	1.67	L	1.5	LB A/A	POST	40.8	48.3	67.1	74.2	61.7	69.6
6	GARLON	4.0	L	2.0	LB A/A	POST	24.6	21.7	26.3	27.5	20.8	37.5
7	STINGER	3.0	L	0.25	LB A/A	POST	50.4	26.7	59.2	36.3	75.4	40.8
8	BANVEL	4.0	L	2.0	LB A/A	POST	62.9	47.5	65.8	57.5	77.1	58.3
9	ALLY	60	DF	.0112	LB A/A	POST	10.0	5.8	8.3	7.1	3.3	1.7
9	X-77		L	0.25	% V/V	POST						
10	CONTROL						0.0	0.0	0.0	0.0	0.0	0.0

TABLE OF B MEANS

1	MOWED ONCE						59.5	63.1	55.9	63.3	51.9	63.1
2	MOWED TWICE						66.0	48.5	64.1	53.1	58.5	52.8
3	MOWED THREE						0.0	0.0	41.1	24.9	58.3	34.1

TABLE OF AB MEANS

1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	80.0	91.3	73.8	93.8	68.8	88.8
1	MOWED ONCE											
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	62.5	80.0	60.0	76.3	57.5	75.0
1	MOWED ONCE											
3	TORDON	2.0	L	1.0	LB A/A	POST	100.0	100.0	100.0	100.0	100.0	100.0
1	MOWED ONCE											
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	92.5	98.8	91.3	97.5	96.3	98.8
1	MOWED ONCE											

Effect of Sequential Mowings & Herbicide Treatments on Mugwort Control

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU MOWED	ARTVU UNMOWED	ARTVU MOWED	ARTVU UNMOWED	ARTVU MOWED	ARTVU UNMOWED
Crop Code	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Part Rated	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Data Type	0-100	0-100	0-100	0-100	0-100	0-100
Rating Unit	8-19-99	8-19-99	8-31-99	8-31-99	9-14-99	9-14-99
Rating Date						
Footnote Number						
Trt-Eval Interval						
PRM Data Type						
# Subsamples, Dec.						

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Rate Unit	Grow Stg	38.8	61.3	28.8	56.3	20.0	62.5
5	LIBERTY	1.67	L	1.5	LB A/A	POST						
1	MOWED ONCE											
6	GARLON	4.0	L	2.0	LB A/A	POST	40.0	45.0	37.5	48.8	21.3	57.5
1	MOWED ONCE											
7	STINGER	3.0	L	0.25	LB A/A	POST	77.5	48.8	72.5	53.8	77.5	60.0
1	MOWED ONCE											
8	BANVEL	4.0	L	2.0	LB A/A	POST	91.3	97.5	87.5	95.0	72.5	83.8
1	MOWED ONCE											
9	ALLY	60	DF	.0112	LB A/A	POST	12.5	8.8	7.5	11.3	5.0	5.0
9	X-77		L	0.25	% V/V	POST						
1	MOWED ONCE											
10	CONTROL						0.0	0.0	0.0	0.0	0.0	0.0
1	MOWED ONCE											
1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	86.3	51.3	80.0	55.0	70.0	61.3
2	MOWED TWICE											
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	90.0	82.5	87.5	87.5	76.3	81.3
2	MOWED TWICE											
3	TORDON	2.0	L	1.0	LB A/A	POST	100.0	96.3	100.0	98.8	100.0	98.8
2	MOWED TWICE											
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	77.5	66.3	82.5	62.5	82.5	61.3
2	MOWED TWICE											
5	LIBERTY	1.67	L	1.5	LB A/A	POST	83.8	83.8	75.0	83.8	75.0	70.0
2	MOWED TWICE											
6	GARLON	4.0	L	2.0	LB A/A	POST	33.8	20.0	30.0	27.5	26.3	40.0
2	MOWED TWICE											
7	STINGER	3.0	L	0.25	LB A/A	POST	73.8	31.3	85.0	43.8	77.5	45.0
2	MOWED TWICE											
8	BANVEL	4.0	L	2.0	LB A/A	POST	97.5	45.0	93.8	65.0	77.5	70.0
2	MOWED TWICE											
9	ALLY	60	DF	.0112	LB A/A	POST	17.5	8.8	7.5	7.5	0.0	0.0
9	X-77		L	0.25	% V/V	POST						
2	MOWED TWICE											
10	CONTROL						0.0	0.0	0.0	0.0	0.0	0.0
2	MOWED TWICE											
1	2,4-D AMINE	3.8	L	4.0	LB A/A	POST	0.0	0.0	50.0	28.8	62.5	51.3
3	MOWED THREE											

Effect of Sequential Mowings & Herbicide Treatments on Mugwort Control

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU	ARTVU
Crop Code	MOWED	UNMOWED	MOWED	UNMOWED	MOWED	UNMOWED	MOWED	UNMOWED	UNMOWED
Part Rated	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Rating Date	8-19-99	8-19-99	8-31-99	8-31-99	8-31-99	8-31-99	9-14-99	9-14-99	9-14-99
Footnote Number									
Trt-Eval Interval									
PRM Data Type									
# Subsamples, Dec.									

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Rate Unit	Grow Stg	0.0	0.0	62.5	40.0	70.0	62.5
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	0.0	0.0	62.5	40.0	70.0	62.5
3	MOWED THREE											
3	TORDON	2.0	L	1.0	LB A/A	POST	0.0	0.0	58.8	32.5	96.3	58.8
3	MOWED THREE											
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	0.0	0.0	85.0	32.5	91.3	38.8
3	MOWED THREE											
5	LIBERTY	1.67	L	1.5	LB A/A	POST	0.0	0.0	97.5	82.5	90.0	76.3
3	MOWED THREE											
6	GARLON	4.0	L	2.0	LB A/A	POST	0.0	0.0	11.3	6.3	15.0	15.0
3	MOWED THREE											
7	STINGER	3.0	L	0.25	LB A/A	POST	0.0	0.0	20.0	11.3	71.3	17.5
3	MOWED THREE											
8	BANVEL	4.0	L	2.0	LB A/A	POST	0.0	0.0	16.3	12.5	81.3	21.3
3	MOWED THREE											
9	ALLY	60	DF	.0112	LB A/A	POST	0.0	0.0	10.0	2.5	5.0	0.0
9	X-77		L	0.25	% V/V	POST						
3	MOWED THREE											
10	CONTROL						0.0	0.0	0.0	0.0	0.0	0.0
3	MOWED THREE											

Effect of Sequential Mowings & Herbicide Treatments on Mugwort Control

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 8-19-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	201946.666667				
R	3	485.000000	161.666667	2.544	0.0645	4.1
A	9	56188.333333	6243.148148	82.630	0.0001	7.3
ERROR A	27	2040.000000	75.555556	1.189	0.2836	13.0
B	2	105846.666667	52923.333333	832.892	0.0001	3.6
AB	18	33574.166667	1865.231481	29.354	0.0001	11.3
ERROR B	60	3812.500000	63.541667			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 8-19-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	183689.791667				
R	3	232.291667	77.430556	1.129	0.3448	4.3
A	9	53483.541667	5942.615741	69.541	0.0001	7.7
ERROR A	27	2307.291667	85.455247	1.246	0.2370	13.5
B	2	87345.416667	43672.708333	636.525	0.0001	3.7
AB	18	36204.583333	2011.365741	29.315	0.0001	11.7
ERROR B	60	4116.666667	68.611111			

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 8-31-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	159824.791667				
R	3	1530.625000	510.208333	4.609	0.0057	5.4
A	9	103660.208333	11517.800926	82.184	0.0001	9.9
ERROR A	27	3783.958333	140.146605	1.266	0.2215	17.2
B	2	10861.666667	5430.833333	49.061	0.0001	4.7
AB	18	33346.666667	1852.592593	16.736	0.0001	14.9
ERROR B	60	6641.666667	110.694444			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 8-31-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	154879.166667				
R	3	2624.166667	874.722222	7.133	0.0004	5.7
A	9	83179.166667	9242.129630	58.819	0.0001	10.5
ERROR A	27	4242.500000	157.129630	1.281	0.2106	18.1
B	2	31642.916667	15821.458333	129.008	0.0001	5.0
AB	18	25832.083333	1435.115741	11.702	0.0001	15.7
ERROR B	60	7358.333333	122.638889			

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CONTRL CONTRL % VISUAL 0-100 9-14-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	160349.791667				
R	3	1535.625000	511.875000	5.959	0.0013	4.8
A	9	134976.875000	14997.430556	68.010	0.0001	12.4
ERROR A	27	5953.958333	220.516975	2.567	0.0012	15.1
B	2	1127.916667	563.958333	6.565	0.0026	4.1
AB	18	11601.250000	644.513889	7.503	0.0001	13.1
ERROR B	60	5154.166667	85.902778			

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CONTRL % VISUAL 0-100 9-14-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	137750.000000				
R	3	1936.666667	645.555556	6.189	0.0010	5.3
A	9	94733.333333	10525.925926	98.681	0.0001	8.7
ERROR A	27	2880.000000	106.666667	1.023	0.4564	16.7
B	2	17273.750000	8636.875000	82.804	0.0001	4.6
AB	18	14667.916667	814.884259	7.812	0.0001	14.4
ERROR B	60	6258.333333	104.305556			

Effect of Sequential Mowings & Herbicide Treatments on Mugwort Control

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code	ARTVU	ARTVU
Crop Code	UNMOWED	MOWED
Part Rated	CONTRL %	CNTRL %
Rating Data Type	VISUAL	VISUAL
Rating Unit	0-100	0-100
Rating Date	10-6-99	10-6-99
Footnote Number		
Trt-Eval Interval		
PRM Data Type		
# Subsamples, Dec.		

Trt No.	Treatment Name	Form	Fm	Rate	Unit	Grow Stg
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TABLE OF R MEANS

Replicate 1		54.5	56.3
Replicate 2		49.3	50.8
Replicate 3		52.0	53.7
Replicate 4		44.7	49.2

TABLE OF A MEANS

1	2,4-D AMINE	3.8 L	4.0 LB A/A	POST	57.9	67.9
2	2,4-D ESTER	3.76 L	4.0 LB A/A	POST	60.4	76.3
3	TORDON	2.0 L	1.0 LB A/A	POST	100.0	97.8
4	ROUNDUP ULTRA	4.0 L	4.0 LB A/A	POST	80.0	77.5
5	LIBERTY	1.67 L	1.5 LB A/A	POST	47.5	63.8
6	GARLON	4.0 L	2.0 LB A/A	POST	13.8	31.7
7	STINGER	3.0 L	0.25 LB A/A	POST	75.8	43.8
8	BANVEL	4.0 L	2.0 LB A/A	POST	65.8	63.8
9	ALLY	60 DF	.0112 LB A/A	POST	0.0	2.5
9	X-77	L	0.25 % V/V	POST		
10	CONTROL				0.0	0.0

TABLE OF B MEANS

1	MOWED ONCE				46.3	59.6
2	MOWED TWICE				50.5	51.1
3	MOWED THREE				53.6	46.8

TABLE OF AB MEANS

1	2,4-D AMINE	3.8 L	4.0 LB A/A	POST	60.0	83.8
1	MOWED ONCE					
2	2,4-D ESTER	3.76 L	4.0 LB A/A	POST	52.5	66.3
1	MOWED ONCE					
3	TORDON	2.0 L	1.0 LB A/A	POST	100.0	100.0
1	MOWED ONCE					
4	ROUNDUP ULTRA	4.0 L	4.0 LB A/A	POST	96.3	98.8
1	MOWED ONCE					

Effect of Sequential Mowings & Herbicide Treatments on Mugwort Control

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code ARTVU ARTVU
Crop Code UNMOWED MOWED
Part Rated CONTRL % CNTRL %
Rating Data Type VISUAL VISUAL
Rating Unit 0-100 0-100
Rating Date 10-6-99 10-6-99
Footnote Number
Trt-Eval Interval
PRM Data Type
Subsamples, Dec.

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Unit	Grow Stg		
5 1	LIBERTY MOWED ONCE	1.67 L		1.5	LB A/A	POST	12.5	57.5
6 1	GARLON MOWED ONCE	4.0 L		2.0	LB A/A	POST	5.0	51.3
7 1	STINGER MOWED ONCE	3.0 L		0.25	LB A/A	POST	78.8	53.8
8 1	BANVEL MOWED ONCE	4.0 L		2.0	LB A/A	POST	57.5	80.0
9 9 1	ALLY X-77 MOWED ONCE	60 DF L		.0112 0.25	LB A/A % V/V	POST POST	0.0	5.0
10 1	CONTROL MOWED ONCE						0.0	0.0
1 2	2,4-D AMINE MOWED TWICE	3.8 L		4.0	LB A/A	POST	52.5	62.5
2 2	2,4-D ESTER MOWED TWICE	3.76 L		4.0	LB A/A	POST	66.3	75.0
3 2	TORDON MOWED TWICE	2.0 L		1.0	LB A/A	POST	100.0	99.5
4 2	ROUNDUP ULTRA MOWED TWICE	4.0 L		4.0	LB A/A	POST	73.8	70.0
5 2	LIBERTY MOWED TWICE	1.67 L		1.5	LB A/A	POST	62.5	65.0
6 2	GARLON MOWED TWICE	4.0 L		2.0	LB A/A	POST	15.0	25.0
7 2	STINGER MOWED TWICE	3.0 L		0.25	LB A/A	POST	73.8	46.3
8 2	BANVEL MOWED TWICE	4.0 L		2.0	LB A/A	POST	61.3	67.5
9 9 2	ALLY X-77 MOWED TWICE	60 DF L		.0112 0.25	LB A/A % V/V	POST POST	0.0	0.0
10 2	CONTROL MOWED TWICE						0.0	0.0
1 3	2,4-D AMINE MOWED THREE	3.8 L		4.0	LB A/A	POST	61.3	57.5

Effect of Sequential Mowings & Herbicide Treatments on Mugwort Control

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

Weed Code UNMOWED ARTVU ARTVU
Crop Code UNMOWED MOWED
Part Rated CONTRL % CNTRL %
Rating Data Type VISUAL VISUAL
Rating Unit 0-100 0-100
Rating Date 10-6-99 10-6-99
Footnote Number
Trt-Eval Interval
PRM Data Type
Subsamples, Dec.

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Unit	Grow Stg	62.5	87.5
2	2,4-D ESTER	3.76	L	4.0	LB A/A	POST	62.5	87.5
3	MOWED THREE							
3	TORDON	2.0	L	1.0	LB A/A	POST	100.0	93.8
3	MOWED THREE							
4	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	70.0	63.8
3	MOWED THREE							
5	LIBERTY	1.67	L	1.5	LB A/A	POST	67.5	68.8
3	MOWED THREE							
6	GARLON	4.0	L	2.0	LB A/A	POST	21.3	18.8
3	MOWED THREE							
7	STINGER	3.0	L	0.25	LB A/A	POST	75.0	31.3
3	MOWED THREE							
8	BANVEL	4.0	L	2.0	LB A/A	POST	78.8	43.8
3	MOWED THREE							
9	ALLY	60	DF	.0112	LB A/A	POST	0.0	2.5
9	X-77		L	0.25	% V/V	POST		
3	MOWED THREE							
10	CONTROL						0.0	0.0
3	MOWED THREE							

Effect of Sequential Mowings & Herbicide Treatments on Mugwort Control

Trial ID: SEQMOW.DAT Investigator: KEVIN BRADLEY
Location: NELSON COUNTY, VA Study Dir.: Scott Hagood

COMPLETE SPLIT PLOT AOV For ARTVU UNMOWED CONTRL CNTRL % VISUAL 0-100 10-6-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	154873.125000				
R	3	1592.291667	530.763889	4.343	0.0078	5.7
A	9	129712.708333	14412.523148	77.547	0.0001	11.4
ERROR A	27	5018.125000	185.856481	1.521	0.0897	18.1
B	2	1096.250000	548.125000	4.485	0.0153	4.9
AB	18	10120.416667	562.245370	4.600	0.0001	15.6
ERROR B	60	7333.333333	122.222222			

COMPLETE SPLIT PLOT AOV For ARTVU MOWED CNTRL CNTRL % VISUAL 0-100 10-6-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	119	135863.966667				
R	3	883.100000	294.366667	2.650	0.0569	5.4
A	9	113931.133333	12659.014815	132.458	0.0001	8.2
ERROR A	27	2580.400000	95.570370	0.860	0.6590	17.2
B	2	3434.316667	1717.158333	15.459	0.0001	4.7
AB	18	8370.516667	465.028704	4.187	0.0001	14.9
ERROR B	60	6664.500000	111.075000			

CONTROL OF HEMP DOGBANE WITH SELECTED POST HERBICIDES

Trial ID: HEMPDG.DAT Investigator: KEVIN BRADLEY
Location: LOUISA COUNTY, VA Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: KEVIN BRADLEY Title: GRADUATE RESEARCH ASST
Affiliation: VPI & SU Postal Code: 24060

Other Investigator: SCOTT HAGOOD Title: PROFESSOR
Affiliation: VPI & SU Postal Code: 24060

Trial Status: ONGOING Initiation Date: 7-14-99 Country: USA
City: LOUISA COUNTY State/Prov.: VIRGINIA Postal Code: _____

CROP AND PEST DESCRIPTION

Weed 1. APPCA HEMP DOGBANE 2. _____ 3. _____
4. _____ 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: NONE Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 12 FT Reps: 4
Site Type: _____
Tillage Type: NO-TILL Study Design: RANDOMIZED COMPLETE BLOCK
Field Prep./Maintenance: _____
Trial Initiation Comments: _____

Previous:	Crops	Pesticides	Year
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

SOIL DESCRIPTION

Texture: _____ % OM: _____ % Sand: _____ % Silt: _____ % Clay: _____
pH: _____ CEC: _____ Soil Name: _____ Fertility Level: _____

CONTROL OF HEMP DOGBANE WITH SELECTED POST HERBICIDES

Trial ID: HEMPDG.DAT Investigator: KEVIN BRADLEY

Location: LOUISA COUNTY, VA Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: _____
Closest Weather Station: _____ Distance: _____ Unit: _____

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	7-14-99					
Time of Day:	9-11 AM					
Application Method:	BROADCAST					
Application Timing:	POST					
Applic. Placement:						
Air Temp., Unit:	75 F					
% Relative Humidity:	95					
Wind Velocity, Unit:	4 MPH					
Dew Presence (Y/N):	Y					
Water Hardness:	N/A					
Soil Temp., Unit:	61 F					
Soil Moisture:	MOIST					
% Cloud Cover:	100					

CONTROL OF HEMP DOGBANE WITH SELECTED POST HERBICIDES

Trial ID: HEMPDG.DAT Investigator: KEVIN BRADLEY
Location: LOUISA COUNTY, VA Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 NONE Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 APPCA Stage: VEGETATIV	_____	_____	_____	_____	_____	_____
Stage Scale: 15-20 "	_____	_____	_____	_____	_____	_____
Density, Unit: 90% GC	_____	_____	_____	_____	_____	_____
Weed 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 4 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 5 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 6 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 7 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 8 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 9 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____

CONTROL OF HEMP DOGBANE WITH SELECTED POST HERBICIDES

Trial ID: HEMPDG.DAT Investigator: KEVIN BRADLEY
Location: LOUISA COUNTY, VA Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK					
Operating Pressure:	34 PSI					
Nozzle Type:	FLAT FAN					
Nozzle Size:	8003					
Nozzle Spacing, Unit:	18 INCH					
Nozzles/Row:	4					
Band Width, Unit:	N/A					
Boom Length, Unit:	60 INCH					
Boom Height, Unit:	22 INCH					
Ground Speed, Unit:	3.1 MPH					
Incorporation Equip.:	N/A					
Hours to Incorp.:						
Incorp. Depth, Unit:						
Carrier:	WATER					
Spray Volume, Unit:	22.5 GPA					
Spray pH:						
Propellant:	CO/2					
Tank Mix (Y/N):	Y					

Trt No	Treatment	Application	Comment
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			

CONTROL OF HEMP DOGBANE WITH SELECTED POST HERBICIDES

Trial ID: HEMPDG.DAT Investigator: KEVIN BRADLEY
Location: LOUISA COUNTY, VA Study Dir.: Scott Hagood

Weed Code	APCCA	APCCA	APCCA
Part Rated	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	8-2-99	8-9-99	8-20-99
Trt-Eval Interval	2 WAT	4 WAT	5 WAT

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Unit	Grow Stg	APCCA	APCCA	APCCA
1	CONTROL						0.0 n	0.0 m	0.0 k
2	2,4-D AMINE	3.8 L		1 PT/A	POST		37.5 cde	51.3 cd	55.0 def
3	CLARITY	4.0 L		0.50 PT/A	POST		17.5 jkl	16.3 j	18.8 j
4	CLARITY	4.0 L		0.75 PT/A	POST		21.3 g-k	28.8 hi	31.3 i
5	2,4-D AMINE	3.8 L		1 PT/A	POST		37.5 cde	58.8 c	70.0 bc
5	CLARITY	4.0 L		.75 PT/A	POST				
6	EXCEED	57 DF		1 OZ/A	POST		20.0 h-l	16.3 j	10.0 jk
6	NIS	L		.250 % V/V	POST				
7	EXCEED	57 DF		1 OZ/A	POST		25.0 g-j	28.8 hi	38.8 ghi
7	CLARITY	4.0 L		.50 PT/A	POST				
7	NIS	L		.250 % V/V	POST				
8	EXCEED	57 DF		1 OZ/A	POST		30.0 d-g	40.0 efg	48.8 efg
8	CLARITY	4.0 L		.75 PT/A	POST				
8	NIS	L		.250 % V/V	POST				
9	PERMIT	75 DF		1.33 OZ/A	POST		12.5 klm	10.0 jkl	8.8 jk
9	NIS	L		.250 % V/V	POST				
10	PERMIT	75 DF		1.33 OZ/A	POST		25.0 g-j	35.0 fgh	47.5 efg
10	CLARITY	4.0 L		.50 PT/A	POST				
10	NIS	L		.250 % V/V	POST				
11	PERMIT	75 DF		1.33 OZ/A	POST		27.5 f-i	32.5 ghi	46.3 fg
11	CLARITY	4.0 L		.75 PT/A	POST				
11	NIS	L		.250 % V/V	POST				
12	BEACON	75 DF		0.76 OZ/A	POST		20.0 h-l	10.0 jkl	3.8 k
12	NIS	L		.250 % V/V	POST				
13	BEACON	75 DF		0.76 OZ/A	POST		25.0 g-j	26.3 i	32.5 hi
13	CLARITY	4.0 L		.50 PT/A	POST				
13	NIS	L		0.250 % V/V	POST				

CONTROL OF HEMP DOGBANE WITH SELECTED POST HERBICIDES

Trial ID: HEMPDG.DAT Investigator: KEVIN BRADLEY
Location: LOUISA COUNTY, VA Study Dir.: Scott Hagood

Weed Code	APCCA	APCCA	APCCA
Part Rated	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	8-2-99	8-9-99	8-20-99
Trt-Eval Interval	2 WAT	4 WAT	5 WAT

Trt No.	Treatment Name	Form	Fm	Rate	Unit	Grow Stg	35.0	46.3	42.5
14	BEACON	75	DF	0.76	OZ/A	POST	c-f	de	gh
14	CLARITY	L		.75	PT/A	POST			
14	NIS	L		0.250	% V/V	POST			
15	ROUNDUP ULTRA	4.0	L	1	QT/A	POST	c	cd	efg
16	ROUNDUP ULTRA	4.0	L	2	QT/A	POST	b	b	b
17	ROUNDUP ULTRA	4.0	L	4	QT/A	POST	a	a	a
18	ACCENT	75	DF	0.66	OZ/A	POST	g-k	jk	k
18	NIS	L		0.250	% V/V	POST			
19	ACCENT	75	DF	0.66	OZ/A	POST	c	c	bc
19	NIS	L		0.250	% V/V	POST			
19	2,4-D AMINE	3.8	L	1.0	PT/A	POST			
20	ACCENT	75	DF	0.66	OZ/A	POST	e-h	ghi	efg
20	NIS	L		0.250	% V/V	POST			
20	CLARITY	L		.50	PT/A	POST			
21	ACCENT	75	DF	0.66	OZ/A	POST	c-f	ef	efg
21	NIS	L		0.250	% V/V	POST			
21	CLARITY	L		.75	PT/A	POST			
22	ZA-1296	4	SC	.094	LB A/A	POST	klm	klm	k
22	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST			
22	UAN	100	L	2.50	% V/V	POST			
23	ZA-1296	4	SC	.094	LB A/A	POST	cd	cd	de
23	CLARITY	4.0	L	.50	PT/A	POST			
23	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST			
23	UAN	100	L	2.50	% V/V	POST			
24	ZA-1296	4	SC	.094	LB A/A	POST	c	c	cd
24	CLARITY	4.0	L	.75	PT/A	POST			
24	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST			
24	UAN	100	L	2.50	% V/V	POST			

CONTROL OF HEMP DOGBANE WITH SELECTED POST HERBICIDES

Trial ID: HEMPDG.DAT Investigator: KEVIN BRADLEY
Location: LOUISA COUNTY, VA Study Dir.: Scott Hagood

Weed Code	APCCA	APCCA	APCCA
Part Rated	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	8-2-99	8-9-99	8-20-99
Trt-Eval Interval	2 WAT	4 WAT	5 WAT

Trt No.	Treatment Name	Form	Fm	Rate	Grow			
		Amt	Ds	Rate	Unit	Stg		
25	ZA-1296	4.0	SC	.094	LB A/A	POST	70.0	b
25	2,4-D AMINE	3.8	L	1	PT/A	POST		
25	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST		
25	UAN	100	L	2.50	% V/V	POST		
26	ZA-1296	4.0	SC	.094	LB A/A	POST	18.8	i-l
26	BEACON	75	WG	0.38	OZ/A	POST		
26	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST		
26	UAN	100	L	2.50	% V/V	POST		
27	ZA-1296	4	SC	.094	LB A/A	POST	7.5	mn
27	MATRIX*RIMSULFURON	25	WG	0.012	LB A/A	POST		
27	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST		
27	UAN	100	L	2.50	% V/V	POST		
28	ZA-1296	4	SC	.094	LB A/A	POST	66.3	b
28	MATRIX*RIMSULFURON	25	WG	0.012	LB A/A	POST		
28	2,4-D AMINE	3.8	L	1	PT/A	POST		
28	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST		
28	UAN	100	L	2.50	% V/V	POST		
29	CONTROL						0.0	n
30	ZA-1296	4	SC	0.188	LB A/A	POST	11.3	lm
30	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST		
30	UAN	100	L	2.50	% V/V	POST		
	LSD (P=.05)						8.11	
	Standard Deviation						5.74	
	CV						18.56	
	Replicate F						4.666	
	Replicate Prob(F)						0.0045	
	Treatment F						51.873	
	Treatment Prob(F)						0.0001	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

CONTROL OF HEMP DOGBANE WITH SELECTED POST HERBICIDES

Trial ID: HEMPDG.DAT Investigator: KEVIN BRADLEY

Location: LOUISA COUNTY, VA Study Dir.: Scott Hagood

Weed Code	APCCA	APCCA	APCCA
Part Rated	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	8-29-99	9-14-99	10-12-99
Trt-Eval Interval	6 WAT	8 WAT	12 WAT

Trt No.	Treatment Name	Form	Fm Amt	Ds	Rate	Unit	Grow Stg						
1	CONTROL							0.0	l	0.0 g	0.0 l		
2	2,4-D AMINE		3.8	L	1	PT/A	POST	70.0	b-f	92.5	ab	92.5	abc
3	CLARITY		4.0	L	0.50	PT/A	POST	17.5	k	37.5	d	71.3	hi
4	CLARITY		4.0	L	0.75	PT/A	POST	50.0	hij	77.5	bc	77.5	fgh
5	2,4-D AMINE		3.8	L	1	PT/A	POST	75.0	b-e	87.5	abc	92.5	abc
5	CLARITY		4.0	L	.75	PT/A	POST						
6	EXCEED		57	DF	1	OZ/A	POST	6.3	kl	26.3	de	42.5	k
6	NIS			L	.250	% VV	POST						
7	EXCEED		57	DF	1	OZ/A	POST	42.5	j	88.8	ab	81.3	d-g
7	CLARITY		4.0	L	.50	PT/A	POST						
7	NIS			L	.250	% VV	POST						
8	EXCEED		57	DF	1	OZ/A	POST	58.8	f-i	87.5	abc	83.8	c-g
8	CLARITY		4.0	L	.75	PT/A	POST						
8	NIS			L	.250	% VV	POST						
9	PERMIT		75	DF	1.33	OZ/A	POST	8.8	kl	22.5	ef	0.0	l
9	NIS			L	.250	% VV	POST						
10	PERMIT		75	DF	1.33	OZ/A	POST	62.5	d-h	83.8	abc	87.5	a-e
10	CLARITY		4.0	L	.50	PT/A	POST						
10	NIS			L	.250	% VV	POST						
11	PERMIT		75	DF	1.33	OZ/A	POST	62.5	d-h	85.0	abc	78.8	e-h
11	CLARITY		4.0	L	.75	PT/A	POST						
11	NIS			L	.250	% VV	POST						
12	BEACON		75	DF	0.76	OZ/A	POST	3.8	kl	5.0	g	0.0	l
12	NIS			L	.250	% VV	POST						
13	BEACON		75	DF	0.76	OZ/A	POST	43.8	ij	86.3	abc	81.3	d-g
13	CLARITY		4.0	L	.50	PT/A	POST						
13	NIS			L	0.250	% VV	POST						

CONTROL OF HEMP DOGBANE WITH SELECTED POST HERBICIDES

Trial ID: HEMPDG.DAT Investigator: KEVIN BRADLEY
Location: LOUISA COUNTY, VA Study Dir.: Scott Hagood

Weed Code	APCCA	APCCA	APCCA
Part Rated	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	8-29-99	9-14-99	10-12-99
Trt-Eval Interval	6 WAT	8 WAT	12 WAT

Trt No.	Treatment Name	Form	Fm	Rate	Unit	Grow Stg	51.3	80.0	76.3
14	BEACON	75	DF	0.76	OZ/A	POST	g-j	abc	gh
14	CLARITY		L	.75	PT/A	POST			
14	NIS		L	0.250	% V/V	POST			
15	ROUNDUP ULTRA	4.0	L	1	QT/A	POST	f-j	c	ij
16	ROUNDUP ULTRA	4.0	L	2	QT/A	POST	abc	ab	b-g
17	ROUNDUP ULTRA	4.0	L	4	QT/A	POST	a	abc	hi
18	ACCENT	75	DF	0.66	OZ/A	POST	0.0	0.0	2.5
18	NIS		L	0.250	% V/V	POST			
19	ACCENT	75	DF	0.66	OZ/A	POST	77.5	abc	d-g
19	NIS		L	0.250	% V/V	POST			
19	2,4-D AMINE	3.8	L	1.0	PT/A	POST			
20	ACCENT	75	DF	0.66	OZ/A	POST	58.8	abc	b-f
20	NIS		L	0.250	% V/V	POST			
20	CLARITY		L	.50	PT/A	POST			
21	ACCENT	75	DF	0.66	OZ/A	POST	63.8	abc	c-g
21	NIS		L	0.250	% V/V	POST			
21	CLARITY		L	.75	PT/A	POST			
22	ZA-1296	4	SC	.094	LB A/A	POST	0.0	12.5	0.0
22	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST			
22	UAN	100	L	2.50	% V/V	POST			
23	ZA-1296	4	SC	.094	LB A/A	POST	66.3	a	ab
23	CLARITY	4.0	L	.50	PT/A	POST			
23	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST			
23	UAN	100	L	2.50	% V/V	POST			
24	ZA-1296	4	SC	.094	LB A/A	POST	61.3	abc	a-d
24	CLARITY	4.0	L	.75	PT/A	POST			
24	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST			
24	UAN	100	L	2.50	% V/V	POST			

CONTROL OF HEMP DOGBANE WITH SELECTED POST HERBICIDES

Trial ID: HEMPDG.DAT Investigator: KEVIN BRADLEY

Location: LOUISA COUNTY, VA Study Dir.: Scott Hagood

Weed Code	APCCA	APCCA	APCCA
Part Rated	CONTRL %	CONTRL %	CONTRL %
Rating Data Type	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100
Rating Date	8-29-99	9-14-99	10-12-99
Trt-Eval Interval	6 WAT	8 WAT	12 WAT

Trt No.	Treatment Name	Form	Fm	Rate	Grow			
		Amt	Ds	Rate	Unit	Stg		
25	ZA-1296	4.0	SC	.094	LB A/A	POST	75.0 b-e	95.0 a 96.3 a
25	2,4-D AMINE	3.8	L	1	PT/A	POST		
25	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST		
25	UAN	100	L	2.50	% V/V	POST		
26	ZA-1296	4.0	SC	.094	LB A/A	POST	6.3 kl	10.0 fg 0.0 l
26	BEACON	75	WG	0.38	OZ/A	POST		
26	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST		
26	UAN	100	L	2.50	% V/V	POST		
27	ZA-1296	4	SC	.094	LB A/A	POST	0.0 l	0.0 g 0.0 l
27	MATRIX*RIMSULFURON	25	WG	0.012	LB A/A	POST		
27	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST		
27	UAN	100	L	2.50	% V/V	POST		
28	ZA-1296	4	SC	.094	LB A/A	POST	81.3 ab	78.8 abc 61.3 j
28	MATRIX*RIMSULFURON	25	WG	0.012	LB A/A	POST		
28	2,4-D AMINE	3.8	L	1	PT/A	POST		
28	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST		
28	UAN	100	L	2.50	% V/V	POST		
29	CONTROL						0.0 l	0.0 g 0.0 l
30	ZA-1296	4	SC	0.188	LB A/A	POST	3.8 kl	11.3 fg 7.5 l
30	CROP OIL CONCENTRATE	100	AL	1.00	% V/V	POST		
30	UAN	100	L	2.50	% V/V	POST		
LSD (P=.05)							13.51	13.38 8.31
Standard Deviation							9.55	9.46 5.88
CV							22.51	16.25 10.44
Replicate F							4.718	2.162 1.953
Replicate Prob(F)							0.0042	0.0983 0.1270
Treatment F							43.454	62.199 169.046
Treatment Prob(F)							0.0001	0.0001 0.0001

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

(PEAR)
VPI & SU

EVALUATION OF PRICKLY PEAR CONTROL W/ HERBICIDES & SIMULATED ROTARY HOEING

Trial ID: PEAR.DAT Investigator: KEVIN BRADLEY
Location: CLARKE COUNTY Study Dir.: Scott Hagood

GENERAL TRIAL INFORMATION

Study Director: KEVIN BRADLEY Title: GRAD RES ASST
Affiliation: VPI & SU Postal Code: 24060

Other Investigator: CHRIS BATES Title: FARMER/OWNER
Affiliation: CLARKE COUNTY Postal Code: _____

Trial Status: ONGOING Initiation Date: 9-3-99 Country: USA
City: CLARKE COUNTY State/Prov.: VIRGINIA Postal Code: _____

CROP AND PEST DESCRIPTION

Weed 1. OPUHU PRICKLY PEAR 2. _____ 3. _____
4. _____ 5. _____ 6. _____
7. _____ 8. _____ 9. _____

Crop 1: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 2: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Crop 3: _____ Variety: _____ Planting Date: _____
Planting Method: _____ Rate: _____ Depth: _____
Perennial Age: _____ Row Spacing: _____ Seed Bed: _____
Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Plot Width, Unit: 6 FT Plot Length, Unit: 4 FT Reps: 3

Site Type: _____
Tillage Type: NONE Study Design: SPLIT-PLOT
Field Prep./Maintenance: _____
Trial Initiation Comments: _____

Previous:	Crops	Pesticides	Year
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

SOIL DESCRIPTION

Texture: _____ % OM: _____ % Sand: _____ % Silt: _____ % Clay: _____
pH: _____ CEC: _____ Soil Name: _____ Fertility Level: _____

(PEAR)
VPI & SU

EVALUATION OF PRICKLY PEAR CONTROL W/ HERBICIDES & SIMULATED ROTARY HOEING

Trial ID: PEAR.DAT Investigator: KEVIN BRADLEY
Location: CLARKE COUNTY Study Dir.: Scott Hagood

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Overall Moisture Conditions: _____
Closest Weather Station: _____ Distance: _____ Unit: _____

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	9-3-99					
Time of Day:	11-12 AM					
Application Method:	BROADCAST					
Application Timing:	POST					
Applic. Placement:						
Air Temp., Unit:	80 F					
% Relative Humidity:	40					
Wind Velocity, Unit:	1 MPH					
Dew Presence (Y/N):	N					
Water Hardness:	N/A					
Soil Temp., Unit:	61 F					
Soil Moisture:	DRY					
% Cloud Cover:	20					

EVALUATION OF PRICKLY PEAR CONTROL W/ HERBICIDES & SIMULATED ROTARY HOEING

Trial ID: PEAR.DAT
Location: CLARKE COUNTY

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____
Crop 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Height, Unit:	_____	_____	_____	_____	_____	_____

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 OPUHU Stage: LATE VEG	_____	_____	_____	_____	_____	_____
Stage Scale: 1-6 "	_____	_____	_____	_____	_____	_____
Density, Unit: 35% GC	_____	_____	_____	_____	_____	_____
Weed 2 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 3 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 4 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 5 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 6 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 7 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 8 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____
Weed 9 _____ Stage:	_____	_____	_____	_____	_____	_____
Stage Scale:	_____	_____	_____	_____	_____	_____
Density, Unit:	_____	_____	_____	_____	_____	_____

EVALUATION OF PRICKLY PEAR CONTROL W/ HERBICIDES & SIMULATED ROTARY HOEING

Trial ID: PEAR.DAT
Location: CLARKE COUNTY

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BACKPACK	_____	_____	_____	_____	_____
Operating Pressure:	34 PSI	_____	_____	_____	_____	_____
Nozzle Type:	FLAT FAN	_____	_____	_____	_____	_____
Nozzle Size:	8003	_____	_____	_____	_____	_____
Nozzle Spacing, Unit:	18 INCH	_____	_____	_____	_____	_____
Nozzles/Row:	4	_____	_____	_____	_____	_____
Band Width, Unit:	_____	_____	_____	_____	_____	_____
Boom Length, Unit:	60 INCH	_____	_____	_____	_____	_____
Boom Height, Unit:	22 INCH	_____	_____	_____	_____	_____
Ground Speed, Unit:	3.1 MPH	_____	_____	_____	_____	_____
Incorporation Equip.:	N/A	_____	_____	_____	_____	_____
Hours to Incorp.:	_____	_____	_____	_____	_____	_____
Incorp. Depth, Unit:	_____	_____	_____	_____	_____	_____
Carrier:	WATER	_____	_____	_____	_____	_____
Spray Volume, Unit:	22.5 GPA	_____	_____	_____	_____	_____
Spray pH:	_____	_____	_____	_____	_____	_____
Propellant:	CO/2	_____	_____	_____	_____	_____
Tank Mix (Y/N):	Y	_____	_____	_____	_____	_____

Trt No Treatment Application Comment
— 1/2 OF EACH PLOT WAS 'ROTARY HOED' PRIOR TO SPRAYING TO DETERMINE IF
— HERBICIDES WILL ENTER THIS TISSUE AND PROVIDE HIGHER CONTROL COMPARED
— TO CONTROL OF PRICKLY PEAR THAT WAS NOT ROTARY HOED

(PEAR)
VPI & SU

EVALUATION OF PRICKLY PEAR CONTROL W/ HERBICIDES & SIMULATED ROTARY HOEING

Trial ID: PEAR.DAT
Location: CLARKE COUNTY

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

Weed Code	OPUNTIA	OPUNTIA	OPUNTIA	OPUNTIA
Crop Code	ROTRYHOE	NOT HOED	ROTRYHOE	NOT HOED
Part Rated	INJURY %	INJURY %	INJURY %	INJURY %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100
Rating Date	9-13-99	9-13-99	9-30-99	9-30-99
Footnote Number				
Trt-Eval Interval	1 WAT	1 WAT	3 WAT	3 WAT

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate Rate	Unit	Grow Stg
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TABLE OF R MEANS

Replicate 1					17.5	8.2	26.8	9.1
Replicate 2					17.5	10.0	20.9	11.8
Replicate 3					17.3	9.8	24.1	14.5

TABLE OF A MEANS

1	2,4-D ESTER	3.8 L		8.0 LB A/A	POST	13.3	5.0	14.2	2.5
2	2,4-D ESTER	3.8 L		4.0 LB A/A	POST	21.7	8.3	17.5	7.5
3	BANVEL	4.0 L		8.0 LB A/A	POST	8.3	2.5	24.2	7.5
4	BANVEL	4.0 L		4.0 LB A/A	POST	10.0	4.2	25.0	10.8
5	TORDON 22K	2.0 L		0.50 LB A/A	POST	10.8	4.2	10.0	6.7
6	TORDON 22K	2.0 L		0.25 LB A/A	POST	13.3	0.8	12.5	5.8
7	ROUNDUP ULTRA	4.0 L		8.0 LB A/A	POST	24.2	6.7	38.3	15.0
8	ROUNDUP ULTRA	4.0 L		4.0 LB A/A	POST	14.2	3.3	20.0	9.2
9	DIQUAT	2.0 L		2.0 LB A/A	POST	40.0	35.8	55.8	35.0
10	DIQUAT	2.0 L		1.0 LB A/A	POST	34.2	31.7	42.5	28.3
11	CONTROL					1.7	0.0	3.3	1.7

TABLE OF B MEANS

1	COC		L	1.0 % V/V	POST	17.7	8.8	24.4	11.8
2	NU-FILM		L	8.0 OZ/A	POST	17.1	9.8	23.5	11.8

TABLE OF AB MEANS

1	2,4-D ESTER	3.8 L		8.0 LB A/A	POST	13.3	3.3	10.0	1.7
1	COC		L	1.0 % V/V	POST				

(PEAR)
VPI & SU

EVALUATION OF PRICKLY PEAR CONTROL W/ HERBICIDES & SIMULATED ROTARY HOEING

Trial ID: PEAR.DAT
Location: CLARKE COUNTY

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

Weed Code	OPUNTIA	OPUNTIA	OPUNTIA	OPUNTIA
Crop Code	ROTRYHOE	NOT HOED	ROTRYHOE	NOT HOED
Part Rated	INJURY %	INJURY %	INJURY %	INJURY %
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL
Rating Unit	0-100	0-100	0-100	0-100
Rating Date	9-13-99	9-13-99	9-30-99	9-30-99
Footnote Number				
Trt-Eval Interval	1 WAT	1 WAT	3 WAT	3 WAT

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Unit	Grow Stg				
2	2,4-D ESTER	3.8	L	4.0	LB A/A	POST	21.7	6.7	20.0	8.3
1	COC		L	1.0	% V/V	POST				
3	BANVEL	4.0	L	8.0	LB A/A	POST	8.3	1.7	20.0	8.3
1	COC		L	1.0	% V/V	POST				
4	BANVEL	4.0	L	4.0	LB A/A	POST	8.3	3.3	23.3	13.3
1	COC		L	1.0	% V/V	POST				
5	TORDON 22K	2.0	L	0.50	LB A/A	POST	11.7	3.3	10.0	6.7
1	COC		L	1.0	% V/V	POST				
6	TORDON 22K	2.0	L	0.25	LB A/A	POST	5.0	0.0	8.3	3.3
1	COC		L	1.0	% V/V	POST				
7	ROUNDUP ULTRA	4.0	L	8.0	LB A/A	POST	23.3	6.7	40.0	13.3
1	COC		L	1.0	% V/V	POST				
8	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	16.7	6.7	21.7	8.3
1	COC		L	1.0	% V/V	POST				
9	DIQUAT	2.0	L	2.0	LB A/A	POST	48.3	35.0	66.7	35.0
1	COC		L	1.0	% V/V	POST				
10	DIQUAT	2.0	L	1.0	LB A/A	POST	35.0	30.0	45.0	30.0
1	COC		L	1.0	% V/V	POST				
11	CONTROL		L	1.0	% V/V	POST	3.3	0.0	3.3	1.7
1	COC		L							
1	2,4-D ESTER	3.8	L	8.0	LB A/A	POST	13.3	6.7	18.3	3.3
2	NU-FILM		L	8.0	OZ/A	POST				
2	2,4-D ESTER	3.8	L	4.0	LB A/A	POST	21.7	10.0	15.0	6.7
2	NU-FILM		L	8.0	OZ/A	POST				
3	BANVEL	4.0	L	8.0	LB A/A	POST	8.3	3.3	28.3	6.7
2	NU-FILM		L	8.0	OZ/A	POST				
4	BANVEL	4.0	L	4.0	LB A/A	POST	11.7	5.0	26.7	8.3
2	NU-FILM		L	8.0	OZ/A	POST				

(PEAR)
VPI & SU

EVALUATION OF PRICKLY PEAR CONTROL W/ HERBICIDES & SIMULATED ROTARY HOEING

Trial ID: PEAR.DAT
Location: CLARKE COUNTY

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

Weed Code	OPUNTIA	OPUNTIA	OPUNTIA	OPUNTIA					
Crop Code	ROTRYHOE	NOT HOED	ROTRYHOE	NOT HOED					
Part Rated	INJURY %	INJURY %	INJURY %	INJURY %					
Rating Data Type	VISUAL	VISUAL	VISUAL	VISUAL					
Rating Unit	0-100	0-100	0-100	0-100					
Rating Date	9-13-99	9-13-99	9-30-99	9-30-99					
Footnote Number									
Trt-Eval Interval	1 WAT	1 WAT	3 WAT	3 WAT					
Trt No.	Treatment Name	Form Amt	Fm Ds	Rate Rate Unit	Grow Stg				
5	TORDON 22K	2.0 L	L	0.50 LB A/A	POST	10.0	5.0	10.0	6.7
2	NU-FILM			8.0 OZ/A	POST				
6	TORDON 22K	2.0 L	L	0.25 LB A/A	POST	21.7	1.7	16.7	8.3
2	NU-FILM			8.0 OZ/A	POST				
7	ROUNDUP ULTRA	4.0 L	L	8.0 LB A/A	POST	25.0	6.7	36.7	16.7
2	NU-FILM			8.0 OZ/A	POST				
8	ROUNDUP ULTRA	4.0 L	L	4.0 LB A/A	POST	11.7	0.0	18.3	10.0
2	NU-FILM			8.0 OZ/A	POST				
9	DIQUAT	2.0 L	L	2.0 LB A/A	POST	31.7	36.7	45.0	35.0
2	NU-FILM			8.0 OZ/A	POST				
10	DIQUAT	2.0 L	L	1.0 LB A/A	POST	33.3	33.3	40.0	26.7
2	NU-FILM			8.0 OZ/A	POST				
11	CONTROL		L			0.0	0.0	3.3	1.7
2	NU-FILM			8.0 OZ/A	POST				

(PEAR)
VPI & SU

EVALUATION OF PRICKLY PEAR CONTROL W/ HERBICIDES & SIMULATED ROTARY HOEING

Trial ID: PEAR.DAT
Location: CLARKE COUNTY

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

COMPLETE SPLIT PLOT AOV For OPUNTIA ROTRYHOE INJURY INJURY % VISUAL 0-100 9-13-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	65	11762.121212				
R	2	0.757576	0.378788	0.006	0.9937	4.8
A	10	7962.121212	796.212121	10.115	0.0001	10.7
ERROR A	20	1574.242424	78.712121	1.324	0.2606	16.0
B	1	6.060606	6.060606	0.102	0.7526	3.9
AB	10	910.606061	91.060606	1.531	0.1940	13.1
ERROR B	22	1308.333333	59.469697			

COMPLETE SPLIT PLOT AOV For OPUNTIA NOT HOED INJURY INJURY % VISUAL 0-100 9-13-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	65	11394.318182				
R	2	43.181818	21.590909	0.864	0.4354	3.1
A	10	9140.151515	914.015152	11.999	0.0001	10.5
ERROR A	20	1523.484848	76.174242	3.047	0.0064	10.4
B	1	18.560606	18.560606	0.742	0.3982	2.6
AB	10	118.939394	11.893939	0.476	0.8880	8.5
ERROR B	22	550.000000	25.000000			

COMPLETE SPLIT PLOT AOV For OPUNTIA ROTRYHOE INJURY INJURY % VISUAL 0-100 9-30-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	65	20625.757576				
R	2	384.848485	192.424242	3.006	0.0701	5.0
A	10	14834.090909	1483.409091	10.385	0.0001	14.4
ERROR A	20	2856.818182	142.840909	2.231	0.0351	16.6
B	1	13.636364	13.636364	0.213	0.6489	4.1
AB	10	1128.030303	112.803030	1.762	0.1288	13.5
ERROR B	22	1408.333333	64.015152			

COMPLETE SPLIT PLOT AOV For OPUNTIA NOT HOED INJURY INJURY % VISUAL 0-100 9-30-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	65	9331.818182				
R	2	327.272727	163.636364	4.000	0.0330	4.0
A	10	6706.818182	670.681818	10.539	0.0001	9.6
ERROR A	20	1272.727273	63.636364	1.556	0.1573	13.3
B	1	0.000000	0.000000	0.000	1.0000	3.3
AB	10	125.000000	12.500000	0.306	0.9718	10.8
ERROR B	22	900.000000	40.909091			

(PEAR)
VPI & SU

EVALUATION OF PRICKLY PEAR CONTROL W/ HERBICIDES & SIMULATED ROTARY HOEING

Trial ID: PEAR.DAT
Location: CLARKE COUNTY

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

Weed Code	OPUNTIA	OPUNTIA
Crop Code	ROTRYHOE	NOT HOED
Part Rated	INJURY %	INJURY %
Rating Data Type	VISUAL	VISUAL
Rating Unit	0-100	0-100
Rating Date	10-26-99	10-26-99
Footnote Number		
Trt-Eval Interval	7 WAT	7 WAT

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate Rate	Unit	Grow Stg
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TABLE OF R MEANS

Replicate 1						29.8	8.2
Replicate 2						30.7	12.7
Replicate 3						28.4	14.1

TABLE OF A MEANS

1	2,4-D ESTER	3.8 L		8.0 LB A/A	POST	15.8	1.7
2	2,4-D ESTER	3.8 L		4.0 LB A/A	POST	20.0	9.2
3	BANVEL	4.0 L		8.0 LB A/A	POST	26.7	6.7
4	BANVEL	4.0 L		4.0 LB A/A	POST	35.0	8.3
5	TORDON 22K	2.0 L		0.50 LB A/A	POST	9.2	3.3
6	TORDON 22K	2.0 L		0.25 LB A/A	POST	14.2	2.5
7	ROUNDUP ULTRA	4.0 L		8.0 LB A/A	POST	62.5	30.8
8	ROUNDUP ULTRA	4.0 L		4.0 LB A/A	POST	33.3	1.7
9	DIQUAT	2.0 L		2.0 LB A/A	POST	58.3	37.5
10	DIQUAT	2.0 L		1.0 LB A/A	POST	44.2	26.7
11	CONTROL					6.7	0.0

TABLE OF B MEANS

1	COC		L	1.0 % V/V	POST	27.1	10.6
2	NU-FILM		L	8.0 OZ/A	POST	32.1	12.7

TABLE OF AB MEANS

1	2,4-D ESTER	3.8 L		8.0 LB A/A	POST	10.0	1.7
1	COC		L	1.0 % V/V	POST		

(PEAR)
VPI & SU

EVALUATION OF PRICKLY PEAR CONTROL W/ HERBICIDES & SIMULATED ROTARY HOEING

Trial ID: PEAR.DAT Investigator: KEVIN BRADLEY
Location: CLARKE COUNTY Study Dir.: Scott Hagood

Weed Code	OPUNTIA	OPUNTIA
Crop Code	ROTRYHOE	NOT HOED
Part Rated	INJURY %	INJURY %
Rating Data Type	VISUAL	VISUAL
Rating Unit	0-100	0-100
Rating Date	10-26-99	10-26-99
Footnote Number		
Trt-Eval Interval	7 WAT	7 WAT

Trt No.	Treatment Name	Form Amt	Fm Ds	Rate Rate	Unit	Grow Stg		
2	2,4-D ESTER	3.8	L	4.0	LB A/A	POST	20.0	10.0
1	COC		L	1.0	% V/V	POST		
3	BANVEL	4.0	L	8.0	LB A/A	POST	18.3	5.0
1	COC		L	1.0	% V/V	POST		
4	BANVEL	4.0	L	4.0	LB A/A	POST	35.0	8.3
1	COC		L	1.0	% V/V	POST		
5	TORDON 22K	2.0	L	0.50	LB A/A	POST	8.3	3.3
1	COC		L	1.0	% V/V	POST		
6	TORDON 22K	2.0	L	0.25	LB A/A	POST	11.7	1.7
1	COC		L	1.0	% V/V	POST		
7	ROUNDUP ULTRA	4.0	L	8.0	LB A/A	POST	61.7	30.0
1	COC		L	1.0	% V/V	POST		
8	ROUNDUP ULTRA	4.0	L	4.0	LB A/A	POST	30.0	1.7
1	COC		L	1.0	% V/V	POST		
9	DIQUAT	2.0	L	2.0	LB A/A	POST	56.7	33.3
1	COC		L	1.0	% V/V	POST		
10	DIQUAT	2.0	L	1.0	LB A/A	POST	40.0	21.7
1	COC		L	1.0	% V/V	POST		
11	CONTROL		L	1.0	% V/V	POST	6.7	0.0
1	2,4-D ESTER	3.8	L	8.0	LB A/A	POST	21.7	1.7
2	NU-FILM		L	8.0	OZ/A	POST		
2	2,4-D ESTER	3.8	L	4.0	LB A/A	POST	20.0	8.3
2	NU-FILM		L	8.0	OZ/A	POST		
3	BANVEL	4.0	L	8.0	LB A/A	POST	35.0	8.3
2	NU-FILM		L	8.0	OZ/A	POST		
4	BANVEL	4.0	L	4.0	LB A/A	POST	35.0	8.3
2	NU-FILM		L	8.0	OZ/A	POST		

(PEAR)
VPI & SU

EVALUATION OF PRICKLY PEAR CONTROL W/ HERBICIDES & SIMULATED ROTARY HOEING

Trial ID: PEAR.DAT
Location: CLARKE COUNTY

Investigator: KEVIN BRADLEY
Study Dir.: Scott Hagood

Weed Code	OPUNTIA	OPUNTIA
Crop Code	ROTRYHOE	NOT HOED
Part Rated	INJURY %	INJURY %
Rating Data Type	VISUAL	VISUAL
Rating Unit	0-100	0-100
Rating Date	10-26-99	10-26-99
Footnote Number		
Trt-Eval Interval	7 WAT	7 WAT

Trt No.	Treatment Name	Form	Fm Amt	Fm Ds	Rate Rate Unit	Grow Stg		
5	TORDON 22K	L	2.0	L	0.50 LB A/A	POST	10.0	3.3
2	NU-FILM	L		L	8.0 OZ/A	POST		
6	TORDON 22K	L	2.0	L	0.25 LB A/A	POST	16.7	3.3
2	NU-FILM	L		L	8.0 OZ/A	POST		
7	ROUNDUP ULTRA	L	4.0	L	8.0 LB A/A	POST	63.3	31.7
2	NU-FILM	L		L	8.0 OZ/A	POST		
8	ROUNDUP ULTRA	L	4.0	L	4.0 LB A/A	POST	36.7	1.7
2	NU-FILM	L		L	8.0 OZ/A	POST		
9	DIQUAT	L	2.0	L	2.0 LB A/A	POST	60.0	41.7
2	NU-FILM	L		L	8.0 OZ/A	POST		
10	DIQUAT	L	2.0	L	1.0 LB A/A	POST	48.3	31.7
2	NU-FILM	L		L	8.0 OZ/A	POST		
11	CONTROL	L		L	8.0 OZ/A	POST	6.7	0.0
2	NU-FILM	L		L				

(PEAR)
VPI & SU

EVALUATION OF PRICKLY PEAR CONTROL W/ HERBICIDES & SIMULATED ROTARY HOEING

Trial ID: PEAR.DAT Investigator: KEVIN BRADLEY
Location: CLARKE COUNTY Study Dir.: Scott Hagood

COMPLETE SPLIT PLOT AOV For OPUNTIA ROTRYHOE INJURY INJURY % VISUAL 0-100 10-26-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	65	27165.530303				
R	2	57.575758	28.787879	0.202	0.8185	7.5
A	10	21811.363636	2181.136364	33.323	0.0001	9.7
ERROR A	20	1309.090909	65.454545	0.460	0.9573	24.8
B	1	412.500000	412.500000	2.896	0.1029	6.1
AB	10	441.666667	44.166667	0.310	0.9703	20.2
ERROR B	22	3133.333333	142.424242			

COMPLETE SPLIT PLOT AOV For OPUNTIA NOT HOED INJURY INJURY % VISUAL 0-100 10-26-99

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	65	13666.666667				
R	2	421.212121	210.606061	3.453	0.0496	4.9
A	10	10750.000000	1075.000000	24.700	0.0001	7.9
ERROR A	20	870.454545	43.522727	0.714	0.7740	16.2
B	1	74.242424	74.242424	1.217	0.2818	4.0
AB	10	209.090909	20.909091	0.343	0.9585	13.2
ERROR B	22	1341.666667	60.984848			

STATION (Climatological) Christiansburg	(River Station, if different)	MONTH April	19 99
STATE VA.	COUNTY MONTGOMERY	RIVER -	
TIME (local) OF OBSERVATION -	TEMP 6:30 a.m.	PRECIPITATION 6:30 a.m.	STANDARD TIME IN USE E
TYPE OF RIVER GAGE -	ELEVATION OF RIVER GAGE ZERO -	FLOOD STAGE -	NORMAL POOL STAGE -

WS FORM B-91
(12-93)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

**B-91's MUST BE MAILED BY THE
6th Day Of The Month**

REMARKS
(Special observations, etc.)

DATE	TEMPERATURE F.			PRECIPITATION			WEATHER (Calendar Day)						RIVER STAGE			
	24 HRS ENDING AT OBSERVATION		AT OBSN	24-HR AMOUNTS		At Ob.	Mark 'X' for all types occurring each day.						GAGE READING AT	TENDENCY		
	MAX	MIN.		Fain, melted snow, etc. (ins. and hundredths)	Snow, ice pellets (ins. and tenths)		Snow, ice pellets, hail, ice on ground (ins.)	A.M.		NOON		P.M.			CONDITION	
1	64	44	52	.35												a.m. min. 48°F
2	66	50	53	.08												
3	73	53	54	0												
4	75	54	58	0												
5	78	55	55	0												
6	64	44	44	0												
7	65	44	53	0												a.m. min. 53°F
8	73	52	53	0												
9	80	51	57	.05												a.m. min. 55°F
10	78	54	54	.04												8 a.m.
11	71	50	51	.75												8 a.m.
12	73	48	48	.53												
13	53	37	37	0												
14	60	37	38	0												a.m. min. 38°F
15	66	38	46	.03												a.m. min. 45°F
16	52	44	46	.35												
17	55	33	39	0												
18	55	33	38	0												
19	49	33	40	T												
20	60	39	43	.08												6 a.m.
21	64	42	42	0												
22	71	41	50	0												a.m. min. 49°F
23	82	49	62	0												a.m. min. 59°F
24	78	53	53	0												
25	67	40	42	0												7:30 a.m.
26	70	42	49	0												a.m. min. 48°F
27	59	49	56	.33												a.m. min. 55°F
28	66	44	44	.50												
29	45	40	42	.04												
30	46	40	42	.02												
31																
SUM				3.15												

CONDITION OF RIVER AT GAGE	CHECK BAR (For wire weight) NORMAL CK. BAR
HEADING	DATE
<ul style="list-style-type: none"> a. Cracked by rough ice. b. Frozen, but open at gage. c. Upper surface of smooth ice. d. Ice gorge above gage. e. Ice gorge below gage. f. Shoro ice. g. Floating ice. h. Pool stage. 	

Fog	Ice Pellets	Glaze	Thunder	Hail	Dam Winds
OBSERVER Jan D. Wooge					
SUPERVISING OFFICE BLACKSBURG VA					

CHRISTIANSBURG
44-1692-05
VA



STATION (Climatological) **Christiansburg** (River Station, if different)

STATE **VA.** COUNTY **Montgomery** MONTH **MAY** 19 **99**

RIVER **—**

TIME (local) OF OBSERVATION RIVER **—** TEMP. **6:30 a.m. 6:30 a.m.** PRECIPITATION **E** STANDARD TIME IN USE **E**

TYPE OF RIVER GAGE **—** ELEVATION OF RIVER GAGE ZERO **—** Ft. FLOOD STAGE **—** Ft. NORMAL POOL STAGE **—** Ft.

WS FORM B-91 (12-93)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE F.			PRECIPITATION														WEATHER (Calendar Day)						RIVER STAGE		REMARKS (Special observations, etc.)				
	24 HRS. ENDING AT OBSERVATION		AT OBSN.	24-HR AMOUNTS		At Ob. Draw a straight line (—) through hours precipitation was observed, and a wavy line (~~~~) through hours precipitation probably occurred unobserved.	A.M.			NOON			P.M.			Fog	Ice Pellets	Glaze	Thunder	Hail	Damaging Winds	Time of observation if different from above	CONDITION	GAGE READING AT — A.M.	TENDENCY					
	MAX.	MIN.		Rain, melted snow, etc. (ins. and hundredths)	Snow, ice pellets, (ins. and tenths)		1	2	3	4	5	6	7	8	9												10	11	1	2
1	62	38	39	0																							7 a.m.			
2	68	39	42	0																								7:30 a.m.		
3	72	37	37	0																										
4	76	37	45	0																									a.m. min. 44°F	
5	80	47	62	0																									a.m. min. ?	
6	76	58	61	0																										
7	77	54	55	T																										
8	76	53	54	.47																										
9	72	48	50	0																										
10	75	48	48	0																										
11	80	48	48	0																										
12	80	48	51	0																										a.m. min. 51°F
13	80	51	53	0																										a.m. min. 53°F
14	76	51	51	.53																										
15	51	44	46	.67																										
16	69	40	52	0																										
17	74	48	49	0																										
18	79	49	58	0																										a.m. min. 57°F
19	78	52	52	1.91																										
20	72	47	47	0																										
21	74	45	45	0																										
22	78	45	52	0																										a.m. min. 51°F
23	73	52	62	0																										a.m. min. 60°F
24	76	57	59	.06																										
25	66	49	50	0																										
26	67	50	53	0																										a.m. min. 52°F
27	73	46	46	0																										
28	73	46	49	0																										
29	78	49	55	0																										
30	81	52	54	0																										
31	84	54	58	0																										
32																														

B-91's MUST BE MAILED BY THE 6th Day Of The Month

REMARKS
(Special observations, etc.)

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice. B. Frozen, but open at gage. C. Upper surface of smooth ice. D. Ice gorge above gage.

E. Ice gorge below gage. F. Shore ice. G. Floating ice. H. Pool stage.

CHECK BAR (For wire-weight) NORMAL CK. BAR

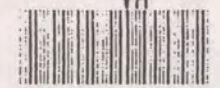
READING _____ DATE _____

Observer **Jon D. uboge**

SUPERVISING OFFICE **BLACKSBURG VA**

CHRISTIANSBURG **44-1692-06**

VA



STATION (Climatological) **Christiansburg** (River Station, if different)

STATE **VA.** COUNTY **Montgomery** MONTH **SEPT.** 19 **99**

TIME (local) OF OBSERVATION RIVER **6:30 a.m.** PRECIPITATION **6:30 a.m.** STANDARD TIME IN USE **E**

TYPE OF RIVER GAGE **-** ELEVATION OF RIVER GAGE ZERO **-** Ft. FLOOD STAGE **-** Ft. NORMAL POOL STAGE **-** Ft.

WS FORM B-91
(12-93)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE F.			PRECIPITATION			WEATHER (Calendar Day)						RIVER STAGE		REMARKS (Special observations, etc.)				
	24 HRS. ENDING AT OBSERVATION		AT OBSN.	24-HR AMOUNTS		At Ob.	Mark 'X' for all types occurring each day.						GAGE READING AT	TENDENCY					
	MAX.	MIN.		Rain, melted snow, etc. (ins. and hundredths)	Snow, ice pellets, (ins. and tenths)	Snow, ice pellets, hail, ice on ground (ins)	A.M.			NOON						P.M.			
1	77	44	47	0															a.m. min. 47°F
2	84	47	52	0															Lt Fog a.m. a.m. min. 52°F
3	87	51	53	0															a.m. min 53°F
4	88	52	58	0															a.m. min. 56°F
5	80	58	65	2.00															a.m. min. 62°F
6	70	64	64	1.06															
7	71	62	62	.07															Fog a.m.
8	84	58	58	0															Lt Fog a.m.
9	86	58	60	0															a.m. min. 60°F
10	83	59	59	T															
11	83	47	47	0															
12	79	47	51	0															a.m. min. 51°F
13	80	51	52	0															Lt. Fog a.m.
14	79	52	58	0															
15	77	58	62	0															a.m. min. 61°F
16	67	56	59	.11															
17	70	48	48	0															
18	72	43	43	0															8 a.m.
19	74	43	49	0															
20	74	49	54	0															a.m. min. 48°F
21	78	52	59	.92															a.m. min. 54°F
22	67	41	41	.01															Fog a.m. a.m. min. 59°F
23	63	41	43	0															a.m. min. 42°F
24	72	42	46	0															a.m. min. 46°F
25	75	44	47	0															8 a.m.
26	80	47	51	0															8 a.m.
27	79	51	65	0															a.m. min. 49°F
28	70	64	65	.40															Lt Fog a.m. a.m. min 64°F
29	73	64	66	.12															
30	71	47	47	.85															a.m. min. 66°F
31																			
SUM				5.54															

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READING DATE

Observer **Jon D. Wooge**

Supervising Office **BLACKSBURG VA**

CHRISTIANSBURG
44-1592-06

