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Winter weed and cotton response to Nimble applied preplant.

Trial ID: C34-07 Protocol ID:
Location: Ponder Farm Study Director: Stanley Culpepper
Investigator: Stanley Culpepper

Reps: 4 Plots: 12 by 25 feet
Spray vol: 14.8 gal/ac Mix size: 2 liters (min 1.5434)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Growth Stage	Appl Code	Amt Product to Measure	Plot No. By Rep 1	2	3	4
1	Nimble	75		WG	0.3	OZ/A	PREPLANT	A	0.3036 g/mx	101	205	304	403
	COC			L	1	% V/V	PREPLANT	A	20.0 ml/mx				
2	Nimble	75		WG	0.5	OZ/A	PREPLANT	A	0.506 g/mx	102	203	301	405
	COC			L	1	% V/V	PREPLANT	A	20.0 ml/mx				
3	Nimble	75		WG	0.5	OZ/A	PREPLANT	A	0.506 g/mx	103	201	303	402
	GLYFOS X-TRA	4		L	1	QT/A	PREPLANT	A	33.78 ml/mx				
4	Harmony Extra	75		WG	0.3	OZ/A	PREPLANT	A	0.3036 g/mx	104	202	305	404
	COC			L	1	% V/V	PREPLANT	A	20.0 ml/mx				
5	Untreated control									105	204	302	401

Sort Order: Treatment

Product quantities required for listed treatments and applications in one trial:

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
1.645	g	Nimble	75	WG	
74.992	ml	COC		L	
42.225	ml	GLYFOS X-TRA	4	L	
0.380	g	Harmony Extra	75	WG	

* 'Per area' calculations based on spray volume= 14.8 gal/ac, mix size= 2 liters (mix size basis).
* Product amount calculations increased 25 % for overage adjustment.
* 'Per volume' calculations use spray volume= 14.8 gal/ac, mix size= 2 liters.

Trial Comments

OBJECTIVE: Compare burndown and cotton response to Nimble herbicide applied preplant.

COTTON RESPONSE:
1. At 17 d after applying burndown, cotton was planted.
2. No visual injury was noted 14, 30, or 58 d after planting.
3. Plant stands were taken at 18 d after planting from 1 row by 10 feet in length. Plant stands ranged from 20.3 to 23 plants with no impact by treatments.

BURNDOWN WEED RESPONSE:
Wild Radish
1. Radish was extremely large at time of application.
2. Nimble and Harmony Extra provided poor but similar control.
3. The glyphosate + Nimble mixture provided complete control.

Wheat:
1. Only glyphosate impacted the wheat with complete control.

Henbit:
1. All preplant burndown programs provided complete control of henbit.

COTTON YIELDS:

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1. Plot yields were high nearing 3 bales/A and extremely uniform with a CV of only 17.
2. No treatment impacted yield. Keep in mind, glyphosate plus a PRE mixture was applied over the entire trial area controlling all emerged weeds so cotton tolerance to Nimble could be evaluated.

GENERAL COMMENTS:
May 1: Roundup WeatherMax at 22 oz/A + Prowl 1 qt + Cotoran 1 qt applied PRE over trial area.
June 1: Roundup WeatherMax at 22 oz/A applied over trial area.
July 1: Roundup WeatherMax at 22 oz/A applied over trial area.

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Trt No.	Treatment Name	Rate	Rate Unit	1	2	3	4	5	6	7	8
Pest Type								W Weed	W Weed	W Weed	W Weed
Pest Code				INJURY	INJURY	INJURY	Plants	RAPRA	RAPRA	TRZAW	TRZAW
Crop Code				GOSHI	GOSHI	GOSHI	GOSHI				
BBCH Scale				BCOT	BCOT	BCOT	BCOT				
Rating Date				May-01-07	May-14-07	May-30-07	May-18-07	Apr-23-07	May-02-07	Apr-23-07	May-02-07
Rating Data Type				%	%	%	#	%	%	%	%
Rating Unit				control	control	control	10 sqft	control	control	control	control
Days After First/Last Applic.				18	31	47	35	10	19	10	19
Trt-Eval Interval				18 DA-A	31 DA-A	47 DA-A	35 DA-A	10 DA-A	19 DA-A	10 DA-A	19 DA-A
ARM Action Codes											
Number of Decimals											
1	Nimble	0.3	OZ/A	0 a	0 a	0 a	20 a	39 b	48 b	0 b	0 b
	COC	1	% V/V								
2	Nimble	0.5	OZ/A	0 a	0 a	0 a	23 a	43 b	46 b	0 b	0 b
	COC	1	% V/V								
3	Nimble	0.5	OZ/A	0 a	0 a	0 a	21 a	87 a	99 a	98 a	99 a
	GLYFOS X-TRA	1	QT/A								
4	Harmony Extra	0.3	OZ/A	0 a	0 a	0 a	22 a	41 b	49 b	0 b	0 b
	COC	1	% V/V								
5	Untreated control			0 a	0 a	0 a	21 a	0 c	0 c	0 b	0 b
LSD (P=.05)				0.0	0.0	0.0	3.5	7.9	2.7	1.4	0.0
Standard Deviation				0.0	0.0	0.0	2.3	5.2	1.8	0.9	0.0
CV				0.0	0.0	0.0	10.59	12.29	3.66	4.56	0.0
Bartlett's X2				0.0	0.0	0.0	1.717	3.579	0.08	0.0	0.0
P(Bartlett's X2)				.	.	.	0.788	0.311	0.961	.	.

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

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Pest Type				W Weed			
Pest Code				LAMAM	SEED		SEED
Crop Code					GOSHI		GOSHI
BBCH Scale					BCOT		BCOT
Rating Date				Apr-23-07	Aug-01-07		Aug-01-07
Rating Data Type				%	yield		yield
Rating Unit				control	lb/plot		lb/A
Days After First/Last Applic.				10	110		110
Trt-Eval Interval				10 DA-A	110 DA-A		110 DA-A
ARM Action Codes							TY1
Number of Decimals							1
Trt No.	Treatment Name	Rate	Rate Unit	9		10	11
1	Nimble	0.3	OZ/A	99	a	12 a	3403.5 a
	COC	1	% V/V				
2	Nimble	0.5	OZ/A	99	a	11 a	3326.5 a
	COC	1	% V/V				
3	Nimble	0.5	OZ/A	99	a	11 a	3239.4 a
	GLYFOS X-TRA	1	QT/A				
4	Harmony Extra	0.3	OZ/A	99	a	12 a	3420.9 a
	COC	1	% V/V				
5	Untreated control			0	b	11 a	3222.0 a
LSD (P=.05)				0.0		3.0	870.81
Standard Deviation				0.0		1.9	565.17
CV				0.0		17.01	17.01
Bartlett's X2				0.0		0.554	0.554
P(Bartlett's X2)				.		0.968	0.968

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

Column 11: TY1 = 290.4*[C10]

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Trial ID: C34-07 Protocol ID:
Location: Ponder Farm Study Director: Stanley Culpepper
Investigator: Stanley Culpepper

General Trial Information

Study Director: Stanley Culpepper **Title:** Ext. Weed Science
Affiliation: Univ. of Georgia
Postal Code: 31794 **E-mail:** _____

Investigator: Stanley Culpepper **Title:** Ext. Weed Science
Affiliation: Univ. of Georgia
Postal Code: 31794 **E-mail:** _____

Keywords:

Trial Location

City: Ponder **Trial Status:** completed
State/Prov.: GA **Trial Reliability:** good
Postal Code: _____ **Initiation Date:** Apr-13-07
Country: USA **Planned Completion Date:** _____
_ -Latitude of LL Corner °: _____ **_ -Longitude of LL Corner °:** _____
Altitude of LL Corner: _____ **Unit:** _____ **Angle y-axis to North °:** _____
Map Reference: _____
Directions:

Conducted Under GLP: _ **Official Trial Code:** _____
Conducted Under GEP: _ **Other Trial Code:** _____

	Guideline	Description
1.		

_
Objectives:

Conclusions:

Cooperator/Landowner

Cooperator: _____ **Country:** _____
Organization: _____ **Phone No:** _____
Address 1: _____ **Fax No:** _____
Address 2: _____
City: _____
State/Prov: _____
Postal Code: _____ **E-mail:** _____

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Crop Description

Crop 1: GOSHI Gossypium hirsutum Cotton, American upland
Variety: Widestrike 485 **Description:** Widestrike 485 WF
BBCH Scale: BCOT **Planting Date:** May-01-07
Planting Method: hill drop **Rate, Unit:** 2 8 in
Depth, Unit: 0.5 in **Perennial Age, Unit:** ____ _____
Row Spacing, Unit: 36 in **Spacing Within Row, Unit:** 8 in
Seed Bed: strip till **Soil Temperature, Unit:** 84 F
Soil Moisture: moist **Emergence Date:** May-06-07
Harvest Date: _____ **Harvest Equipment:** _____
Harvested Width, Unit: _____ _____ **Harvested Length, Unit:** _____ _____
% Standard Moisture: _____ **Moisture Meter:** _____
Weighing Equipment: _____

Pest Description

Pest 1 Type: W **Code:** RAPRA _____
Common Name: Raphanus raphanistrum
Description: Wild Radish

Pest 2 Type: W **Code:** TRZAW Winter wheat
Common Name: Triticum aestivum (winter)
Description: _____

Pest 3 Type: W **Code:** LAMAM Lamium amplexicaule
Common Name: Lamium amplexicaule
Description: _____

Site and Design

Plot Width, Unit: 12 FT **Site Type:** Ponder Farm
Plot Length, Unit: 25 FT **Tillage Type:** Strip Tillage
Replications: 4 **Study Design:** Randomized Complete Block
% Slope: _____ **Soil Drainage:** _ _____

Trial Initiation Comments:

	Previous Crops	Previous Pesticides	Year
1.			

Maintenance

No.	Date	Maintenance Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Tank Mix
1.								

Comment:

Field Prep./Maintenance:

Soil Description

Description Name: _____
% Sand: 94 **% OM:** 1.3 **Texture:** sand
% Silt: 2 **pH:** 6.4 **Soil Name:** loamy sand
% Clay: 4 **CEC:** _____ **Fert. Level:** _____
Analyzed By:

Additional Measured Elements

Element	Quantity	Unit

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Moisture Conditions

Overall Moisture Conditions: Irrigated
Closest Weather Station: _____ **Distance:** _____ **Unit:** __

	Date	Time	Amount	Unit	Type	Interval	Unit
1.							

Application Description

	A
Application Date:	Apr-13-07
Time of Day:	7:00 pm
Application Method:	broadcast
Application Timing:	preplant
Application Placement:	overtop
Applied By:	Culpepper
Air Temperature, Unit:	87 F
% Relative Humidity:	35
Wind Velocity, Unit:	0 mph
Wind Direction:	
Dew Presence (Y/N):	N
Water Hardness:	
Soil Temperature, Unit:	90 F
Soil Moisture:	dry
% Cloud Cover:	0
Next Rain Occurred On:	

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	GOSHI BCOT
Stage Scale Used:	BBCH
Stage Majority, Percent:	preplant 100
Stage Minimum, Percent:	preplant 100
Stage Maximum, Percent:	preplant 100
Diameter, Unit:	0 in
Height, Unit:	0 in
Height Minimum, Maximum:	0 0

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Pest Stage At Each Application

	A
Pest 1 Code, Disc., Scale:	RAPRA W .
Stage Majority, Percent:	. 0
Stage Minimum, Percent:	. 0
Stage Maximum, Percent:	. 0
Diameter, Unit:	0. yd
Height, Unit:	30 in
Height Minimum, Maximum:	24 36
Density, Unit:	3 ydsq
Coverage, Unit:	
Pest 2 Code, Disc., Scale:	TRZAW W .
Stage Majority, Percent:	seedhe 100
Stage Minimum, Percent:	seedhe 100
Stage Maximum, Percent:	seedhe 100
Diameter, Unit:	
Height, Unit:	30 in
Height Minimum, Maximum:	30 30
Density, Unit:	75 lb/A
Coverage, Unit:	
Pest 3 Code, Disc., Scale:	LAMAM W .
Stage Majority, Percent:	. 0
Stage Minimum, Percent:	. 0
Stage Maximum, Percent:	. 0
Diameter, Unit:	0. yd
Height, Unit:	4 in
Height Minimum, Maximum:	3 5
Density, Unit:	3 ydsq
Coverage, Unit:	

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Application Equipment

	A
Appl. Equipment:	backpack
Operating Pressure, Unit:	24 psi
Nozzle Type:	flat fan
Nozzle Size:	11002
Nozzle Spacing, Unit:	18 in
Nozzles/Row:	2
Nozzle Calibration, Unit:	
Band Width, Unit:	
Boom ID:	
Boom Length, Unit:	4.5 ft
Boom Height, Unit:	15 in
Ground Speed, Unit:	3 mph
Incorporation Equip.:	
Hours to Incorp.:	
Incorp. Depth, Unit:	
Carrier:	water
Spray Volume, Unit:	14.8 GAL/AC
Mix Size, Unit:	
Spray pH:	
Propellant:	CO2
Tank Mix (Y/N):	

Equipment Comment:

Trt No Treatment Application Comment

Date By Notes

Date By Deviations

Reasons: