

University of Georgia

Weed management systems in Roundup Ready Flex cotton.

Trial ID: C25-03
Location: Ponder farm

Study Director: Blaine Walden
Investigator: Stanley Culpepper

General Trial Information

Study Director: Blaine Walden **Title:** Graduate Student
Affiliation: University of Georgia
Investigator: Stanley Culpepper **Title:** Ext. Agronomist
Affiliation: University of Georgia
Postal Code: 31794

Trial Location

City: TyTy **Trial Status:** completed
State/Prov.: GA **Trial Reliability:** fair
Postal Code: . **Initiation Date:** May-20-03
Country: USA
Directions:

Objectives:

Conclusions:

Crop Description

Crop 1: GOSHI *Gossypium hirsutum* Cotton, American upland
Variety: RR Flex
BBCH Scale: BCOT **Planting Date:** May-20-03
Planting Method: conventional **Rate, Unit:** 3 per foot
Depth, Unit: 0.5 in
Row Spacing, Unit: 36 inch **Spacing Within Row, Unit:** 4 inch
Seed Bed: bedded **Soil Temperature, Unit:** 92 F
Soil Moisture: moist **Emergence Date:** May-25-03

Pest Description

Pest 1 Type: W **Code:** XANST *Xanthium strumarium*
Common Name: Broad cocklebur
Description: Common cocklebur

Pest 2 Type: W **Code:** PANTE *Panicum texanum*
Common Name: Conchograss
Description: Texas panicum

Pest 3 Type: W **Code:** IAQTA *Jacquemontia tamnifolia*
Common Name: Morningglory, smallflower

Pest 4 Type: W **Code:** RAPSS *Raphanus* sp.
Common Name: Radish

Pest 5 Type: W **Code:** CASOB *Cassia obtusifolia*
Common Name: Sickle pod

Pest 6 Type: W **Code:** AMAPA *Amaranthus palmeri*
Common Name: Amaranth, Palmer

Pest 7 Type: W **Code:** IPOSS *Ipomoea* sp.
Common Name: Morning glory
Description: mixture pitted and entireleaf

Site and Design

Plot Width, Unit: 12 FT **Site Type:** research station
Plot Length, Unit: 25 FT **Tillage Type:** conventional
Replications: 3 **Study Design:** Randomized Complete Block

Trial Initiation Comments:

University of Georgia

Field Prep./Maintenance:

% Sand: 94 % Silt: 2 % Clay: 4	% OM: 1.3 pH: 5.8	Soil Description Texture: sand Soil Name: Tifton sandy loam
--------------------------------------	----------------------	--------------------------------------------------------------------------

Moisture Conditions

Overall Moisture Conditions: wet

Application Description

	A	B	C	D	E
Application Date:	May-20-03	Jun-04-03	Jun-13-03	Jun-20-03	Jun-22-03
Time of Day:	11 am	3 pm	2 pm	9 am	9 am
Application Method:	broadcast	broadcast	broadcast	broadcast	broadcast
Application Timing:	PRE	1-leaf	4-leaf	7-leaf	code E
Application Placement:	on soil	overtop	overtop	overtop	overtop
Applied By:	culpepper	culpepper	culpepper	culpepper	culpepper
Air Temperature, Unit:	78 F	92 F	88 F	78 F	82 F
% Relative Humidity:	65	39	39	67	59
Wind Velocity, Unit:	2 mph	3 mph	2 mph	3 mph	3 mph
Dew Presence (Y/N):	n	n	n	n	n
Soil Temperature, Unit:	76 F	88 F	85 F	80 F	81 F
Soil Moisture:	moist	moist	moist	wet	wet
% Cloud Cover:	25	45	50	30	10
	F	G	H	I	J
Application Date:	Jul-04-03	Jul-08-03	Jul-12-03	Jul-20-03	Jul-20-03
Time of Day:	9 am	3 pm	10 am	9 am	9 am
Application Method:	broadcast	broadcast	broadcast	broadcast	broadcast
Application Timing:	code F	code G	code H	code I	code J
Application Placement:	overtop	overtop	overtop	directed	overtop
Applied By:	culpepper	culpepper	culpepper	culpepper	culpepper
Air Temperature, Unit:	78 F	92 F	83 F	88 F	88 F
% Relative Humidity:	70	60	65	70	70
Wind Velocity, Unit:	1 mph	2 mph	2 mph	2 mph	2 mph
Dew Presence (Y/N):	n	n	n	n	n
Soil Temperature, Unit:	71 F	97 F	83 F	82 F	82 F
Soil Moisture:	wet	moist	moist	moist	moist
% Cloud Cover:	100	50	25	0	0

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	GOSHI BCOT	GOSHI BCOT	GOSHI BCOT	GOSHI BCOT
Stage Scale Used:	DESC	DESC	DESC	DESC
Stage Majority, Percent:	V0 0	V1-V2 100	V4 100	V7 100
Stage Minimum, Percent:	. 0	. 0	. 0	. 0
Stage Maximum, Percent:	. 0	. 0	. 0	. 0
Diameter, Unit:	0. in	0. in	0. in	0. in
Height, Unit:	0. in	3.5 IN	7 in	12 in
Height Minimum, Maximum:	0. 0	3 4	6 8	10 14
	E	F	G	H
Crop 1 Code, BBCH Scale:	GOSHI BCOT	GOSHI BCOT	GOSHI BCOT	GOSHI BCOT
Stage Scale Used:	DESC	DESC	DESC	DESC
Stage Majority, Percent:	V8 100	V10 100	V11 100	V12 100
Stage Minimum, Percent:	. 0	. 0	. 0	. 0
Stage Maximum, Percent:	. 0	. 0	. 0	. 0
Diameter, Unit:	0. in	0. in	0. in	0. in
Height, Unit:	14 in	23 in	25 in	27 in
Height Minimum, Maximum:	13 15	20 25	22 28	22 32

University of Georgia

	I	J
Crop 1 Code, BBCH Scale:	GOSHI BCOT	GOSHI BCOT
Stage Scale Used:	DESC	DESC
Stage Majority, Percent:	V13-V14 100	V13-V14 100
Stage Minimum, Percent:	. 0	. 0
Stage Maximum, Percent:	. 0	. 0
Diameter, Unit:	0. in	0. in
Height, Unit:	28 in	28 in
Height Minimum, Maximum:	24 32	24 32

Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Disc., Scale:	XANST W A	XANST W B	XANST W C	XANST W D
Stage Majority, Percent:	. 0	<2 lf 100	. 0	. 0
Stage Minimum, Percent:	. 0	. 0	. 0	. 0
Stage Maximum, Percent:	. 0	. 0	. 0	. 0
Diameter, Unit:	0. in	0. in	0. in	0. in
Height, Unit:	0. in	1 in	3 in	8 in
Height Minimum, Maximum:	0. 0	0 2	0 6	4 12
Density, Unit:	0. in	3 ydsq	3 ydsq	3 ydsq
Coverage, Unit:	. in	. in	. in	. in
Pest 2 Code, Disc., Scale:	PANTE W PRE	PANTE W 1-lf	PANTE W 4-lf	PANTE W 7-lf
Stage Majority, Percent:	. 0	<2 lf 100	. 0	. 0
Stage Minimum, Percent:	. 0	. 0	. 0	. 0
Stage Maximum, Percent:	. 0	. 0	. 0	. 0
Diameter, Unit:	0. in	0. in	0. in	0. in
Height, Unit:	0. in	1 in	3 in	15 in
Height Minimum, Maximum:	0. 0	0 2	0 6	12 18
Density, Unit:	0. in	14 ydsq	14 ydsq	14 ydsq
Coverage, Unit:	. in	. in	. in	. in
Pest 3 Code, Disc., Scale:	IAQTA W PRE	IAQTA W 1-lf	IAQTA W 4-lf	IAQTA W 7-lf
Stage Majority, Percent:	. 0	<2 lf 100	. 0	. 0
Stage Minimum, Percent:	. 0	. 0	. 0	. 0
Stage Maximum, Percent:	. 0	. 0	. 0	. 0
Diameter, Unit:	0. in	0. in	0. in	0. in
Height, Unit:	0. in	1 in	3 in	12 in
Height Minimum, Maximum:	0. 0	0 2	0 6	6 18
Density, Unit:	0. in	4 ydsq	4 ydsq	4 ydsq
Coverage, Unit:	. in	. in	. in	. in
Pest 4 Code, Disc., Scale:	RAPSS W PRE	RAPSS W 1-lf	RAPSS W 4-lf	RAPSS W 7-lf
Stage Majority, Percent:	. 0	<2 lf 100	. 0	. 0
Stage Minimum, Percent:	. 0	. 0	. 0	. 0
Stage Maximum, Percent:	. 0	. 0	. 0	. 0
Diameter, Unit:	0. in	0. in	0. in	0. in
Height, Unit:	0. in	1 in	4 in	6 in
Height Minimum, Maximum:	0. 0	0 2	0 8	4 8
Density, Unit:	0. in	3 ydsq	3 ydsq	3 ydsq
Coverage, Unit:	. in	. in	. in	. in
Pest 5 Code, Disc., Scale:	CASOB W PRE	CASOB W 1-lf	CASOB W 4-lf	CASOB W 7-lf
Stage Majority, Percent:	. 0	<2 lf 100	. 0	. 0
Stage Minimum, Percent:	. 0	. 0	. 0	. 0
Stage Maximum, Percent:	. 0	. 0	. 0	. 0
Diameter, Unit:	0. in	0. in	0. in	0. in
Height, Unit:	0. in	1 in	3 in	10 in
Height Minimum, Maximum:	0. 0	0 2	0 6	5 10
Density, Unit:	0. in	4 ydsq	4 ydsq	4 ydsq
Coverage, Unit:	. in	. in	. in	. in
Pest 6 Code, Disc., Scale:	AMAPA W PRE	AMAPA W 1-lf	AMAPA W 4-lf	AMAPA W 7-lf
Stage Majority, Percent:	. 0	<2 lf 100	. 0	. 0

University of Georgia

Stage Minimum, Percent:	. 0	. 0	. 0	. 0
Stage Maximum, Percent:	. 0	. 0	. 0	. 0
Diameter, Unit:	0. in	0. in	0. in	0. in
Height, Unit:	0. in	1 in	3 in	8 in
Height Minimum, Maximum:	0. 0	0 2	0 6	6 10
Density, Unit:	0. in	3 ydsq	3 ydsq	3 ydsq
Coverage, Unit:	. in	. in	. in	. in
Pest 7 Code, Disc., Scale:	IPOSS W PRE	IPOSS W 1-1f	IPOSS W 4-1f	IPOSS W 7-1f
Stage Majority, Percent:	. 0	<2 lf 100	. 0	. 0
Stage Minimum, Percent:	. 0	. 0	. 0	. 0
Stage Maximum, Percent:	. 0	. 0	. 0	. 0
Diameter, Unit:	0. in	0. in	0. in	0. in
Height, Unit:	0. in	1 in	3 in	15 in
Height Minimum, Maximum:	0. 0	0 2	0 6	6 24
Density, Unit:	0. in	5 ydsq	5 ydsq	5 ydsq
Coverage, Unit:	. in	. in	. in	. in
	E	F	G	H
Pest 1 Code, Disc., Scale:	XANST W E	XANST W F	XANST W G	XANST W H
Stage Majority, Percent:	. 0	. 0	. 0	. 0
Stage Minimum, Percent:	. 0	. 0	. 0	. 0
Stage Maximum, Percent:	. 0	. 0	. 0	. 0
Diameter, Unit:	0. in	0. in	0. in	0. in
Height, Unit:	3 in	3 in	4 in	4 in
Height Minimum, Maximum:	1 4	1 3	1 6	1 5
Density, Unit:	3 ydsq	3 ydsq	3 ydsq	3 ydsq
Coverage, Unit:	. in	. in	. in	. in
Pest 2 Code, Disc., Scale:	PANTE W E	PANTE W F	PANTE W G	PANTE W H
Stage Majority, Percent:	. 0	. 0	. 0	. 0
Stage Minimum, Percent:	. 0	. 0	. 0	. 0
Stage Maximum, Percent:	. 0	. 0	. 0	. 0
Diameter, Unit:	0. in	0. in	0. in	0. in
Height, Unit:	3 in	3 in	4 in	4 in
Height Minimum, Maximum:	1 4	1 3	1 6	1 5
Density, Unit:	14 ydsq	14 ydsq	14 ydsq	14 ydsq
Coverage, Unit:	. in	. in	. in	. in
Pest 3 Code, Disc., Scale:	IAQTA W E	IAQTA W F	IAQTA W G	IAQTA W H
Stage Majority, Percent:	. 0	. 0	. 0	. 0
Stage Minimum, Percent:	. 0	. 0	. 0	. 0
Stage Maximum, Percent:	. 0	. 0	. 0	. 0
Diameter, Unit:	0. in	0. in	0. in	0. in
Height, Unit:	3 in	3 in	4 in	4 in
Height Minimum, Maximum:	1 4	1 3	1 6	1 5
Density, Unit:	4 ydsq	4 ydsq	4 ydsq	4 ydsq
Coverage, Unit:	. in	. in	. in	. in
Pest 4 Code, Disc., Scale:	RAPSS W E	RAPSS W F	RAPSS W G	RAPSS W H
Stage Majority, Percent:	. 0	. 0	. 0	. 0
Stage Minimum, Percent:	. 0	. 0	. 0	. 0
Stage Maximum, Percent:	. 0	. 0	. 0	. 0
Diameter, Unit:	0. in	0. in	0. in	0. in
Height, Unit:	0 in	0 in	0 in	0 in
Height Minimum, Maximum:	0 0	0 0	0 0	0 0
Density, Unit:	3 ydsq	3 ydsq	3 ydsq	3 ydsq
Coverage, Unit:	. in	. in	. in	. in
Pest 5 Code, Disc., Scale:	CASOB W E	CASOB W F	CASOB W G	CASOB W H
Stage Majority, Percent:	. 0	. 0	. 0	. 0
Stage Minimum, Percent:	. 0	. 0	. 0	. 0
Stage Maximum, Percent:	. 0	. 0	. 0	. 0
Diameter, Unit:	0. in	0. in	0. in	0. in

University of Georgia

Height, Unit:	3	in	3	in	4	in	4	in
Height Minimum, Maximum:	1	4	1	3	1	6	1	5
Density, Unit:	4	ydsq	4	ydsq	4	ydsq	4	ydsq
Coverage, Unit:	.	in	.	in	.	in	.	in
Pest 6 Code, Disc., Scale:	AMAPA	W E	AMAPA	W F	AMAPA	W G	AMAPA	W H
Stage Majority, Percent:	.	0	.	0	.	0	.	0
Stage Minimum, Percent:	.	0	.	0	.	0	.	0
Stage Maximum, Percent:	.	0	.	0	.	0	.	0
Diameter, Unit:	0.	in	0.	in	0.	in	0.	in
Height, Unit:	3	in	3	in	4	in	4	in
Height Minimum, Maximum:	1	4	1	3	1	6	1	5
Density, Unit:	3	ydsq	3	ydsq	3	ydsq	3	ydsq
Coverage, Unit:	.	in	.	in	.	in	.	in
Pest 7 Code, Disc., Scale:	IPOSS	W E	IPOSS	W F	IPOSS	W G	IPOSS	W H
Stage Majority, Percent:	.	0	.	0	.	0	.	0
Stage Minimum, Percent:	.	0	.	0	.	0	.	0
Stage Maximum, Percent:	.	0	.	0	.	0	.	0
Diameter, Unit:	0.	in	0.	in	0.	in	0.	in
Height, Unit:	3	in	3	in	4	in	4	in
Height Minimum, Maximum:	1	4	1	3	1	6	1	5
Density, Unit:	5	ydsq	5	ydsq	5	ydsq	5	ydsq
Coverage, Unit:	.	in	.	in	.	in	.	in
		I		J				
Pest 1 Code, Disc., Scale:	XANST	W I	XANST	W J				
Stage Majority, Percent:	.	0	.	0				
Stage Minimum, Percent:	.	0	.	0				
Stage Maximum, Percent:	.	0	.	0				
Diameter, Unit:	0.	in	0.	in				
Height, Unit:	4	in	4	in				
Height Minimum, Maximum:	1	7	1	7				
Density, Unit:	3	ydsq	3	ydsq				
Coverage, Unit:	.	in	.	in				
Pest 2 Code, Disc., Scale:	PANTE	W I	PANTE	W J				
Stage Majority, Percent:	.	0	.	0				
Stage Minimum, Percent:	.	0	.	0				
Stage Maximum, Percent:	.	0	.	0				
Diameter, Unit:	0.	in	0.	in				
Height, Unit:	4	in	4	in				
Height Minimum, Maximum:	1	7	1	7				
Density, Unit:	14	ydsq	14	ydsq				
Coverage, Unit:	.	in	.	in				
Pest 3 Code, Disc., Scale:	IAQTA	W I	IAQTA	W J				
Stage Majority, Percent:	.	0	.	0				
Stage Minimum, Percent:	.	0	.	0				
Stage Maximum, Percent:	.	0	.	0				
Diameter, Unit:	0.	in	0.	in				
Height, Unit:	4	in	4	in				
Height Minimum, Maximum:	1	7	1	7				
Density, Unit:	4	ydsq	4	ydsq				
Coverage, Unit:	.	in	.	in				
Pest 4 Code, Disc., Scale:	RAPSS	W I	RAPSS	W J				
Stage Majority, Percent:	.	0	.	0				
Stage Minimum, Percent:	.	0	.	0				
Stage Maximum, Percent:	.	0	.	0				
Diameter, Unit:	0.	in	0.	in				
Height, Unit:	0	in	0	in				
Height Minimum, Maximum:	0	0	0	0				
Density, Unit:	3	ydsq	3	ydsq				

University of Georgia

Coverage, Unit:	. in	. in
Pest 5 Code, Disc., Scale:	CASOB W I	CASOB W J
Stage Majority, Percent:	. 0	. 0
Stage Minimum, Percent:	. 0	. 0
Stage Maximum, Percent:	. 0	. 0
Diameter, Unit:	0. in	0. in
Height, Unit:	4 in	4 in
Height Minimum, Maximum:	1 7	1 7
Density, Unit:	4 ydsq	4 ydsq
Coverage, Unit:	. in	. in
Pest 6 Code, Disc., Scale:	AMAPA W I	AMAPA W J
Stage Majority, Percent:	. 0	. 0
Stage Minimum, Percent:	. 0	. 0
Stage Maximum, Percent:	. 0	. 0
Diameter, Unit:	0. in	0. in
Height, Unit:	4 in	4 in
Height Minimum, Maximum:	1 7	1 7
Density, Unit:	3 ydsq	3 ydsq
Coverage, Unit:	. in	. in
Pest 7 Code, Disc., Scale:	IPOSS W I	IPOSS W J
Stage Majority, Percent:	. 0	. 0
Stage Minimum, Percent:	. 0	. 0
Stage Maximum, Percent:	. 0	. 0
Diameter, Unit:	0. in	0. in
Height, Unit:	4 in	4 in
Height Minimum, Maximum:	1 7	1 7
Density, Unit:	5 ydsq	5 ydsq
Coverage, Unit:	. in	. in

Application Equipment

	A	B	C	D	E	F
Appl. Equipment:	backpack	backpack	backpack	backpack	backpack	backpack
Operating Pressure:	22	22	22	22	22	22
Pressure Unit:	psi	psi	psi	psi	psi	psi
Nozzle Type:	flat fan	flat fan	flat fan	flat fan	flat fan	flat fan
Nozzle Size:	11002	11002	11002	11002	11002	11002
Nozzle Spacing, Unit:	18 inch	18 inch	18 inch	18 inch	18 inch	18 inch
Nozzles/Row:	2	2	2	2	2	2
Boom Length, Unit:	4.5 feet	4.5 feet	4.5 feet	4.5 feet	4.5 feet	4.5 feet
Boom Height, Unit:	15 inch	15 inch	15 inch	15 inch	15 inch	15 inch
Ground Speed, Unit:	3 mph	3 mph	3 mph	3 mph	3 mph	3 mph
Carrier:	water	water	water	water	water	water
Spray Volume:	14.8	14.8	14.8	14.8	14.8	14.8
Volume Unit:	GAL/AC	GAL/AC	GAL/AC	GAL/AC	GAL/AC	GAL/AC
Propellant:	CO2	CO2	CO2	CO2	CO2	CO2
Tank Mix (Y/N):	Y	Y	Y	Y	Y	Y

University of Georgia

	G	H	I	J
Appl. Equipment:	backpack	backpack	backpack	backpack
Operating Pressure:	22	22	22	18
Pressure Unit:	psi	psi	psi	psi
Nozzle Type:	flat fan	flat fan	flat fan	flat fan
Nozzle Size:	11002	11002	11002	11002
Nozzle Spacing, Unit:	18 inch	18 inch	18 inch	12 inch
Nozzles/Row:	2	2	2	3
Boom Length, Unit:	4.5 feet	4.5 feet	4.5 feet	2 feet
Boom Height, Unit:	15 inch	15 inch	15 inch	12 inch
Ground Speed, Unit:	3 mph	3 mph	3 mph	3 mph
Carrier:	water	water	water	water
Spray Volume:	14.8	14.8	14.8	14.8
Volume Unit:	GAL/AC	GAL/AC	GAL/AC	GAL/AC
Propellant:	CO2	CO2	CO2	CO2
Tank Mix (Y/N):	Y	Y	Y	Y

University of Georgia

Weed management systems in Roundup Ready Flex cotton.

Trial ID: C25-03

Study Director: Blaine Walden

Location: Ponder farm

Investigator: Stanley Culpepper

Pest Type			W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code			XANST	XANST	XANST	XANST	XANST			
Crop Code	GOSHI	GOSHI								
BBCH Scale	BCOT	BCOT								
Rating Date	Jun-12-03	Jun-19-03	Jun-12-03	Jun-19-03	Jul-03-03	Jul-31-03	Aug-22-03			
Rating Data Type	STUNTING	STUNTING	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%	%			
Days After Last Applic.	8	6	8	6	11	11	33			
Trt-Eval Interval	8 DA-A	15 DA-A	8 DA-A	15 DA-A	29 DA-A	57 DA-A	79 DA-A			
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6	7
1	Roundup WeatherMax OT	0.75	lb ai/a	15.0		100.0		100.0	100.0	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax OT	0.75	lb ai/a							
2	Roundup WeatherMax OT	0.75	lb ai/a		20.0		83.3	96.7	100.0	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax OT	0.75	lb ai/a							
3	Roundup WeatherMax OT	1.125	lb ai/a		20.0		100.0	98.3	100.0	100.0
	Roundup WeatherMax OT	1.125	lb ai/a							
	Roundup WeatherMax OT	1.125	lb ai/a							
4	Roundup WeatherMax OT	1.5	lb ai/a					93.3	100.0	100.0
	Roundup WeatherMax OT	1.5	lb ai/a							
	Roundup WeatherMax OT	1.5	lb ai/a							
5	Roundup WeatherMax OT	1.125	lb ai/a					96.7	100.0	100.0
	Roundup WeatherMax OT	1.125	lb ai/a							
	Roundup WeatherMax OT	1.125	lb ai/a							
6	Roundup WeatherMax OT	1.5	lb ai/a					100.0	100.0	100.0
	Roundup WeatherMax OT	1.5	lb ai/a							
	Roundup WeatherMax OT	1.5	lb ai/a							
7	Prowl	2	pt/a					98.3	100.0	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
8	Prowl	2	pt/a					100.0	100.0	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Dual Magnum OT	1	pt/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
9	Prowl	2	pt/a					98.3	100.0	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Staple OT	0.6	oz/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
10	Roundup WeatherMax OT	0.38	lb ai/a	13.3		100.0		100.0	100.0	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx (PD)	1.25	pt/a							
11	Roundup WeatherMax OT	0.38	lb ai/a	5.0		100.0		100.0	100.0	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Dual Magnum	1	pt/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
12	non-treated							0.0	0.0	0.0
LSD (P=.05)				19.99	0.00	0.00	71.72	4.98	0.00	0.00
Standard Deviation				8.82	0.00	0.00	20.41	2.94	0.00	0.00
CV				79.37	0.0	0.0	22.27	3.26	0.0	0.0
Bartlett's X2				2.204	0.0	0.0	0.0	2.565	0.0	0.0
P(Bartlett's X2)				0.332	.	.	.	0.767	.	.

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

University of Georgia

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	IAQTA	IAQTA	IAQTA	IAQTA	IAQTA	RAPSS	RAPSS			
Crop Code										
BBCH Scale										
Rating Date	Jun-12-03	Jun-19-03	Jul-03-03	Jul-31-03	Aug-22-03	Jun-12-03	Jun-19-03			
Rating Data Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%	%			
Days After Last Applic.	8	6	11	11	33	8	6			
Trt-Eval Interval	8 DA-A	15 DA-A	29 DA-A	57 DA-A	79 DA-A	8 DA-A	15 DA-A			
Trt No.	Treatment Name	Rate	Rate Unit	8	9	10	11	12	13	14
1	Roundup WeatherMax OT	0.75	lb ai/a	100.0		95.0	98.3	100.0	100.0	
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax OT	0.75	lb ai/a							
2	Roundup WeatherMax OT	0.75	lb ai/a		71.7	88.3	100.0	100.0		83.3
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax OT	0.75	lb ai/a							
3	Roundup WeatherMax OT	1.125	lb ai/a		95.0	98.3	100.0	100.0		100.0
	Roundup WeatherMax OT	1.125	lb ai/a							
	Roundup WeatherMax OT	1.125	lb ai/a							
4	Roundup WeatherMax OT	1.5	lb ai/a			93.3	100.0	100.0		
	Roundup WeatherMax OT	1.5	lb ai/a							
	Roundup WeatherMax OT	1.5	lb ai/a							
5	Roundup WeatherMax OT	1.125	lb ai/a			86.7	100.0	100.0		
	Roundup WeatherMax OT	1.125	lb ai/a							
	Roundup WeatherMax OT	1.125	lb ai/a							
6	Roundup WeatherMax OT	1.5	lb ai/a			95.0	100.0	100.0		
	Roundup WeatherMax OT	1.5	lb ai/a							
	Roundup WeatherMax OT	1.5	lb ai/a							
7	Prowl	2	pt/a			95.0	100.0	100.0		
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
8	Prowl	2	pt/a			91.7	100.0	100.0		
	Roundup WeatherMax OT	0.75	lb ai/a							
	Dual Magnum OT	1	pt/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
9	Prowl	2	pt/a			93.3	100.0	100.0		
	Roundup WeatherMax OT	0.75	lb ai/a							
	Staple OT	0.6	oz/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
10	Roundup WeatherMax OT	0.38	lb ai/a	100.0		100.0	100.0	100.0	100.0	
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx (PD)	1.25	pt/a							
11	Roundup WeatherMax OT	0.38	lb ai/a	100.0		98.3	100.0	100.0	100.0	
	Roundup WeatherMax OT	0.75	lb ai/a							
	Dual Magnum	1	pt/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
12	non-treated					0.0	0.0	0.0		
LSD (P=.05)				0.00	58.70	9.12	1.41	0.00	0.00	71.72
Standard Deviation				0.00	16.71	5.38	0.83	0.00	0.00	20.41
CV				0.0	20.05	6.24	0.91	0.0	0.0	22.27
Bartlett's X2				0.0	1.093	14.379	0.0	0.0	0.0	0.0
P(Bartlett's X2)				.	0.296	0.109	.	.	.	.

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

University of Georgia

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	PAPSS	RAPSS	RAPSS	CASOB	CASOB	CASOB	CASOB			
Crop Code										
BBCH Scale										
Rating Date	Jul-03-03	Jul-31-03	Aug-22-03	Jun-12-03	Jun-19-03	Jul-03-03	Jul-31-03			
Rating Data Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%	%			
Days After Last Applic.	11	11	33	8	6	11	11			
Trt-Eval Interval	29 DA-A	57 DA-A	79 DA-A	8 DA-A	15 DA-A	29 DA-A	57 DA-A			
Trt No.	Treatment Name	Rate	Rate Unit	15	16	17	18	19	20	21
1	Roundup WeatherMax OT	0.75	lb ai/a	100.0	100.0	100.0	100.0		98.3	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax OT	0.75	lb ai/a							
2	Roundup WeatherMax OT	0.75	lb ai/a	92.7	100.0	100.0		70.0	95.0	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax OT	0.75	lb ai/a							
3	Roundup WeatherMax OT	1.125	lb ai/a	100.0	100.0	100.0		80.0	96.7	100.0
	Roundup WeatherMax OT	1.125	lb ai/a							
	Roundup WeatherMax OT	1.125	lb ai/a							
4	Roundup WeatherMax OT	1.5	lb ai/a	100.0	100.0	100.0			98.3	100.0
	Roundup WeatherMax OT	1.5	lb ai/a							
	Roundup WeatherMax OT	1.5	lb ai/a							
5	Roundup WeatherMax OT	1.125	lb ai/a	100.0	100.0	100.0			100.0	100.0
	Roundup WeatherMax OT	1.125	lb ai/a							
	Roundup WeatherMax OT	1.125	lb ai/a							
6	Roundup WeatherMax OT	1.5	lb ai/a	100.0	100.0	100.0			100.0	100.0
	Roundup WeatherMax OT	1.5	lb ai/a							
	Roundup WeatherMax OT	1.5	lb ai/a							
7	Prowl	2	pt/a	100.0	100.0	100.0			86.7	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
8	Prowl	2	pt/a	100.0	100.0	100.0			95.0	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Dual Magnum OT	1	pt/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
9	Prowl	2	pt/a	100.0	100.0	100.0			96.7	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Staple OT	0.6	oz/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
10	Roundup WeatherMax OT	0.38	lb ai/a	100.0	100.0	100.0	100.0		100.0	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx (PD)	1.25	pt/a							
11	Roundup WeatherMax OT	0.38	lb ai/a	100.0	100.0	100.0	100.0		100.0	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Dual Magnum	1	pt/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
12	non-treated			0.0	0.0	0.0			0.0	0.0
LSD (P=.05)				5.38	0.00	0.00	0.00	43.03	7.47	0.00
Standard Deviation				3.18	0.00	0.00	0.00	12.25	4.41	0.00
CV				3.49	0.0	0.0	0.0	16.33	4.96	0.0
Bartlett's X2				0.0	0.0	0.0	0.0	0.0	5.289	0.0
P(Bartlett's X2)				.	.	.	.	.	0.507	.

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

University of Georgia

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	CASOB	AMAPA	AMAPA	AMAPA	AMAPA	AMAPA	PANTE			
Crop Code										
BBCH Scale										
Rating Date	Aug-22-03	Jun-12-03	Jun-19-03	Jul-03-03	Jul-31-03	Aug-22-03	Jun-12-03			
Rating Data Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%	%			
Days After Last Applic.	33	8	6	11	11	33	8			
Trt-Eval Interval	79 DA-A	8 DA-A	15 DA-A	29 DA-A	57 DA-A	79 DA-A	8 DA-A			
Trt No.	Treatment Name	Rate	Rate Unit	22	23	24	25	26	27	28
1	Roundup WeatherMax OT	0.75	lb ai/a	100.0	100.0		100.0	100.0	100.0	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax OT	0.75	lb ai/a							
2	Roundup WeatherMax OT	0.75	lb ai/a	100.0		83.3	100.0	100.0	100.0	
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax OT	0.75	lb ai/a							
3	Roundup WeatherMax OT	1.125	lb ai/a	100.0		100.0	100.0	100.0	100.0	
	Roundup WeatherMax OT	1.125	lb ai/a							
	Roundup WeatherMax OT	1.125	lb ai/a							
4	Roundup WeatherMax OT	1.5	lb ai/a	100.0			100.0	100.0	100.0	
	Roundup WeatherMax OT	1.5	lb ai/a							
	Roundup WeatherMax OT	1.5	lb ai/a							
5	Roundup WeatherMax OT	1.125	lb ai/a	100.0			100.0	100.0	100.0	
	Roundup WeatherMax OT	1.125	lb ai/a							
	Roundup WeatherMax OT	1.125	lb ai/a							
6	Roundup WeatherMax OT	1.5	lb ai/a	100.0			100.0	100.0	100.0	
	Roundup WeatherMax OT	1.5	lb ai/a							
	Roundup WeatherMax OT	1.5	lb ai/a							
7	Prowl	2	pt/a	100.0			100.0	100.0	100.0	
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
8	Prowl	2	pt/a	100.0			100.0	100.0	100.0	
	Roundup WeatherMax OT	0.75	lb ai/a							
	Dual Magnum OT	1	pt/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
9	Prowl	2	pt/a	100.0			100.0	100.0	100.0	
	Roundup WeatherMax OT	0.75	lb ai/a							
	Staple OT	0.6	oz/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
10	Roundup WeatherMax OT	0.38	lb ai/a	100.0	100.0		100.0	100.0	100.0	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx (PD)	1.25	pt/a							
11	Roundup WeatherMax OT	0.38	lb ai/a	100.0	100.0		100.0	100.0	100.0	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Dual Magnum	1	pt/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
12	non-treated			0.0			0.0	0.0	0.0	
LSD (P=.05)				0.00	0.00	71.72	0.00	0.00	0.00	0.00
Standard Deviation				0.00	0.00	20.41	0.00	0.00	0.00	0.00
CV				0.0	0.0	22.27	0.0	0.0	0.0	0.0
Bartlett's X2				0.0	0.0	0.0	0.0	0.0	0.0	0.0
P(Bartlett's X2)				.	.	.	.	.	.	.

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

University of Georgia

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	PANTE	PANTE	PANTE	PANTE	IPOSS	IPOSS	IPOSS			
Crop Code										
BBCH Scale										
Rating Date	Jun-19-03	Jul-03-03	Jul-31-03	Aug-22-03	Jul-03-03	Jul-31-03	Aug-22-03			
Rating Data Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%	%			
Days After Last Applic.	6	11	11	33	11	11	33			
Trt-Eval Interval	15 DA-A	29 DA-A	57 DA-A	79 DA-A	29 DA-A	57 DA-A	79 DA-A			
Trt No.	Treatment Name	Rate	Rate Unit	29	30	31	32	33	34	35
1	Roundup WeatherMax OT	0.75	lb ai/a		100.0	100.0	100.0	86.7	96.7	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax OT	0.75	lb ai/a							
2	Roundup WeatherMax OT	0.75	lb ai/a	68.3	100.0	100.0	100.0	86.7	98.3	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax OT	0.75	lb ai/a							
3	Roundup WeatherMax OT	1.125	lb ai/a	85.0	100.0	100.0	100.0	91.7	98.3	100.0
	Roundup WeatherMax OT	1.125	lb ai/a							
	Roundup WeatherMax OT	1.125	lb ai/a							
4	Roundup WeatherMax OT	1.5	lb ai/a		100.0	100.0	100.0	95.0	100.0	100.0
	Roundup WeatherMax OT	1.5	lb ai/a							
	Roundup WeatherMax OT	1.5	lb ai/a							
5	Roundup WeatherMax OT	1.125	lb ai/a		90.0	100.0	100.0	70.0	99.3	100.0
	Roundup WeatherMax OT	1.125	lb ai/a							
	Roundup WeatherMax OT	1.125	lb ai/a							
6	Roundup WeatherMax OT	1.5	lb ai/a		97.7	100.0	100.0	86.7	100.0	100.0
	Roundup WeatherMax OT	1.5	lb ai/a							
	Roundup WeatherMax OT	1.5	lb ai/a							
7	Prowl	2	pt/a		88.3	100.0	100.0	76.7	98.7	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
8	Prowl	2	pt/a		95.0	100.0	100.0	81.7	100.0	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Dual Magnum OT	1	pt/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
9	Prowl	2	pt/a		89.3	100.0	100.0	80.0	100.0	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Staple OT	0.6	oz/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
10	Roundup WeatherMax OT	0.38	lb ai/a		100.0	100.0	100.0	93.3	99.3	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx (PD)	1.25	pt/a							
11	Roundup WeatherMax OT	0.38	lb ai/a		100.0	100.0	100.0	95.0	100.0	100.0
	Roundup WeatherMax OT	0.75	lb ai/a							
	Dual Magnum	1	pt/a							
	Roundup WeatherMax PD	0.75	lb ai/a							
	Direx PD	1.25	pt/a							
12	non-treated				0.0	0.0	0.0	0.0	0.0	0.0
LSD (P=.05)		28.69	6.33	0.00	0.00	0.00	0.00	13.88	2.43	0.00
Standard Deviation		8.16	3.74	0.00	0.00	0.00	0.00	8.20	1.43	0.00
CV		10.65	4.23	0.0	0.0	0.0	0.0	10.43	1.58	0.0
Bartlett's X2		0.907	2.991	0.0	0.0	0.0	0.0	9.52	4.125	0.0
P(Bartlett's X2)		0.341	0.559	.	.	.	.	0.484	0.532	.

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

University of Georgia

Weed management systems in Roundup Ready Flex cotton.

Trial ID: C25-03

Study Director: Blaine Walden

Location: Ponder farm

Investigator: Stanley Culpepper

Trial Comments

OBJECTIVE: Evaluate weed management systems in Roundup Ready Flex cotton.

RESULTS AND DISCUSSION:

CROP RESPONSE:

1.) Early season cotton stunting was due to cadre carryover from previous crop. Injury was variable, therefore plots were not harvested because of the potential of carryover herbicides impacting yield.

Weed Response:

Common cocklebur:

1) Each application of glyphosate provided excellent control throughout the season. Late-season control with all systems was excellent.

Smallflower morningglory:

1) By 20 DAT, 1.125 lb ai/a rate of glyphosate was 10% more effective than the 0.75 lb ai/A rate. When these treatments were followed by an additional glyphosate treatment control was excellent in both systems.

2) Mid and late-season control was excellent in all systems.

Radish:

1) By 20 DAT, 1.125 lb ai/a rate of glyphosate was 7% more effective than the 0.75 lb ai/A rate. When these treatments were followed by an additional glyphosate treatment control was excellent in both systems.

2) Mid and late-season control was excellent in all systems.

Sicklepod:

1) Excellent control was noted with most applications. Sicklepod that was greater than 10 inches at time of application was slow to die and sequential applications were needed for complete control.

2) Mid and late-season control was excellent in all systems.

Palmer amaranth:

1) Control was excellent with all applications.

Texas panicum:

1) Control was excellent with all applications.

Ipomoea morningglory:

1) Sequential early season applications were generally more effective than a single highrate application.

2) Mid- to late-season control was excellent.

CONCLUSIONS:

1) Growing conditions were absolutely ideal for great control with glyphosate.

2) All treatments provided excellent weed control by late-season.

3) The first 4 treatments were clean throughout the season, treatments 5 and 6 were able to be cleaned because of the environment during 2003.

4) The advantage from Prowl in reducing weed population and size was evident in treatments 7 through 11. However, benefits from early-season weed control on yield could not be measured as the trial could not be harvested.

5) The benefit from Staple or Dual mixed with glyphosate was not noted in this trial due to excellent POST activity from glyphosate and a tremendous cotton canopy.