

University of Georgia

GRASS WEED CONTROL WITH ANTHEM FLEX, DUAL MAGNUM,
WARRANT, AND OUTLOOK (BARE-GROUND)

Trial ID: PE-10-22 Study Dir.: BLAIR COLVIN
Location: PONDER FARM Investigator: Eric P. Prostko

Reps: 4

Plots: 6 by 25 feet
Mix Size: 1.5 L

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	Appl. Amount	Amt Product to Measure	Diluent	Rep 1	2	3	4
1	NTC									-	101	206	301	406
2	DUAL MAGNUM	7.62	EC	16.0	oz/a	PRE	A	15 GPA	12.5 mL/mx	1487.5 mL	102	209	303	405
3	OUTLOOK	6	EC	12.8	oz/a	PRE	A	15 GPA	10.0 mL/mx	1490 mL	103	201	305	408
4	WARRANT	3	SC	48.0	oz/a	PRE	A	15 GPA	37.5 mL/mx	1462.5 mL	104	207	308	404
5	ANTHEM FLEX	4	SC	3.0	oz/a	PRE	A	15 GPA	2.344 mL/mx	1497.7 mL	105	204	307	402
6	GRAMOXONE	2	SL	12.0	oz/a	EPOST	B	15 GAL/AC	9.375 mL/mx	1465.6 mL	106	203	302	403
	STORM	4	SL	16.0	oz/a	EPOST	B	15 GAL/AC	12.5 mL/mx					
	DUAL MAGNUM	7.62	EC	16.0	oz/a	EPOST	B	15 GAL/AC	12.5 mL/mx					
7	GRAMOXONE	2	SL	12.0	oz/a	EPOST	B	15 GAL/AC	9.375 mL/mx	1468.1 mL	107	205	304	401
	STORM	4	SL	16.0	oz/a	EPOST	B	15 GAL/AC	12.5 mL/mx					
	OUTLOOK	6	EC	12.8	oz/a	EPOST	B	15 GAL/AC	10.0 mL/mx					
8	GRAMOXONE	2	SL	12.0	oz/a	EPOST	B	15 GAL/AC	9.375 mL/mx	1436.9 mL	108	202	309	407
	STORM	4	SL	16.0	oz/a	EPOST	B	15 GAL/AC	12.5 mL/mx					
	WARRANT	3	SC	48.0	oz/a	EPOST	B	15 GAL/AC	37.5 mL/mx					
	INDUCE			0.25	% v/v	EPOST	B	15 GAL/AC	3.75 mL/mx					
9	GRAMOXONE	2	SL	12.0	oz/a	EPOST	B	15 GAL/AC	9.375 mL/mx	1472.0 mL	109	208	306	409
	STORM	4	SL	16.0	oz/a	EPOST	B	15 GAL/AC	12.5 mL/mx					
	ANTHEM FLEX	4	SC	3.0	oz/a	EPOST	B	15 GAL/AC	2.344 mL/mx					
	INDUCE			0.25	% v/v	EPOST	B	15 GAL/AC	3.75 mL/mx					

Sort Order: Treatment

Trial Comments

VALOR EZ @ 2 OZ/A - PRE OVER ENTIRE TEST TO CONTROL BROADLEAF WEEDS AND PROMOTE GRASSES (04/12/22)

LAST TILLAGE ON 04/11/22.

ANTHEM FLEX = PYROXASULFONE (3.733 LB AI/GAL) + CARFENTRAZONE (0.267 LBS AI/GAL)

ANNUAL GRASS = NON-UNIFORM MIXTURE OF ANNUAL GRASSES INCLUDING TX PANICUM, CRABGRASS, GOOSEGRASS, AND CROWFOOTGRASS.

SUMMARY:

1) ANNUAL GRASS CONTROL WITH PRE APPLICATIONS OF DUAL MAGNUM, OUTLOOK, AND ANTHEM FLEX WAS SIMILAR. WARRANT WAS LESS EFFECTIVE THAN ANTHEM FLEX.

2) ANNUAL GRASS CONTROL WAS BETTER WITH GRAMOXONE + STORM + ANTHEM FLEX EPOST APPLICATIONS IN COMPARISON TO OTHER GROUP 15 TANK-MIXTURES.

University of Georgia

GRASS WEED CONTROL WITH ANTHEM FLEX, DUAL MAGNUM,
WARRANT, AND OUTLOOK (BARE-GROUND)

Trial ID: PE-10-22 Study Dir.: BLAIR COLVIN
Location: PONDER FARM Investigator: Eric P. Prostko

GENERAL TRIAL INFORMATION

Study Director: BLAIR COLVIN

Title: _____

Affiliation: _____

Postal Code: _____

Investigator: Eric P. Prostko

Title: _____

Affiliation: _____

Postal Code: _____

TRIAL LOCATION

City: _____

State/Prov.: _____

Postal Code: _____

Country: _____

E-Longitude of LL Corner °: _____

Altitude of LL Corner: _____ Unit: _____

Directions: _____

Trial Status: E

Trial Reliability: _____

Initiation Date: _____

Planned Completion Date: _____

N-Latitude of LL Corner °: _____

Angle y-axis to North °: _____

COOPERATOR/LANDOWNER

Cooperator: _____

Org: _____

Address 1: _____

Address 2: _____

City: _____

State/Prov: _____

Postal Code: _____

Country: _____

Phone No: _____

Fax No: _____

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Guidelines: _____ Guideline Description: _____

Objective: _____

Conclusions: _____

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	AGRASS	TX	PAN/CRAB/GOOSE
2.	CASOB	SI	CKLEPOD

Crop 1: _____

Planting Date: _____ Planting Method: _____

Rate: _____ Depth: _____ Perennial Age: _____

Row Spacing: _____ Spacing Within Row: _____ Seed Bed: _____

Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

Variety: _____

Plot Width, Unit: 6 FT SITE AND DESIGN
Plot Length, Unit: 25 FT Reps: 4

Site Type: _____

Tillage Type: CONVENTIONAL Study Design: RACOB

Trial Initiation Comments:

	Previous Crops	Previous Pesticides	Year
1.	FALLOW		2021
2.	PEANUT		2020

MAINTENANCE

Field Prep./Maintenance:

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

University of Georgia

GRASS WEED CONTROL WITH ANTHEM FLEX, DUAL MAGNUM,
WARRANT, AND OUTLOOK (BARE-GROUND)

Trial ID: PE-10-22 Study Dir.: BLAIR COLVIN
Location: PONDER FARM Investigator: Eric P. Prostko

SOIL DESCRIPTION

% Sand: _____ % OM: 0.65 Texture: SAND
% Silt: _____ pH: 6.0 Soil Name: TIFTON
% Clay: _____ CEC: 2.5 Fert. Level: good

ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

MOISTURE CONDITIONS

	Date	Time	Amount	Unit	Type	Interval	Unit
1.	Apr-12-22		0.5	IN	SPRINKLER - LATERAL MOVE		
2.	Apr-28-22		0.5	IN	SPRINKLER - LATERAL MOVE		
3.	May-4-22		0.3	IN	SPRINKLER - LATERAL MOVE		
4.	May-5-22		0.3	IN	SPRINKLER - LATERAL MOVE		
5.	May-6-22		0.45	IN	RAINFALL		
6.	May-10-22		0.38	IN	SPRINKLER - LATERAL MOVE	7	HR
7.	May-17-22		0.5	IN	SPRINKLER - LATERAL MOVE		
8.	May-24-22		0.5	IN	SPRINKLER - LATERAL MOVE		
9.	May-24-22		1.8	IN	RAINFALL		
10.	Jun-1-22		0.6	IN	SPRINKLER - LATERAL MOVE		
11.	Jun-7-22		0.5	IN	SPRINKLER - LATERAL MOVE		

Overall Moisture Conditions: _____

Closest Weather Station: _____ Distance: _____ Unit: _____

APPLICATION DESCRIPTION

	A	B
Application Date:	Apr-12-22	May-10-22
Time of Day:	7:14 AM	7:00 AM
Application Method:	BROADCAST	BROADCAST
Application Timing:	PRE	EPOST
Applic. Placement:	SOIL	FOLIAGE
Air Temp., Unit:	56 F	53 F
% Relative Humidity:	91	91
Wind Velocity, Unit:	0 MPH	0 MPH
Dew Presence (Y/N):	N	Y
Water Hardness:	--	--
Soil Temp., Unit:	60 F	60 F
Soil Moisture:	OPTIMUM	OPTIMUM
% Cloud Cover:	0	0

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:		
Stage Scale:		
Height, Unit:		

University of Georgia

GRASS WEED CONTROL WITH ANTHEM FLEX, DUAL MAGNUM,
WARRANT, AND OUTLOOK (BARE-GROUND)

Trial ID: PE-10-22 Study Dir.: BLAIR COLVIN
Location: PONDER FARM Investigator: Eric P. Prostko

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	AGRAS,	AGRAS,
Stage Scale:		1-3"
Density, Unit:		
Weed 2 Code, Stage:	CASOB,	CASOB,
Stage Scale:		1-2"
Density, Unit:		

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	BACKPACK	BACKPACK
Operating Pressure:	35	SAME AS A
Nozzle Type:	AIXR	
Nozzle Size:	11002	
Nozzle Spacing, Unit:	20 IN	
Nozzles/Row:		
Band Width, Unit:		
Boom Length, Unit:	60 IN	
Boom Height, Unit:	20 IN	
Ground Speed, Unit:	3.5 MPH	
Incorporation Equip.:		
Hours to Incorp.:		
Incorp. Depth, Unit:		
Carrier:	WATER	
Spray Volume, Unit:	15 GPA	
Spray pH:		
Propellant:	CO2	
Tank Mix (Y/N):		

Trt No	Treatment Application Comment

University of Georgia

GRASS WEED CONTROL WITH ANTHEM FLEX, DUAL MAGNUM, WARRANT, AND OUTLOOK (BARE-GROUND)									
Trial ID:		PE-10-22		Study Dir.:		BLAIR COLVIN			
Location:		PONDER FARM		Investigator:		Eric P. Prostko			
Weed Code						Agrass	Agrass	Agrass	Agrass
Crop Code						-----	-----		
Part Rated									
Rating Data Type						#/sqft	Control	Control	Control
Rating Unit						Number	%	%	%
Rating Date						Apr-28-22	May-6-22	May-19-22	Jun-1-22
Trt	Treatment	Form	Form	Rate	Grow	Appl	1	2	3
No.	Name	Conc	Type	Rate Unit	Stg	Code			4
1	NTC						9.0 a	0.0 c	0.0 e
2	DUAL MAGNUM	7.62	EC	16.0 oz/a	PRE	A	4.8 a	65.0 a	45.0 cd
3	OUTLOOK	6	EC	12.8 oz/a	PRE	A	0.5 a	68.8 a	48.8 cd
4	WARRANT	3	SC	48.0 oz/a	PRE	A	7.8 a	53.8 b	37.5 d
5	ANTHEM FLEX	4	SC	3.0 oz/a	PRE	A	3.5 a	71.3 a	56.3 bc
6	GRAMOXONE	2	SL	12.0 oz/a	EPOST	B	12.8 a	0.0 c	65.0 b
	STORM	4	SL	16.0 oz/a	EPOST	B			45.0 b
	DUAL MAGNUM	7.62	EC	16.0 oz/a	EPOST	B			
7	GRAMOXONE	2	SL	12.0 oz/a	EPOST	B	6.5 a	0.0 c	63.8 b
	STORM	4	SL	16.0 oz/a	EPOST	B			43.8 b
	OUTLOOK	6	EC	12.8 oz/a	EPOST	B			
8	GRAMOXONE	2	SL	12.0 oz/a	EPOST	B	6.3 a	0.0 c	65.0 b
	STORM	4	SL	16.0 oz/a	EPOST	B			46.3 b
	WARRANT	3	SC	48.0 oz/a	EPOST	B			
	INDUCE			0.25 % v/v	EPOST	B			
9	GRAMOXONE	2	SL	12.0 oz/a	EPOST	B	9.5 a	0.0 c	77.5 a
	STORM	4	SL	16.0 oz/a	EPOST	B			70.0 a
	ANTHEM FLEX	4	SC	3.0 oz/a	EPOST	B			
	INDUCE			0.25 % v/v	EPOST	B			
LSD P=.10						7.93	9.01	12.30	15.67
Standard Deviation						6.56	7.45	10.17	12.95
CV						97.57	25.91	19.95	44.4
Grand Mean						6.72	28.75	50.97	29.17
Bartlett's X2^						15.826	20.291	16.884	10.189
P(Bartlett's X2)						0.045*	0.009*	0.031*	0.252

Means followed by same letter or symbol do not significantly differ (P=.10, LSD).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

^Calculated from residual.

University of Georgia

GRASS WEED CONTROL WITH ANTHEM FLEX, DUAL MAGNUM,
WARRANT, AND OUTLOOK (BARE-GROUND)

Trial ID: PE-10-22 Study Dir.: BLAIR COLVIN
Location: PONDER FARM Investigator: Eric P. Prostko

Randomized Complete Block (RCB) AOV For Agrass ----- #/sqft Number Apr-28-22 (Data Column 1)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	35	1571.222222			
Replicate	3	124.555556	41.518519	0.965	0.4253
Treatment	8	414.222222	51.777778	1.204	0.3382
Error	24	1032.444444	43.018519		

Randomized Complete Block (RCB) AOV For Agrass ----- Control % May-6-22 (Data Column 2)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	35	39568.750000			
Replicate	3	324.305556	108.101852	1.948	0.1488
Treatment	8	37912.500000	4739.062500	85.392	0.0001
Error	24	1331.944444	55.497685		

Randomized Complete Block (RCB) AOV For Agrass Control % May-19-22 (Data Column 3)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	35	19140.972222			
Replicate	3	224.305556	74.768519	0.723	0.5481
Treatment	8	16434.722222	2054.340278	19.865	0.0001
Error	24	2481.944444	103.414352		

Randomized Complete Block (RCB) AOV For Agrass Control % Jun-1-22 (Data Column 4)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	35	21525.000000			
Replicate	3	225.000000	75.000000	0.447	0.7215
Treatment	8	17275.000000	2159.375000	12.876	0.0001
Error	24	4025.000000	167.708333		

Rating Unit

Number = NUMBER

% = PERCENT

University of Georgia

GRASS WEED CONTROL WITH ANTHEM FLEX, DUAL MAGNUM,
WARRANT, AND OUTLOOK (BARE-GROUND)

Trial ID: PE-10-22 Study Dir.: BLAIR COLVIN
Location: PONDER FARM Investigator: Eric P. Prostko

Weed Code Crop Code Part Rated Rating Data Type Rating Unit Rating Date							Agrass ----- #/sqft Number Apr-28-22	Agrass ----- Control % May-6-22	Agrass Control % May-19-22	Agrass Control % Jun-1-22		
Trt	Treatment	Form	Form	Rate	Grow	Appl						
No.	Name	Conc	Type	Rate	Unit	Stg	Code	Plot	1	2	3	4
1	NTC						101		19.0	0.0	0.0	0.0
							206		3.0	0.0	0.0	0.0
							301		7.0	0.0	0.0	0.0
							406		7.0	0.0	0.0	0.0
							Mean =		9.0	0.0	0.0	0.0
2	DUAL MAGNUM	7.62	EC	16.0	oz/a	PRE	A	102	1.0	75.0	65.0	25.0
							209		1.0	70.0	55.0	30.0
							303		14.0	50.0	20.0	0.0
							405		3.0	65.0	40.0	0.0
							Mean =		4.8	65.0	45.0	13.8
3	OUTLOOK	6	EC	12.8	oz/a	PRE	A	103	0.0	75.0	55.0	15.0
							201		0.0	70.0	50.0	20.0
							305		2.0	65.0	40.0	10.0
							408		0.0	65.0	50.0	0.0
							Mean =		0.5	68.8	48.8	11.3
4	WARRANT	3	SC	48.0	oz/a	PRE	A	104	4.0	65.0	50.0	10.0
							207		14.0	50.0	30.0	0.0
							308		1.0	70.0	50.0	20.0
							404		12.0	30.0	20.0	0.0
							Mean =		7.8	53.8	37.5	7.5
5	ANTHEM FLEX	4	SC	3.0	oz/a	PRE	A	105	0.0	85.0	70.0	50.0
							204		2.0	70.0	55.0	30.0
							307		4.0	65.0	50.0	10.0
							402		8.0	65.0	50.0	10.0
							Mean =		3.5	71.3	56.3	25.0
6	GRAMOXONE	2	SL	12.0	oz/a	EPOST	B	106	2.0	0.0	65.0	30.0
	STORM	4	SL	16.0	oz/a	EPOST	B	203	4.0	0.0	65.0	50.0
	DUAL MAGNUM	7.62	EC	16.0	oz/a	EPOST	B	302	13.0	0.0	65.0	50.0
							403		32.0	0.0	65.0	50.0
							Mean =		12.8	0.0	65.0	45.0
7	GRAMOXONE	2	SL	12.0	oz/a	EPOST	B	107	8.0	0.0	60.0	30.0
	STORM	4	SL	16.0	oz/a	EPOST	B	205	4.0	0.0	65.0	50.0
	OUTLOOK	6	EC	12.8	oz/a	EPOST	B	304	5.0	0.0	65.0	50.0
							401		9.0	0.0	65.0	45.0
							Mean =		6.5	0.0	63.8	43.8
8	GRAMOXONE	2	SL	12.0	oz/a	EPOST	B	108	12.0	0.0	50.0	20.0
	STORM	4	SL	16.0	oz/a	EPOST	B	202	5.0	0.0	70.0	50.0
	WARRANT	3	SC	48.0	oz/a	EPOST	B	309	4.0	0.0	75.0	60.0
	INDUCE			0.25	% v/v	EPOST	B	407	4.0	0.0	65.0	55.0
							Mean =		6.3	0.0	65.0	46.3
9	GRAMOXONE	2	SL	12.0	oz/a	EPOST	B	109	16.0	0.0	75.0	65.0
	STORM	4	SL	16.0	oz/a	EPOST	B	208	2.0	0.0	80.0	70.0
	ANTHEM FLEX	4	SC	3.0	oz/a	EPOST	B	306	13.0	0.0	70.0	60.0
	INDUCE			0.25	% v/v	EPOST	B	409	7.0	0.0	85.0	85.0
							Mean =		9.5	0.0	77.5	70.0

Rating Unit

Number = NUMBER

% = PERCENT