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ANTHEM/ANTHEM ATZ TANK MIXES FOR WEED CONTROL IN FIELD CORN

Trial ID: CN-05-15 Location: Georgia Trial Year: 2015
 Protocol ID: Investigator: Eric P. Prostko
 Project ID: Study Director: Craig Heim
 Sponsor Contact:

Reps: 4 Plots: 6 by 25 feet
 Spray vol: 15 GAL/AC Mix Size: 1.5 liters (calculated mix size .78211)

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Growth Stage	Appl Code	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	CHECK							102	203	304	408
2	ANTHEM MAXX	4.3 SE		4.0 oz/a	PRE	A	3.125 ml/mx	109	201	311	407
	CADET	0.91 EC		0.9 oz/a	POST	B	0.7031 ml/mx				
	ROUNDUP POWERMAX	5.5 SL		22.0 oz/a	POST	B	17.19 ml/mx				
	AMS XTRA	3.4 SL		2.5 % v/v	POST	B	37.5 ml/mx				
3	ANTHEM MAXX	4.3 SE		4.0 oz/a	PRE	A	3.125 ml/mx	112	209	308	406
	F9387-1	4 SC		3.0 oz/a	POST	B	2.344 ml/mx				
	ROUNDUP POWERMAX	5.5 SL		22.0 oz/a	POST	B	17.19 ml/mx				
	AMS XTRA	3.4 SL		2.5 % v/v	POST	B	37.5 ml/mx				
4	ANTHEM MAXX	4.3 SE		4.0 oz/a	PRE	A	3.125 ml/mx	108	206	303	409
	BALANCE FLEXX	2 SC		3.0 oz/a	PRE	A	2.344 ml/mx				
	CADET	0.91 EC		0.9 oz/a	POST	B	0.7031 ml/mx				
	ROUNDUP POWERMAX	5.5 SL		22 oz/a	POST	B	17.19 ml/mx				
	AMS XTRA	3.4 SL		2.5 % v/v	POST	B	37.5 ml/mx				
5	ANTHEM ATZ	4.5 SE		2.0 pt/a	PRE	A	25.0 ml/mx	103	204	312	402
	BALANCE FLEXX	2 SC		3.0 oz/a	PRE	A	2.344 ml/mx				
	CADET	0.91 EC		0.9 oz/a	POST	B	0.7031 ml/mx				
	ROUNDUP POWERMAX	5.5 SL		22.0 oz/a	POST	B	17.19 ml/mx				
	AMS XTRA	3.4 SL		2.5 % v/v	POST	B	37.5 ml/mx				
6	ANTHEM ATZ	4.5 SE		2.0 pt/a	PRE	A	25.0 ml/mx	110	212	305	401
	CADET	0.91 EC		0.9 oz/a	POST	B	0.7031 ml/mx				
	ROUNDUP POWERMAX	5.5 SL		22 oz/a	POST	B	17.19 ml/mx				
	AMS XTRA	3.4 SL		2.5 % v/v	POST	B	37.5 ml/mx				
7	ANTHEM ATZ	4.5 SE		2.0 pt/a	PRE	A	25.0 ml/mx	101	202	301	403
	F9387-1	4 SC		3.0 oz/a	POST	B	2.344 ml/mx				
	ROUNDUP POWERMAX	5.5 SL		22 oz/a	POST	B	17.19 ml/mx				
	AMS XTRA	3.4 SL		2.5 % v/v	POST	B	37.5 ml/mx				
8	ANTHEM ATZ	4.5 SE		2.0 pt/a	PRE	A	25.0 ml/mx	106	208	306	412
	CADET	0.91 EC		0.9 oz/a	POST	B	0.7031 ml/mx				
	LIBERTY 280 SL	2.34 SL		22.0 oz/a	POST	B	17.19 ml/mx				
9	ATRAZINE	4 L		32.0 oz/a	PRE	A	25.0 ml/mx	111	207	309	411
	ATRAZINE	4 L		48.0 oz/a	POST	B	37.5 ml/mx				
	ROUNDUP POWERMAX	5.5 SL		22.0 oz/a	POST	B	17.19 ml/mx				
10	ATRAZINE	4 L		32.0 oz/a	PRE	A	25.0 ml/mx	107	205	307	410
	LIBERTY	2.34 SL		29.0 oz/a	POST	B	22.66 ml/mx				
	ATRAZINE	4 SL		48.0 oz/a	POST	B	37.5 ml/mx				
11	ATRAZINE	4 L		32.0 oz/a	PRE	A	25.0 ml/mx	104	210	302	405
	STEADFAST Q	37.7 WG		1.5 oz/a	POST	B	1.123 g/mx				
	ATRAZINE	4 L		48.0 oz/a	POST	B	37.5 ml/mx				
	COC			1.0 % v/v	POST	B	15.0 ml/mx				
12	ATRAZINE	4 FL		32.0 oz/a	PRE	A	25.0 ml/mx	105	211	310	404
	CAPRENO	3.45 SL		3.0 oz/a	POST	B	2.344 ml/mx				
	ATRAZINE	4 FL		48.0 oz/a	POST	B	37.5 ml/mx				
	COC			1.0 % v/v	POST	B	15.0 ml/mx				

Sort Order: Treatment

Trial Comments

F9387-1 = SOLSTICE = MESOTRIONE (3.784 LB/GAL) + FLUTHIACET (0.261 LB/GAL)

ANTHEM MAXX = PYROXASULFONE (4.174 LB/GAL) + FLUTHIACET (0.126 LB/GAL)

ANTHEM ATZ = PYROXASULFONE (0.485 LB/GAL) + ATRAZINE (4.006 LB/GAL) + FLUTHIACET (0.014 LB/GAL)

STEADFAST Q = NICOSULFURON (25.2%) + RIMSULFURON (12.5%) + ISOXADIFEN (SAFENER)

CAPRENO = TEMBOTRIONE (2.88 LB/GAL) + THIENCARBAZONE (0.57 LB/GAL) + ISOXADIFEN (SAFENER)

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AGRASS = CRABGRASS + BL SIGNALGRASS + TEXAS PANICUM + GOOSEGRASS

YIELD DATA WAS NOT COLLECTED FROM PLOTS 311, 312, AND 409 DUE TO IRRIGATION TIRE TRACK.

SUMMARY:

- 1) ALL POST TREATMENTS THAT CONTAINED CADET OR F9387-1 (SOLSTICE) CAUSED SIGNIFICANT CORN STUNTING AND LEAF SPECKLING ON MAY 4 (12 DAT).
- 2) AT THAT SAME TIME, PALMER AMARANTH AND ANNUAL GRASS CONTROL WAS EXCELLENT (>95%) WITH ALL TREATMENTS EXCEPT ATRAZINE - PRE FB STEADFAST Q + ATRAZINE - POST (88% ANNUAL GRASS CONTROL).
- 3) GENERALLY, THERE WAS NOT MUCH DIFFERENCE IN WEED CONTROL BETWEEN ANTHEM BASED TREATMENTS COMPARED TO CURRENT STANDARDS.
- 4) ALL TREATMENTS RESULTED IN HIGHER YIELDS THAN THE NTC EXCEPT FOR ANTHEM ATZ - PRE FB F9387-1 + ROUNDUP POWERMAX - POST. 6 OUT OF 7 ANTHEM CONTAINING TREATMENTS HAD LOWER YIELDS THAN THE CURRENT STANDARD OF ATRAZINE - PRE FOLLOWED BY ROUNDUP + ATRAZINE-POST.

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ANTHEM/ANTHEM ATZ TANK MIXES FOR WEED CONTROL IN FIELD CORN

Trial ID: CN-05-15 Location: Georgia Trial Year: 2015
 Protocol ID: Investigator: Eric P. Prostko
 Project ID: Study Director: Craig Heim
 Sponsor Contact:

General Trial Information

Study Director: Craig Heim **Title:** _____
Investigator: Eric P. Prostko **Title:** _____

Discipline: _____
Trial Status: _____ **Trial Reliability:** _____
Initiation Date: _____ **Planned Completion Date:** _____
Completion Date: _____

Trial Location

City: ATTAPULGUS **Country:** USA United States
State/Prov.: Georgia
Postal Code: _____ **Climate Zone:** EPPOSE EPPO South East

Latitude of LL Corner °: _____ -
Longitude of LL Corner °: _____ -
Altitude of LL Corner, Unit: _____
Angle y-axis to North °: _____ **Map Reference:** _____
Directions:

Conducted Under GLP: No **Official Trial ID:** _____
Conducted Under GEP: No **Other Trial ID:** _____
Study Rules: _____

No.	Guideline	Description
1.		

Keywords:

Objectives:

Evaluate Anthem and Anthem ATZ for control of difficult weeds, i.e., Morningglory, Pigweeds

Conclusions:

Contacts

Study Director: Craig Heim **Title:** _____
Organization: _____
Address: _____ **Phone No.:** _____
City+State/Prov: _____ **Mobile No.:** _____
Postal Code: _____ **E-mail:** _____
Country: _____

Investigator: Eric P. Prostko **Title:** _____
Organization: _____
Address: _____ **Phone No.:** _____
City+State/Prov: _____ **Mobile No.:** _____
Postal Code: _____ **E-mail:** _____
Country: _____

Cooperator/Landowner

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

Other Contacts

Name	Role	Other

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Crop 1: ZEAMX Variety: N83D-3000GT		Zea mays	Crop Description Corn	
Description:			BBCH Scale: BCOR	
Seed Size, Unit:	_____		Nursery Date:	_____
Seed Shape:	_____		Planting Date:	Apr-1-15
Planting Rate, Unit:	34848 S/A		Planting Method:	_____
Depth, Unit:	2 IN		Planting Equipment:	_____
Row Spacing, Unit:	36 IN		Emergence Date:	_____
Spacing Within Row, Unit:	5 IN		Harvest Date:	Aug-27-15
Planting Density, Unit:	_____		Harvested Width, Unit:	6 FT
Soil Temperature, Unit:	_____		Harvested Length, Unit:	25 FT
Soil Moisture:	EXCELL excellent		Harvest Equipment:	_____
Seed Bed:	_____		% Standard Moisture:	15.5
Perennial Age, Unit:	_____		Moisture Meter:	_____
			Weighing Equipment:	_____

Pest 1 Type: W		Code: AMAPA	Amaranthus palmeri	Pest Description
Common Name:		Palmer amaranth		
Description:		_____		
Artificial Population:		_____		
Establishment Rate, Unit:		_____		
Concentration, Unit:		_____		
Establishment Method/Description:		_____		
Pest 2 Type: W		Code: AGRASS	ANNUAL GRASSES (CRAB + CROW + TPANICUM)	
Common Name:		Amaranth		
Description:		_____		
Artificial Population:		_____		
Establishment Rate, Unit:		_____		
Concentration, Unit:		_____		
Establishment Method/Description:		_____		
Pest 3 Type: W		Code: CASOB	SICKLEPOD	
Common Name:		_____		
Description:		_____		
Artificial Population:		_____		
Establishment Rate, Unit:		_____		
Concentration, Unit:		_____		
Establishment Method/Description:		_____		

Site and Design				
Treated Plot Width:	6	FT	Site Type:	FIELD field
Treated Plot Length:	25	FT	Experimental Unit:	_____
Treated Plot Area:	150	FT2	Tillage Type:	_____
Replications:	4		Study Design:	RACOBL Randomized Complete Block (RCB)
% Slope:	_____			
Untreated Arrangement:	_____			
Trial Initiation Comments:				

No.	Previous Crop	Previous Pesticides	Year
1.			

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

Comment:

Field Prep./Maintenance:

Soil Description			
Description Name: LOAMY SAND			
% Sand: 84	% OM: 1.61	Texture: LS loamy sand	
% Silt: 6	pH: 6.0	Soil Name: FACEVILLE	
% Clay: 10	CEC: _____	Fert. Level: G good	
		Soil Drainage: G good	
Analyzed By:			

Additional Measured Elements			
Date	Element	Quantity	Unit

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Moisture and Weather Conditions												
Overall Moisture Conditions: _____												
Closest Weather Station: _____						Distance, Unit: _____						
No.	Date	Time	Amount	Unit	Type	Type Description	Interval	Unit	Min Temp	Max Temp	Temp Unit	Relative Humidity
1.												
Comment:												

Application Description		
	A	B
Application Date:	Apr-2-15	Apr-22-15
Appl. Start Time:	8:00 AM	8:05 AM
Appl. Stop Time:	8:45 AM	8:45 AM
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	EAPOCR
Application Placement:	FOLIAR	FOLIAR
Applied By:	EPP	EPP
Air Temperature, Unit:	70 F	67 F
% Relative Humidity:	81	83
Wind Velocity, Unit:	1 MPH	0 MPH
Wind Direction:		
Dew Presence (Y/N):	N no	Y yes
Soil Temperature, Unit:	67 F	64 F
Soil Moisture:	GOOD	GOOD
% Cloud Cover:	100	0
Next Moisture Occurred On:		
Time to Next Moisture, Unit:		

Crop Stage At Each Application		
	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		V5
Stage Minimum, Percent:		
Stage Maximum, Percent:		
Diameter, Unit:		
Height, Unit:		12 IN
Height Minimum, Maximum:		10 12
Plant Foliage Height, Unit:		
Crop coverage (%):		

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Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	AMAPA W	AMAPA W
Stage Majority, Percent:		
Stage Minimum, Percent:		
Stage Maximum, Percent:		
Diameter, Unit:		
Height, Unit:		2 IN
Height Minimum, Maximum:		
Density, Unit:		
Coverage, Unit:		
Pest 2 Code, Type, Scale:	AGRASS W	AGRASS W
Stage Majority, Percent:		
Stage Minimum, Percent:		
Stage Maximum, Percent:		
Diameter, Unit:		
Height, Unit:		3 IN
Height Minimum, Maximum:		2 4
Density, Unit:		
Coverage, Unit:		
Pest 3 Code, Type, Scale:	CASOB W	CASOB W
Stage Majority, Percent:		
Stage Minimum, Percent:		
Stage Maximum, Percent:		
Diameter, Unit:		
Height, Unit:		2 IN
Height Minimum, Maximum:		
Density, Unit:		
Coverage, Unit:		

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Application Equipment

	A	B
Appl. Equipment:	BP	SAME
Equipment Type:	BACCAI	
Operation Pressure, Unit:	38 PSI	
Nozzle Type:	AIXR	FLAT FN
Nozzle Size:	11002	11002DG
Nozzle Spacing, Unit:	20 IN	20 IN
Nozzles/Row:		
Nozzle Calibration, Unit:		
Band Width, Unit:		
% Coverage:		
Row Sides Applied:		
Boom ID:		
Boom Length, Unit:	60 IN	60 IN
Boom Height, Unit:	20 IN	20 IN
Ground Speed, Unit:	3.5 MPH	3.5 MPH
Incorporation Equip.:		
Hours to Incorp.:		
Incorp. Depth, Unit		
Carrier:	WATER	WATER
Water Hardness (ppm CaCO3):		
Spray Volume, Unit:	15 GAL/AC	15 GAL/AC
Mix Size, Unit:	1.5 liters	1.5 liters
Spray pH:		
Propellant:	CO2	CO2
Tank Mix (Y/N):		
Equipment Comment:		

Trt No Treatment Application Comment

Date By Notes

No. Date By Deviations
 1. _____
Reasons:

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Trial ID: CN-05-15 Location: Georgia Trial Year: 2015
 Protocol ID: Investigator: Eric P. Prostko
 Project ID: Study Director: Craig Heim
 Sponsor Contact:

Pest Type		W Weed		W Weed				
Pest Code		AMAPA	AGRASS	CASOB				
Pest Scientific Name		Amaranthus pal>		Senna obtusifol>				
Pest Name		Palmer amaranth		Sickle pod				
Crop Code	ZEAMD	ZEAMD	ZEAMD	ZEAMD				
BBCH Scale	BCOR	BCOR	BCOR	BCOR				
Crop Scientific Name	Zea mays inden>	Zea mays inden>	Zea mays inden>	Zea mays inden>				
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn				
Part Rated	CROP -							
Rating Date	Apr-9-15	Apr-9-15	Apr-9-15	Apr-9-15				
Rating Type	STUNTING	CONTROL	CONTROL	CONTROL				
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT				
Sample Size, Unit								
Number of Subsamples	1	1	1	1				
Days After First/Last Applic.	7 7	7 7	7 7	7 7				
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A				
Plant-Eval Interval	8 DP-1	8 DP-1	8 DP-1	8 DP-1				
ARM Action Codes								
Number of Decimals								
Trt Treatment No. Name	Form Form Conc Type	Rate Rate Unit	Growth Stage	Appl Code	1	2	3	4
1 CHECK					0.0 a	0.0 b	0.0 c	0.0 b
2 ANTHEM MAXX	4.3 SE	4.0 oz/a	PRE	A	2.5 a	99.0 a	85.0 a	74.8 a
CADET	0.91 EC	0.9 oz/a	POST	B				
ROUNDUP POWERMAX	5.5 SL	22.0 oz/a	POST	B				
AMS XTRA	3.4 SL	2.5 % v/v	POST	B				
3 ANTHEM MAXX	4.3 SE	4.0 oz/a	PRE	A	5.0 a	99.0 a	85.0 a	62.5 a
F9387-1	4 SC	3.0 oz/a	POST	B				
ROUNDUP POWERMAX	5.5 SL	22.0 oz/a	POST	B				
AMS XTRA	3.4 SL	2.5 % v/v	POST	B				
4 ANTHEM MAXX	4.3 SE	4.0 oz/a	PRE	A	2.5 a	99.0 a	86.0 a	74.8 a
BALANCE FLEXX	2 SC	3.0 oz/a	PRE	A				
CADET	0.91 EC	0.9 oz/a	POST	B				
ROUNDUP POWERMAX	5.5 SL	22 oz/a	POST	B				
AMS XTRA	3.4 SL	2.5 % v/v	POST	B				
5 ANTHEM ATZ	4.5 SE	2.0 pt/a	PRE	A	0.0 a	99.0 a	92.5 a	71.3 a
BALANCE FLEXX	2 SC	3.0 oz/a	PRE	A				
CADET	0.91 EC	0.9 oz/a	POST	B				
ROUNDUP POWERMAX	5.5 SL	22.0 oz/a	POST	B				
AMS XTRA	3.4 SL	2.5 % v/v	POST	B				
6 ANTHEM ATZ	4.5 SE	2.0 pt/a	PRE	A	0.0 a	99.0 a	92.3 a	71.0 a
CADET	0.91 EC	0.9 oz/a	POST	B				
ROUNDUP POWERMAX	5.5 SL	22 oz/a	POST	B				
AMS XTRA	3.4 SL	2.5 % v/v	POST	B				
7 ANTHEM ATZ	4.5 SE	2.0 pt/a	PRE	A	0.0 a	99.0 a	96.0 a	70.0 a
F9387-1	4 SC	3.0 oz/a	POST	B				
ROUNDUP POWERMAX	5.5 SL	22 oz/a	POST	B				
AMS XTRA	3.4 SL	2.5 % v/v	POST	B				
8 ANTHEM ATZ	4.5 SE	2.0 pt/a	PRE	A	0.0 a	99.0 a	85.0 a	60.0 a
CADET	0.91 EC	0.9 oz/a	POST	B				
LIBERTY 280 SL	2.34 SL	22.0 oz/a	POST	B				
9 ATRAZINE	4 L	32.0 oz/a	PRE	A	0.0 a	99.0 a	0.0 c	76.3 a
ATRAZINE	4 L	48.0 oz/a	POST	B				
ROUNDUP POWERMAX	5.5 SL	22.0 oz/a	POST	B				
10 ATRAZINE	4 L	32.0 oz/a	PRE	A	0.0 a	99.0 a	0.0 c	70.0 a
LIBERTY	2.34 SL	29.0 oz/a	POST	B				
ATRAZINE	4 SL	48.0 oz/a	POST	B				

Means followed by same letter do not significantly differ (P=.10, Duncan's New MRT)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=17,18,19
 Could not calculate LSD (% mean diff) for columns 2,7,12 because error mean square = 0.

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						W Weed		W Weed		
						AMAPA	AGRASS	CASOB		
						Amaranthus pal>		Senna obtusifo>		
						Palmer amaranth		Sickle pod		
Pest Type						ZEAMD	ZEAMD	ZEAMD		
Pest Code						BCOR	BCOR	BCOR		
Pest Scientific Name						Zea mays inden>	Zea mays inden>	Zea mays inden>		
Pest Name						Dent corn	Dent corn	Dent corn		
Crop Code						CROP -				
BBCH Scale						Apr-9-15	Apr-9-15	Apr-9-15		
Crop Scientific Name						STUNTING	CONTROL	CONTROL		
Crop Name						PERCENT	PERCENT	PERCENT		
Part Rated										
Rating Date										
Rating Type										
Rating Unit										
Sample Size, Unit										
Number of Subsamples						1	1	1		
Days After First/Last Applic.						7 7	7 7	7 7		
Trt-Eval Interval						7 DA-A	7 DA-A	7 DA-A		
Plant-Eval Interval						8 DP-1	8 DP-1	8 DP-1		
ARM Action Codes										
Number of Decimals										
Trt Treatment No. Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	Appl Code	1	2	3	4
11 ATRAZINE	4 L		32.0 oz/a		PRE	A	0.0 a	99.0 a	28.8 b	51.3 a
STEADFAST Q	37.7 WG		1.5 oz/a		POST	B				
ATRAZINE	4 L		48.0 oz/a		POST	B				
COC			1.0 % v/v		POST	B				
12 ATRAZINE	4 FL		32.0 oz/a		PRE	A	0.0 a	99.0 a	16.3 bc	57.5 a
CAPRENO	3.45 SL		3.0 oz/a		POST	B				
ATRAZINE	4 FL		48.0 oz/a		POST	B				
COC			1.0 % v/v		POST	B				
LSD P=.10						3.07	.	17.52	25.50	
Standard Deviation						2.56	0.00	14.64	21.31	
CV						307.48	0.0	26.35	34.59	
Grand Mean						0.83	90.75	55.56	61.60	
Bartlett's X2						0.083	0.0	25.54	7.165	
P(Bartlett's X2)						0.959	.	0.001*	0.71	
Replicate F						1.692	0.000	3.120	10.486	
Replicate Prob(F)						0.1877	1.0000	0.0391	0.0001	
Treatment F						1.615	0.000	32.916	3.848	
Treatment Prob(F)						0.1401	1.0000	0.0001	0.0013	

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Pest Type					W Weed	W Weed
Pest Code					AMAPA	CASOB
Pest Scientific Name					Amaranthus pal>	Senna obtusifol>
Pest Name					Palmer amaranth	Sickle pod
Crop Code					ZEAMD	ZEAMD
BBCH Scale					BCOR	BCOR
Crop Scientific Name					Zea mays inden>	Zea mays inden>
Crop Name					Dent corn	Dent corn
Part Rated						
Rating Date					Apr-22-15	Apr-22-15
Rating Type					STUNTING	CHLOROSIS
Rating Unit					PERCENT	PERCENT
Sample Size, Unit						
Number of Subsamples					1	1
Days After First/Last Applic.					20 20	20 20
Trt-Eval Interval					20 DA-A	20 DA-A
Plant-Eval Interval					21 DP-1	21 DP-1
ARM Action Codes						
Number of Decimals						
Trt Treatment	Form	Form	Rate	Growth	Appl	
No. Name	Conc	Type	Rate	Stage	Code	
			Unit			
1 CHECK						5
						6
						7
						8
2 ANTHEM MAXX	4.3	SE	4.0 oz/a	PRE	A	5.0 c
CADET	0.91	EC	0.9 oz/a	POST	B	15.0 a
ROUNDUP POWERMAX	5.5	SL	22.0 oz/a	POST	B	10.0 a
AMS XTRA	3.4	SL	2.5 % v/v	POST	B	99.0 a
3 ANTHEM MAXX	4.3	SE	4.0 oz/a	PRE	A	11.3 ab
F9387-1	4	SC	3.0 oz/a	POST	B	10.0 a
ROUNDUP POWERMAX	5.5	SL	22.0 oz/a	POST	B	99.0 a
AMS XTRA	3.4	SL	2.5 % v/v	POST	B	58.8 ab
4 ANTHEM MAXX	4.3	SE	4.0 oz/a	PRE	A	8.8 b
BALANCE FLEXX	2	SC	3.0 oz/a	PRE	A	7.5 a
CADET	0.91	EC	0.9 oz/a	POST	B	99.0 a
ROUNDUP POWERMAX	5.5	SL	22 oz/a	POST	B	58.8 ab
AMS XTRA	3.4	SL	2.5 % v/v	POST	B	
5 ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A	13.8 ab
BALANCE FLEXX	2	SC	3.0 oz/a	PRE	A	7.5 a
CADET	0.91	EC	0.9 oz/a	POST	B	99.0 a
ROUNDUP POWERMAX	5.5	SL	22.0 oz/a	POST	B	73.8 a
AMS XTRA	3.4	SL	2.5 % v/v	POST	B	
6 ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A	13.8 ab
CADET	0.91	EC	0.9 oz/a	POST	B	10.0 a
ROUNDUP POWERMAX	5.5	SL	22 oz/a	POST	B	99.0 a
AMS XTRA	3.4	SL	2.5 % v/v	POST	B	62.5 a
7 ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A	15.0 a
F9387-1	4	SC	3.0 oz/a	POST	B	10.0 a
ROUNDUP POWERMAX	5.5	SL	22 oz/a	POST	B	99.0 a
AMS XTRA	3.4	SL	2.5 % v/v	POST	B	57.5 ab
8 ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A	8.8 b
CADET	0.91	EC	0.9 oz/a	POST	B	7.5 a
LIBERTY 280 SL	2.34	SL	22.0 oz/a	POST	B	99.0 a
9 ATRAZINE	4	L	32.0 oz/a	PRE	A	0.0 c
ATRAZINE	4	L	48.0 oz/a	POST	B	0.0 b
ROUNDUP POWERMAX	5.5	SL	22.0 oz/a	POST	B	99.0 a
10 ATRAZINE	4	L	32.0 oz/a	PRE	A	0.0 c
LIBERTY	2.34	SL	29.0 oz/a	POST	B	0.0 b
ATRAZINE	4	SL	48.0 oz/a	POST	B	99.0 a

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							W Weed	W Weed		
							AMAPA	CASOB		
							Amaranthus pal>	Senna obtusifo>		
							Palmer amaranth	Sickle pod		
Pest Type							ZEAMD	ZEAMD		
Pest Code							BCOR	BCOR		
Pest Scientific Name							BCOR	BCOR		
Pest Name							BCOR	BCOR		
Crop Code							Zea mays inden>	Zea mays inden>		
BBCH Scale							Dent corn	Dent corn		
Crop Scientific Name							Dent corn	Dent corn		
Crop Name							Dent corn	Dent corn		
Part Rated							Dent corn	Dent corn		
Rating Date							Apr-22-15	Apr-22-15		
Rating Type							STUNTING	CHLOROSIS		
Rating Unit							PERCENT	PERCENT		
Sample Size, Unit							PERCENT	PERCENT		
Number of Subsamples							1	1		
Days After First/Last Applic.							20 20	20 20		
Trt-Eval Interval							20 DA-A	20 DA-A		
Plant-Eval Interval							21 DP-1	21 DP-1		
ARM Action Codes							21 DP-1	21 DP-1		
Number of Decimals							21 DP-1	21 DP-1		
Trt Treatment No. Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	Appl Code	5	6	7	8
11 ATRAZINE	4 L		32.0 oz/a		PRE	A	0.0 c	2.5 b	99.0 a	36.3 b
STEADFAST Q	37.7 WG		1.5 oz/a		POST	B				
ATRAZINE	4 L		48.0 oz/a		POST	B				
COC			1.0 % v/v		POST	B				
12 ATRAZINE	4 FL		32.0 oz/a		PRE	A	0.0 c	0.0 b	99.0 a	55.0 ab
CAPRENO	3.45 SL		3.0 oz/a		POST	B				
ATRAZINE	4 FL		48.0 oz/a		POST	B				
COC			1.0 % v/v		POST	B				
LSD P=.10							4.92	3.56	.	21.59
Standard Deviation							4.12	2.97	0.00	18.05
CV							57.26	54.89	0.0	33.57
Grand Mean							7.19	5.42	90.75	53.75
Bartlett's X2							3.966	0.0	0.0	20.44
P(Bartlett's X2)							0.681	.	.	0.025*
Replicate F							2.655	0.314	0.000	4.406
Replicate Prob(F)							0.0646	0.8149	1.0000	0.0103
Treatment F							10.476	9.171	0.000	4.753
Treatment Prob(F)							0.0001	0.0001	1.0000	0.0002

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Pest Type						AGRASS	W Weed			W Weed
Pest Code										AMAPA
Pest Scientific Name										Amaranthus pal>
Pest Name										Palmer amaranth
Crop Code						ZEAMD	ZEAMD	ZEAMD		
BBCH Scale						BCOR	BCOR	BCOR		
Crop Scientific Name						Zea mays inden>	Zea mays inden>	Zea mays inden>		
Crop Name						Dent corn	Dent corn	Dent corn		
Part Rated										
Rating Date						Apr-22-15	May-4-15	May-4-15		May-4-15
Rating Type						CONTROL	STUNTING	LEAF SPECKL		
Rating Unit						PERCENT	PERCENT	PERCENT		
Sample Size, Unit										
Number of Subsamples						1	1	1		1
Days After First/Last Applic.						20 20	32 12	32 12		32 12
Trt-Eval Interval						20 DA-A	32 DA-A	32 DA-A		32 DA-A
Plant-Eval Interval						21 DP-1	33 DP-1	33 DP-1		33 DP-1
ARM Action Codes										
Number of Decimals										
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Growth Stage	Appl Code	9	10	11	12
1	CHECK						0.0 c	0.0 c	0.0 c	0.0 b
2	ANTHEM MAXX CADET ROUNDUP POWERMAX AMS XTRA	4.3 0.91 5.5 3.4	SE EC SL SL	4.0 oz/a 0.9 oz/a 22.0 oz/a 2.5 % v/v	PRE POST POST POST	A B B B	96.8 a	21.3 ab	10.0 a	99.0 a
3	ANTHEM MAXX F9387-1 ROUNDUP POWERMAX AMS XTRA	4.3 4 5.5 3.4	SE SC SL SL	4.0 oz/a 3.0 oz/a 22.0 oz/a 2.5 % v/v	PRE POST POST POST	A B B B	97.0 a	15.0 b	0.0 c	99.0 a
4	ANTHEM MAXX BALANCE FLEXX CADET ROUNDUP POWERMAX AMS XTRA	4.3 2 0.91 5.5 3.4	SE SC EC SL SL	4.0 oz/a 3.0 oz/a 0.9 oz/a 22 oz/a 2.5 % v/v	PRE PRE POST POST POST	A A B B B	99.0 a	15.0 b	10.0 a	99.0 a
5	ANTHEM ATZ BALANCE FLEXX CADET ROUNDUP POWERMAX AMS XTRA	4.5 2 0.91 5.5 3.4	SE SC EC SL SL	2.0 pt/a 3.0 oz/a 0.9 oz/a 22.0 oz/a 2.5 % v/v	PRE PRE POST POST POST	A A B B B	99.0 a	17.5 b	10.0 a	99.0 a
6	ANTHEM ATZ CADET ROUNDUP POWERMAX AMS XTRA	4.5 0.91 5.5 3.4	SE EC SL SL	2.0 pt/a 0.9 oz/a 22 oz/a 2.5 % v/v	PRE POST POST POST	A B B B	99.0 a	16.3 b	10.0 a	99.0 a
7	ANTHEM ATZ F9387-1 ROUNDUP POWERMAX AMS XTRA	4.5 4 5.5 3.4	SE SC SL SL	2.0 pt/a 3.0 oz/a 22 oz/a 2.5 % v/v	PRE POST POST POST	A B B B	98.0 a	26.3 a	3.8 b	99.0 a
8	ANTHEM ATZ CADET LIBERTY 280 SL	4.5 0.91 2.34	SE EC SL	2.0 pt/a 0.9 oz/a 22.0 oz/a	PRE POST POST	A B B	99.0 a	15.0 b	5.0 b	99.0 a
9	ATRAZINE ATRAZINE ROUNDUP POWERMAX	4 4 5.5	L L SL	32.0 oz/a 48.0 oz/a 22.0 oz/a	PRE POST POST	A B B	0.0 c	0.0 c	0.0 c	99.0 a
10	ATRAZINE LIBERTY ATRAZINE	4 2.34 4	L SL SL	32.0 oz/a 29.0 oz/a 48.0 oz/a	PRE POST POST	A B B	0.0 c	0.0 c	0.0 c	99.0 a

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							W Weed			W Weed AMAPA Amaranthus pal> Palmer amaranth	
Pest Type							AGRASS				
Pest Code							ZEAMD	ZEAMD	ZEAMD		
Pest Scientific Name							BCOR	BCOR	BCOR		
Pest Name							Zea mays inden>	Zea mays inden>	Zea mays inden>		
Crop Code							Dent corn	Dent corn	Dent corn		
BBCH Scale											
Crop Scientific Name											
Crop Name											
Part Rated											
Rating Date							Apr-22-15	May-4-15	May-4-15		May-4-15
Rating Type							CONTROL	STUNTING	LEAF SPECKL		
Rating Unit							PERCENT	PERCENT	PERCENT		
Sample Size, Unit											
Number of Subsamples							1	1	1		1
Days After First/Last Applic.							20 20	32 12	32 12		32 12
Trt-Eval Interval							20 DA-A	32 DA-A	32 DA-A		32 DA-A
Plant-Eval Interval							21 DP-1	33 DP-1	33 DP-1		33 DP-1
ARM Action Codes											
Number of Decimals											
Trt	Treatment	Form	Form	Rate	Growth	Appl					
No.	Name	Conc	Type	Rate	Unit	Stage	Code	9	10	11	12
11	ATRAZINE	4 L		32.0 oz/a	PRE	A		21.3 b	0.0 c	0.0 c	99.0 a
	STEADFAST Q	37.7 WG		1.5 oz/a	POST	B					
	ATRAZINE	4 L		48.0 oz/a	POST	B					
	COC			1.0 % v/v	POST	B					
12	ATRAZINE	4 FL		32.0 oz/a	PRE	A		16.3 bc	0.0 c	0.0 c	99.0 a
	CAPRENO	3.45 SL		3.0 oz/a	POST	B					
	ATRAZINE	4 FL		48.0 oz/a	POST	B					
	COC			1.0 % v/v	POST	B					
LSD P=.10							15.54	5.92	2.21		.
Standard Deviation							12.98	4.95	1.85		0.00
CV							21.48	47.06	45.55		0.0
Grand Mean							60.44	10.52	4.06		90.75
Bartlett's X2							29.137	3.38	1.868		0.0
P(Bartlett's X2)							0.001*	0.76	0.172		.
Replicate F							1.016	3.024	0.558		0.000
Replicate Prob(F)							0.3982	0.0433	0.6467		1.0000
Treatment F							52.768	15.692	25.590		0.000
Treatment Prob(F)							0.0001	0.0001	0.0001		1.0000

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Pest Type	AGRASS	W Weed CASOB Senna obtusifol Sickle pod	W Weed AMAPA Amaranthus pal Palmer amaranth	AGRASS	W Weed					
Pest Code										
Pest Scientific Name										
Pest Name										
Crop Code										
BBCH Scale										
Crop Scientific Name					ZEAMD BCOR Zea mays inden Dent corn					
Crop Name										
Part Rated										
Rating Date	May-4-15	May-4-15	Jun-9-15	Jun-9-15						
Rating Type										
Rating Unit					YIELD LBS/PLOT 1 PLOT 1					
Sample Size, Unit										
Number of Subsamples	1	1	1	1						
Days After First/Last Applic.	32 12 32 DA-A 33 DP-1	32 12 32 DA-A 33 DP-1	68 48 68 DA-A 69 DP-1	68 48 68 DA-A 69 DP-1						
Trt-Eval Interval										
Plant-Eval Interval										
ARM Action Codes										
Number of Decimals					2					
Trt Treatment No. Name	Form Conc	Form Type	Rate Rate	Growth Stage	Appl Code	13	14	15	16	17
1 CHECK						0.0 c	0.0 c	0.0 c	0.0 e	31.15 e
2 ANTHEM MAXX CADET ROUNDUP POWERMAX AMS XTRA	4.3 0.91 5.5 3.4	SE EC SL SL	4.0 oz/a 0.9 oz/a 22.0 oz/a 2.5 % v/v	PRE POST POST POST	A B B B	98.0 a	75.0 a	99.0 a	67.5 bcd	37.43 cd
3 ANTHEM MAXX F9387-1 ROUNDUP POWERMAX AMS XTRA	4.3 4 5.5 3.4	SE SC SL SL	4.0 oz/a 3.0 oz/a 22.0 oz/a 2.5 % v/v	PRE POST POST POST	A B B B	97.0 a	74.5 a	99.0 a	56.3 cd	42.47 b
4 ANTHEM MAXX BALANCE FLEXX CADET ROUNDUP POWERMAX AMS XTRA	4.3 2 0.91 5.5 3.4	SE SC EC SL SL	4.0 oz/a 3.0 oz/a 0.9 oz/a 22 oz/a 2.5 % v/v	PRE PRE POST POST POST	A A B B B	95.5 a	58.8 ab	99.0 a	67.5 bcd	44.39 ab
5 ANTHEM ATZ BALANCE FLEXX CADET ROUNDUP POWERMAX AMS XTRA	4.5 2 0.91 5.5 3.4	SE SC EC SL SL	2.0 pt/a 3.0 oz/a 0.9 oz/a 22.0 oz/a 2.5 % v/v	PRE PRE POST POST POST	A A B B B	98.0 a	58.8 ab	99.0 a	77.5 ab	41.09 bc
6 ANTHEM ATZ CADET ROUNDUP POWERMAX AMS XTRA	4.5 0.91 5.5 3.4	SE EC SL SL	2.0 pt/a 0.9 oz/a 22 oz/a 2.5 % v/v	PRE POST POST POST	A B B B	98.0 a	71.0 a	99.0 a	70.0 bc	43.62 b
7 ANTHEM ATZ F9387-1 ROUNDUP POWERMAX AMS XTRA	4.5 4 5.5 3.4	SE SC SL SL	2.0 pt/a 3.0 oz/a 22 oz/a 2.5 % v/v	PRE POST POST POST	A B B B	98.0 a	39.8 b	99.0 a	83.8 a	34.21 de
8 ANTHEM ATZ CADET LIBERTY 280 SL	4.5 0.91 2.34	SE EC SL	2.0 pt/a 0.9 oz/a 22.0 oz/a	PRE POST POST	A B B	99.0 a	56.3 ab	99.0 a	55.0 d	44.36 ab
9 ATRAZINE ATRAZINE ROUNDUP POWERMAX	4 4 5.5	L L SL	32.0 oz/a 48.0 oz/a 22.0 oz/a	PRE POST POST	A B B	97.0 a	80.0 a	95.8 a	57.5 cd	49.45 a
10 ATRAZINE LIBERTY ATRAZINE	4 2.34 4	L SL SL	32.0 oz/a 29.0 oz/a 48.0 oz/a	PRE POST POST	A B B	98.0 a	66.0 a	92.3 b	57.5 cd	45.14 ab

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Pest Type							W Weed	W Weed	W Weed	W Weed	
Pest Code							AGRASS	CASOB	AMAPA	AGRASS	W Weed
Pest Scientific Name								Senna obtusifol>	Amaranthus pal>		
Pest Name								Sickle pod	Palmer amaranth		
Crop Code											
BBCH Scale											
Crop Scientific Name											ZEAMD
Crop Name											BCOR
Part Rated											Zea mays inden>
Rating Date							May-4-15	May-4-15	Jun-9-15	Jun-9-15	Dent corn
Rating Type											
Rating Unit											
Sample Size, Unit											YIELD
Number of Subsamples							1	1	1	1	LBS/PLOT
Days After First/Last Applic.							32 12	32 12	68 48	68 48	1 PLOT
Trt-Eval Interval							32 DA-A	32 DA-A	68 DA-A	68 DA-A	1
Plant-Eval Interval							33 DP-1	33 DP-1	69 DP-1	69 DP-1	1
ARM Action Codes											
Number of Decimals											2
Trt Treatment No. Name	Form Conc	Form Type	Rate Rate	Unit Unit	Growth Stage	Appl Code	13	14	15	16	17
11 ATRAZINE	4 L		32.0 oz/a		PRE A		87.5 b	71.3 a	99.0 a	62.5 cd	45.16 ab
STEADFAST Q	37.7 WG		1.5 oz/a		POST B						
ATRAZINE	4 L		48.0 oz/a		POST B						
COC			1.0 % v/v		POST B						
12 ATRAZINE	4 FL		32.0 oz/a		PRE A		98.0 a	67.5 a	99.0 a	65.0 bcd	45.26 ab
CAPRENO	3.45 SL		3.0 oz/a		POST B						
ATRAZINE	4 FL		48.0 oz/a		POST B						
COC			1.0 % v/v		POST B						
LSD P=.10			4.30				20.37	3.22	12.27		4.715
Standard Deviation			3.59				17.02	2.69	10.25		3.929
CV			4.05				28.41	3.0	17.08		9.36
Grand Mean			88.67				59.90	89.92	60.00		41.976
Bartlett's X2			23.538				4.233	1.253	10.45		11.761
P(Bartlett's X2)			0.005*				0.936	0.263	0.402		0.382
Replicate F			2.572				4.165	1.203	0.859		1.821
Replicate Prob(F)			0.0708				0.0132	0.3240	0.4718		0.1645
Treatment F			244.264				6.532	444.587	16.496		7.073
Treatment Prob(F)			0.0001				0.0001	0.0001	0.0001		0.0001

University of Georgia

							W Weed
Pest Type							
Pest Code							
Pest Scientific Name							
Pest Name							
Crop Code				ZEAMD			ZEAMD
BBCH Scale				BCOR			BCOR
Crop Scientific Name				Zea mays inden>			Zea mays inden>
Crop Name				Dent corn			Dent corn
Part Rated							
Rating Date							
Rating Type							
Rating Unit							YIELD
Sample Size, Unit							BU/A
Number of Subsamples							1 A
Days After First/Last Applic.							1
Trt-Eval Interval							
Plant-Eval Interval							
ARM Action Codes							TY1
Number of Decimals							0
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Growth Stage	Appl Code	
							18
							19
1	CHECK						13.08 a
2	ANTHEM MAXX	4.3	SE	4.0 oz/a	PRE	A	12.83 a
	CADET	0.91	EC	0.9 oz/a	POST	B	200 cd
	ROUNDUP POWERMAX	5.5	SL	22.0 oz/a	POST	B	
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B	
3	ANTHEM MAXX	4.3	SE	4.0 oz/a	PRE	A	14.10 a
	F9387-1	4	SC	3.0 oz/a	POST	B	224 bc
	ROUNDUP POWERMAX	5.5	SL	22.0 oz/a	POST	B	
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B	
4	ANTHEM MAXX	4.3	SE	4.0 oz/a	PRE	A	12.84 a
	BALANCE FLEXX	2	SC	3.0 oz/a	PRE	A	237 ab
	CADET	0.91	EC	0.9 oz/a	POST	B	
	ROUNDUP POWERMAX	5.5	SL	22 oz/a	POST	B	
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B	
5	ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A	12.44 a
	BALANCE FLEXX	2	SC	3.0 oz/a	PRE	A	221 bc
	CADET	0.91	EC	0.9 oz/a	POST	B	
	ROUNDUP POWERMAX	5.5	SL	22.0 oz/a	POST	B	
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B	
6	ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A	13.78 a
	CADET	0.91	EC	0.9 oz/a	POST	B	231 b
	ROUNDUP POWERMAX	5.5	SL	22 oz/a	POST	B	
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B	
7	ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A	11.67 a
	F9387-1	4	SC	3.0 oz/a	POST	B	186 de
	ROUNDUP POWERMAX	5.5	SL	22 oz/a	POST	B	
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B	
8	ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A	14.64 a
	CADET	0.91	EC	0.9 oz/a	POST	B	233 b
	LIBERTY 280 SL	2.34	SL	22.0 oz/a	POST	B	
9	ATRAZINE	4	L	32.0 oz/a	PRE	A	12.92 a
	ATRAZINE	4	L	48.0 oz/a	POST	B	264 a
	ROUNDUP POWERMAX	5.5	SL	22.0 oz/a	POST	B	
10	ATRAZINE	4	L	32.0 oz/a	PRE	A	13.23 a
	LIBERTY	2.34	SL	29.0 oz/a	POST	B	240 ab
	ATRAZINE	4	SL	48.0 oz/a	POST	B	

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Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Part Rated Rating Date Rating Type Rating Unit Sample Size, Unit Number of Subsamples Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval ARM Action Codes Number of Decimals	ZEAMD BCOR Zea mays inden> Dent corn MOISTURE PERCENT 1 2	W Weed ZEAMD BCOR Zea mays inden> Dent corn YIELD BU/A 1 A 1 TY1 0																																																																																										
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Trt No.</th> <th style="width: 15%;">Treatment Name</th> <th style="width: 10%;">Form Conc</th> <th style="width: 10%;">Form Type</th> <th style="width: 10%;">Rate</th> <th style="width: 10%;">Unit</th> <th style="width: 10%;">Growth Stage</th> <th style="width: 10%;">Appl Code</th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr> <td>11</td> <td>ATRAZINE</td> <td>4</td> <td>L</td> <td>32.0</td> <td>oz/a</td> <td>PRE</td> <td>A</td> <td>12.41</td> <td>a</td> </tr> <tr> <td></td> <td>STEADFAST Q</td> <td>37.7</td> <td>WG</td> <td>1.5</td> <td>oz/a</td> <td>POST</td> <td>B</td> <td></td> <td></td> </tr> <tr> <td></td> <td>ATRAZINE</td> <td>4</td> <td>L</td> <td>48.0</td> <td>oz/a</td> <td>POST</td> <td>B</td> <td></td> <td></td> </tr> <tr> <td></td> <td>COC</td> <td></td> <td></td> <td>1.0</td> <td>% v/v</td> <td>POST</td> <td>B</td> <td></td> <td></td> </tr> <tr> <td>12</td> <td>ATRAZINE</td> <td>4</td> <td>FL</td> <td>32.0</td> <td>oz/a</td> <td>PRE</td> <td>A</td> <td>12.98</td> <td>a</td> </tr> <tr> <td></td> <td>CAPRENO</td> <td>3.45</td> <td>SL</td> <td>3.0</td> <td>oz/a</td> <td>POST</td> <td>B</td> <td></td> <td></td> </tr> <tr> <td></td> <td>ATRAZINE</td> <td>4</td> <td>FL</td> <td>48.0</td> <td>oz/a</td> <td>POST</td> <td>B</td> <td></td> <td></td> </tr> <tr> <td></td> <td>COC</td> <td></td> <td></td> <td>1.0</td> <td>% v/v</td> <td>POST</td> <td>B</td> <td></td> <td></td> </tr> </tbody> </table>	Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Growth Stage	Appl Code			11	ATRAZINE	4	L	32.0	oz/a	PRE	A	12.41	a		STEADFAST Q	37.7	WG	1.5	oz/a	POST	B				ATRAZINE	4	L	48.0	oz/a	POST	B				COC			1.0	% v/v	POST	B			12	ATRAZINE	4	FL	32.0	oz/a	PRE	A	12.98	a		CAPRENO	3.45	SL	3.0	oz/a	POST	B				ATRAZINE	4	FL	48.0	oz/a	POST	B				COC			1.0	% v/v	POST	B			18 19	18 19
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Growth Stage	Appl Code																																																																																					
11	ATRAZINE	4	L	32.0	oz/a	PRE	A	12.41	a																																																																																			
	STEADFAST Q	37.7	WG	1.5	oz/a	POST	B																																																																																					
	ATRAZINE	4	L	48.0	oz/a	POST	B																																																																																					
	COC			1.0	% v/v	POST	B																																																																																					
12	ATRAZINE	4	FL	32.0	oz/a	PRE	A	12.98	a																																																																																			
	CAPRENO	3.45	SL	3.0	oz/a	POST	B																																																																																					
	ATRAZINE	4	FL	48.0	oz/a	POST	B																																																																																					
	COC			1.0	% v/v	POST	B																																																																																					
LSD P=.10 Standard Deviation CV Grand Mean Bartlett's X2 P(Bartlett's X2)	1.626 1.355 10.36 13.075 14.249 0.22	24.7 20.6 9.2 223.8 11.614 0.393																																																																																										
Replicate F Replicate Prob(F) Treatment F Treatment Prob(F)	1.732 0.1817 1.386 0.2297	2.028 0.1311 7.099 0.0001																																																																																										

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ANTHEM/ANTHEM ATZ TANK MIXES FOR WEED CONTROL IN FIELD CORN

Trial ID: CN-05-15 Location: Georgia Trial Year: 2015
 Protocol ID: Investigator: Eric P. Prostko
 Project ID: Study Director: Craig Heim
 Sponsor Contact:

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

AMAPA, Amaranthus palmeri, = US

CASOB, Senna obtusifolia, = US

Crop Code

ZEAMD, BCOR, Zea mays indentata, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent

PLOT = total plot

A = acre

Plant-Eval Interval

8 DP-1 = 1 ZEAMX Apr-1-15

21 DP-1 = 1 ZEAMX Apr-1-15

33 DP-1 = 1 ZEAMX Apr-1-15

69 DP-1 = 1 ZEAMX Apr-1-15

ARM Action Codes

TY1 = 5.185714*[17]*(100-@MVAVGREP([18]))/84.5

University of Georgia

ANTHEM/ANTHEM ATZ TANK MIXES FOR WEED CONTROL IN FIELD CORN

Trial ID: CN-05-15 Location: Georgia Trial Year: 2015
 Protocol ID: Investigator: Eric P. Prostko
 Project ID: Study Director: Craig Heim
 Sponsor Contact:

							W Weed		AGRASS
							AMAPA		
							Amaranthus pal>		
							Palmer amaranth		
Pest Type							ZEAMD		ZEAMD
Pest Code							BCOR		BCOR
Pest Scientific Name							Zea mays inden>		Zea mays inden>
Pest Name							Dent corn		Dent corn
Crop Code							CROP -		
BBCH Scale							Apr-9-15		Apr-9-15
Crop Scientific Name							STUNTING		CONTROL
Crop Name							PERCENT		PERCENT
Part Rated									
Rating Date									
Rating Type									
Rating Unit									
Sample Size, Unit							1		1
Number of Subsamples							7		7
Days After First/Last Applic.							7 DA-A		7 DA-A
Trt-Eval Interval							8 DP-1		8 DP-1
Plant-Eval Interval									
ARM Action Codes									
Number of Decimals									
Trt Treatment	Form	Form	Rate	Growth	Appl				
No. Name	Conc	Type	Rate Unit	Stage	Code Plot	1	2	3	
1 CHECK					102	0.0	0.0	0.0	0.0
					203	0.0	0.0	0.0	0.0
					304	0.0	0.0	0.0	0.0
					408	0.0	0.0	0.0	0.0
					Mean =	0.0	0.0	0.0	0.0
2 ANTHEM MAXX	4.3	SE	4.0 oz/a	PRE	A 109	0.0	99.0	95.0	
CADET	0.91	EC	0.9 oz/a	POST	B 201	10.0	99.0	95.0	
ROUNDUP POWERMAX	5.5	SL	22.0 oz/a	POST	B 311	0.0	99.0	85.0	
AMS XTRA	3.4	SL	2.5 % v/v	POST	B 407	0.0	99.0	65.0	
					Mean =	2.5	99.0	85.0	
3 ANTHEM MAXX	4.3	SE	4.0 oz/a	PRE	A 112	0.0	99.0	95.0	
F9387-1	4	SC	3.0 oz/a	POST	B 209	10.0	99.0	95.0	
ROUNDUP POWERMAX	5.5	SL	22.0 oz/a	POST	B 308	10.0	99.0	75.0	
AMS XTRA	3.4	SL	2.5 % v/v	POST	B 406	0.0	99.0	75.0	
					Mean =	5.0	99.0	85.0	
4 ANTHEM MAXX	4.3	SE	4.0 oz/a	PRE	A 108	0.0	99.0	95.0	
BALANCE FLEXX	2	SC	3.0 oz/a	PRE	A 206	0.0	99.0	85.0	
CADET	0.91	EC	0.9 oz/a	POST	B 303	10.0	99.0	99.0	
ROUNDUP POWERMAX	5.5	SL	22 oz/a	POST	B 409	0.0	99.0	65.0	
AMS XTRA	3.4	SL	2.5 % v/v	POST	B				
					Mean =	2.5	99.0	86.0	
5 ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A 103	0.0	99.0	95.0	
BALANCE FLEXX	2	SC	3.0 oz/a	PRE	A 204	0.0	99.0	95.0	
CADET	0.91	EC	0.9 oz/a	POST	B 312	0.0	99.0	85.0	
ROUNDUP POWERMAX	5.5	SL	22.0 oz/a	POST	B 402	0.0	99.0	95.0	
AMS XTRA	3.4	SL	2.5 % v/v	POST	B				
					Mean =	0.0	99.0	92.5	
6 ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A 110	0.0	99.0	85.0	
CADET	0.91	EC	0.9 oz/a	POST	B 212	0.0	99.0	90.0	
ROUNDUP POWERMAX	5.5	SL	22 oz/a	POST	B 305	0.0	99.0	99.0	
AMS XTRA	3.4	SL	2.5 % v/v	POST	B 401	0.0	99.0	95.0	
					Mean =	0.0	99.0	92.3	
7 ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A 101	0.0	99.0	95.0	
F9387-1	4	SC	3.0 oz/a	POST	B 202	0.0	99.0	95.0	
ROUNDUP POWERMAX	5.5	SL	22 oz/a	POST	B 301	0.0	99.0	99.0	
AMS XTRA	3.4	SL	2.5 % v/v	POST	B 403	0.0	99.0	95.0	
					Mean =	0.0	99.0	96.0	
8 ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A 106	0.0	99.0	95.0	
CADET	0.91	EC	0.9 oz/a	POST	B 208	0.0	99.0	95.0	
LIBERTY 280 SL	2.34	SL	22.0 oz/a	POST	B 306	0.0	99.0	85.0	
					412	0.0	99.0	65.0	
					Mean =	0.0	99.0	85.0	

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Pest Type		W Weed		
Pest Code		AMAPA		AGRASS
Pest Scientific Name		Amaranthus pal>		
Pest Name		Palmer amaranth		
Crop Code	ZEAMD	ZEAMD		ZEAMD
BBCH Scale	BCOR	BCOR		BCOR
Crop Scientific Name	Zea mays inden>	Zea mays inden>		Zea mays inden>
Crop Name	Dent corn	Dent corn		Dent corn
Part Rated	CROP -			
Rating Date	Apr-9-15	Apr-9-15		Apr-9-15
Rating Type	STUNTING	CONTROL		CONTROL
Rating Unit	PERCENT	PERCENT		PERCENT
Sample Size, Unit				
Number of Subsamples	1	1		1
Days After First/Last Applic.	7 7	7 7		7 7
Trt-Eval Interval	7 DA-A	7 DA-A		7 DA-A
Plant-Eval Interval	8 DP-1	8 DP-1		8 DP-1
ARM Action Codes				
Number of Decimals				
Trt Treatment	Form Form	Rate	Growth Appl	
No. Name	Conc Type	Rate Unit	Stage Code Plot	1 2 3
9 ATRAZINE	4 L	32.0 oz/a	PRE A 111	0.0 99.0 0.0
ATRAZINE	4 L	48.0 oz/a	POST B 207	0.0 99.0 0.0
ROUNDUP POWERMAX	5.5 SL	22.0 oz/a	POST B 309	0.0 99.0 0.0
			411	0.0 99.0 0.0
Mean =				0.0 99.0 0.0
10 ATRAZINE	4 L	32.0 oz/a	PRE A 107	0.0 99.0 0.0
LIBERTY	2.34 SL	29.0 oz/a	POST B 205	0.0 99.0 0.0
ATRAZINE	4 SL	48.0 oz/a	POST B 307	0.0 99.0 0.0
			410	0.0 99.0 0.0
Mean =				0.0 99.0 0.0
11 ATRAZINE	4 L	32.0 oz/a	PRE A 104	0.0 99.0 50.0
STEADFAST Q	37.7 WG	1.5 oz/a	POST B 210	0.0 99.0 0.0
ATRAZINE	4 L	48.0 oz/a	POST B 302	0.0 99.0 65.0
COC		1.0 % v/v	POST B 405	0.0 99.0 0.0
Mean =				0.0 99.0 28.8
12 ATRAZINE	4 FL	32.0 oz/a	PRE A 105	0.0 99.0 65.0
CAPRENO	3.45 SL	3.0 oz/a	POST B 211	0.0 99.0 0.0
ATRAZINE	4 FL	48.0 oz/a	POST B 310	0.0 99.0 0.0
COC		1.0 % v/v	POST B 404	0.0 99.0 0.0
Mean =				0.0 99.0 16.3

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Pest Type							W Weed		
Pest Code							CASOB		
Pest Scientific Name							Senna obtusifo>		
Pest Name							Sickle pod		
Crop Code							ZEAMD	ZEAMD	ZEAMD
BBCH Scale							BCOR	BCOR	BCOR
Crop Scientific Name							Zea mays inden>	Zea mays inden>	Zea mays inden>
Crop Name							Dent corn	Dent corn	Dent corn
Part Rated									
Rating Date							Apr-9-15	Apr-22-15	Apr-22-15
Rating Type							CONTROL	STUNTING	CHLOROSIS
Rating Unit							PERCENT	PERCENT	PERCENT
Sample Size, Unit									
Number of Subsamples							1	1	1
Days After First/Last Applic.							7 7	20 20	20 20
Trt-Eval Interval							7 DA-A	20 DA-A	20 DA-A
Plant-Eval Interval							8 DP-1	21 DP-1	21 DP-1
ARM Action Codes									
Number of Decimals									
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Growth Stage	Appl Code Plot	4	5	6
1	CHECK					102	0.0	0.0	0.0
						203	0.0	0.0	0.0
						304	0.0	0.0	0.0
						408	0.0	0.0	0.0
						Mean =	0.0	0.0	0.0
2	ANTHEM MAXX	4.3	SE	4.0 oz/a	PRE	A 109	99.0	20.0	10.0
	CADET	0.91	EC	0.9 oz/a	POST	B 201	95.0	10.0	10.0
	ROUNDUP POWERMAX	5.5	SL	22.0 oz/a	POST	B 311	85.0	10.0	10.0
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B 407	20.0	20.0	10.0
						Mean =	74.8	15.0	10.0
3	ANTHEM MAXX	4.3	SE	4.0 oz/a	PRE	A 112	75.0	15.0	10.0
	F9387-1	4	SC	3.0 oz/a	POST	B 209	95.0	10.0	10.0
	ROUNDUP POWERMAX	5.5	SL	22.0 oz/a	POST	B 308	80.0	10.0	10.0
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B 406	0.0	10.0	10.0
						Mean =	62.5	11.3	10.0
4	ANTHEM MAXX	4.3	SE	4.0 oz/a	PRE	A 108	99.0	10.0	10.0
	BALANCE FLEXX	2	SC	3.0 oz/a	PRE	A 206	85.0	0.0	0.0
	CADET	0.91	EC	0.9 oz/a	POST	B 303	50.0	15.0	10.0
	ROUNDUP POWERMAX	5.5	SL	22 oz/a	POST	B 409	65.0	10.0	10.0
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B			
						Mean =	74.8	8.8	7.5
5	ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A 103	85.0	15.0	10.0
	BALANCE FLEXX	2	SC	3.0 oz/a	PRE	A 204	75.0	10.0	10.0
	CADET	0.91	EC	0.9 oz/a	POST	B 312	75.0	10.0	0.0
	ROUNDUP POWERMAX	5.5	SL	22.0 oz/a	POST	B 402	50.0	20.0	10.0
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B			
						Mean =	71.3	13.8	7.5
6	ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A 110	99.0	15.0	10.0
	CADET	0.91	EC	0.9 oz/a	POST	B 212	85.0	10.0	10.0
	ROUNDUP POWERMAX	5.5	SL	22 oz/a	POST	B 305	50.0	10.0	10.0
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B 401	50.0	20.0	10.0
						Mean =	71.0	13.8	10.0
7	ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A 101	65.0	20.0	10.0
	F9387-1	4	SC	3.0 oz/a	POST	B 202	75.0	10.0	10.0
	ROUNDUP POWERMAX	5.5	SL	22 oz/a	POST	B 301	90.0	20.0	10.0
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B 403	50.0	10.0	10.0
						Mean =	70.0	15.0	10.0
8	ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A 106	25.0	0.0	0.0
	CADET	0.91	EC	0.9 oz/a	POST	B 208	85.0	5.0	10.0
	LIBERTY 280 SL	2.34	SL	22.0 oz/a	POST	B 306	80.0	10.0	10.0
						412	50.0	20.0	10.0
						Mean =	60.0	8.8	7.5

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Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Part Rated Rating Date Rating Type Rating Unit Sample Size, Unit Number of Subsamples Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval ARM Action Codes Number of Decimals	W Weed CASOB Senna obtusifol Sickie pod ZEAMD BCOR Zea mays inden Dent corn Apr-9-15 CONTROL PERCENT 1 7 7 7 DA-A 8 DP-1	ZEAMD BCOR Zea mays inden Dent corn Apr-22-15 STUNTING PERCENT 1 20 20 20 DA-A 21 DP-1	ZEAMD BCOR Zea mays inden Dent corn Apr-22-15 CHLOROSIS PERCENT 1 20 20 20 DA-A 21 DP-1				
Trt Treatment No. Name	Form Form Conc Type	Rate Rate Unit Unit	Growth Growth Stage Stage	Appl Appl Code Code Plot Plot	4	5	6
9 ATRAZINE	4 L	32.0 oz/a	PRE	A 111	95.0	0.0	0.0
ATRAZINE	4 L	48.0 oz/a	POST	B 207	75.0	0.0	0.0
ROUNDUP POWERMAX	5.5 SL	22.0 oz/a	POST	B 309	85.0	0.0	0.0
				411	50.0	0.0	0.0
				Mean =	76.3	0.0	0.0
10 ATRAZINE	4 L	32.0 oz/a	PRE	A 107	95.0	0.0	0.0
LIBERTY	2.34 SL	29.0 oz/a	POST	B 205	50.0	0.0	0.0
ATRAZINE	4 SL	48.0 oz/a	POST	B 307	85.0	0.0	0.0
				410	50.0	0.0	0.0
				Mean =	70.0	0.0	0.0
11 ATRAZINE	4 L	32.0 oz/a	PRE	A 104	65.0	0.0	0.0
STEADFAST Q	37.7 WG	1.5 oz/a	POST	B 210	90.0	0.0	0.0
ATRAZINE	4 L	48.0 oz/a	POST	B 302	50.0	0.0	10.0
COC		1.0 % v/v	POST	B 405	0.0	0.0	0.0
				Mean =	51.3	0.0	2.5
12 ATRAZINE	4 FL	32.0 oz/a	PRE	A 105	50.0	0.0	0.0
CAPRENO	3.45 SL	3.0 oz/a	POST	B 211	95.0	0.0	0.0
ATRAZINE	4 FL	48.0 oz/a	POST	B 310	85.0	0.0	0.0
COC		1.0 % v/v	POST	B 404	0.0	0.0	0.0
				Mean =	57.5	0.0	0.0

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Pest Type							W Weed	W Weed	AGRASS
Pest Code							AMAPA	CASOB	
Pest Scientific Name							Amaranthus pal>	Senna obtusifo>	
Pest Name							Palmer amaranth	Sickle pod	
Crop Code							ZEAMD	ZEAMD	ZEAMD
BBCH Scale							BCOR	BCOR	BCOR
Crop Scientific Name							Zea mays inden>	Zea mays inden>	Zea mays inden>
Crop Name							Dent corn	Dent corn	Dent corn
Part Rated									
Rating Date							Apr-22-15	Apr-22-15	Apr-22-15
Rating Type							CONTROL	CONTROL	CONTROL
Rating Unit							PERCENT	PERCENT	PERCENT
Sample Size, Unit									
Number of Subsamples							1	1	1
Days After First/Last Applic.							20 20	20 20	20 20
Trt-Eval Interval							20 DA-A	20 DA-A	20 DA-A
Plant-Eval Interval							21 DP-1	21 DP-1	21 DP-1
ARM Action Codes									
Number of Decimals									
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Growth Stage	Appl Code Plot	7	8	9
1	CHECK					102	0.0	0.0	0.0
						203	0.0	0.0	0.0
						304	0.0	0.0	0.0
						408	0.0	0.0	0.0
						Mean =	0.0	0.0	0.0
2	ANTHEM MAXX	4.3 SE		4.0 oz/a	PRE A	109	99.0	90.0	99.0
	CADET	0.91 EC		0.9 oz/a	POST B	201	99.0	50.0	99.0
	ROUNDUP POWERMAX	5.5 SL		22.0 oz/a	POST B	311	99.0	50.0	99.0
	AMS XTRA	3.4 SL		2.5 % v/v	POST B	407	99.0	50.0	90.0
						Mean =	99.0	60.0	96.8
3	ANTHEM MAXX	4.3 SE		4.0 oz/a	PRE A	112	99.0	75.0	95.0
	F9387-1	4 SC		3.0 oz/a	POST B	209	99.0	60.0	99.0
	ROUNDUP POWERMAX	5.5 SL		22.0 oz/a	POST B	308	99.0	50.0	99.0
	AMS XTRA	3.4 SL		2.5 % v/v	POST B	406	99.0	50.0	95.0
						Mean =	99.0	58.8	97.0
4	ANTHEM MAXX	4.3 SE		4.0 oz/a	PRE A	108	99.0	70.0	99.0
	BALANCE FLEXX	2 SC		3.0 oz/a	PRE A	206	99.0	50.0	99.0
	CADET	0.91 EC		0.9 oz/a	POST B	303	99.0	50.0	99.0
	ROUNDUP POWERMAX	5.5 SL		22 oz/a	POST B	409	99.0	65.0	99.0
	AMS XTRA	3.4 SL		2.5 % v/v	POST B				
						Mean =	99.0	58.8	99.0
5	ANTHEM ATZ	4.5 SE		2.0 pt/a	PRE A	103	99.0	95.0	99.0
	BALANCE FLEXX	2 SC		3.0 oz/a	PRE A	204	99.0	50.0	99.0
	CADET	0.91 EC		0.9 oz/a	POST B	312	99.0	85.0	99.0
	ROUNDUP POWERMAX	5.5 SL		22.0 oz/a	POST B	402	99.0	65.0	99.0
	AMS XTRA	3.4 SL		2.5 % v/v	POST B				
						Mean =	99.0	73.8	99.0
6	ANTHEM ATZ	4.5 SE		2.0 pt/a	PRE A	110	99.0	85.0	99.0
	CADET	0.91 EC		0.9 oz/a	POST B	212	99.0	65.0	99.0
	ROUNDUP POWERMAX	5.5 SL		22 oz/a	POST B	305	99.0	50.0	99.0
	AMS XTRA	3.4 SL		2.5 % v/v	POST B	401	99.0	50.0	99.0
						Mean =	99.0	62.5	99.0
7	ANTHEM ATZ	4.5 SE		2.0 pt/a	PRE A	101	99.0	65.0	95.0
	F9387-1	4 SC		3.0 oz/a	POST B	202	99.0	50.0	99.0
	ROUNDUP POWERMAX	5.5 SL		22 oz/a	POST B	301	99.0	65.0	99.0
	AMS XTRA	3.4 SL		2.5 % v/v	POST B	403	99.0	50.0	99.0
						Mean =	99.0	57.5	98.0
8	ANTHEM ATZ	4.5 SE		2.0 pt/a	PRE A	106	99.0	40.0	99.0
	CADET	0.91 EC		0.9 oz/a	POST B	208	99.0	60.0	99.0
	LIBERTY 280 SL	2.34 SL		22.0 oz/a	POST B	306	99.0	50.0	99.0
						412	99.0	50.0	99.0
						Mean =	99.0	50.0	99.0

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Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Part Rated Rating Date Rating Type Rating Unit Sample Size, Unit Number of Subsamples Days After First/Last Applic. Trt-Eval Interval Plant-Eval Interval ARM Action Codes Number of Decimals	W Weed AMAPA Amaranthus pal> Palmer amaranth ZEAMD BCOR Zea mays inden> Dent corn Apr-22-15 CONTROL PERCENT 1 20 20 20 DA-A 21 DP-1	W Weed CASOB Senna obtusifo> Sickle pod ZEAMD BCOR Zea mays inden> Dent corn Apr-22-15 CONTROL PERCENT 1 20 20 20 DA-A 21 DP-1	AGRASS ZEAMD BCOR Zea mays inden> Dent corn Apr-22-15 CONTROL PERCENT 1 20 20 20 DA-A 21 DP-1				
Trt Treatment No. Name	Form Form Conc Type	Rate Rate Unit Unit	Growth Growth Stage Stage	Appl Appl Code Code Plot Plot	7	8	9
9 ATRAZINE	4 L	32.0 oz/a	PRE	A 111	99.0	85.0	0.0
ATRAZINE	4 L	48.0 oz/a	POST	B 207	99.0	70.0	0.0
ROUNDUP POWERMAX	5.5 SL	22.0 oz/a	POST	B 309	99.0	75.0	0.0
				411	99.0	70.0	0.0
Mean =					99.0	75.0	0.0
10 ATRAZINE	4 L	32.0 oz/a	PRE	A 107	99.0	80.0	0.0
LIBERTY	2.34 SL	29.0 oz/a	POST	B 205	99.0	50.0	0.0
ATRAZINE	4 SL	48.0 oz/a	POST	B 307	99.0	50.0	0.0
				410	99.0	50.0	0.0
Mean =					99.0	57.5	0.0
11 ATRAZINE	4 L	32.0 oz/a	PRE	A 104	99.0	60.0	20.0
STEADFAST Q	37.7 WG	1.5 oz/a	POST	B 210	99.0	85.0	0.0
ATRAZINE	4 L	48.0 oz/a	POST	B 302	99.0	0.0	65.0
COC		1.0 % v/v	POST	B 405	99.0	0.0	0.0
Mean =					99.0	36.3	21.3
12 ATRAZINE	4 FL	32.0 oz/a	PRE	A 105	99.0	65.0	65.0
CAPRENO	3.45 SL	3.0 oz/a	POST	B 211	99.0	85.0	0.0
ATRAZINE	4 FL	48.0 oz/a	POST	B 310	99.0	70.0	0.0
COC		1.0 % v/v	POST	B 404	99.0	0.0	0.0
Mean =					99.0	55.0	16.3

University of Georgia

							W Weed		W Weed AMAPA Amaranthus pal> Palmer amaranth		AGRASS
Pest Type											
Pest Code											
Pest Scientific Name											
Pest Name											
Crop Code											
BBCH Scale											
Crop Scientific Name											
Crop Name											
Part Rated											
Rating Date											
Rating Type											
Rating Unit											
Sample Size, Unit											
Number of Subsamples											
Days After First/Last Applic.											
Trt-Eval Interval											
Plant-Eval Interval											
ARM Action Codes											
Number of Decimals											
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Growth Stage	Appl Code Plot	10	11	12	13	
1	CHECK					102	0.0	0.0	0.0	0.0	
						203	0.0	0.0	0.0	0.0	
						304	0.0	0.0	0.0	0.0	
						408	0.0	0.0	0.0	0.0	
						Mean =	0.0	0.0	0.0	0.0	
2	ANTHEM MAXX	4.3 SE		4.0 oz/a	PRE A	109	15.0	10.0	99.0	95.0	
	CADET	0.91 EC		0.9 oz/a	POST B	201	20.0	10.0	99.0	99.0	
	ROUNDUP POWERMAX	5.5 SL		22.0 oz/a	POST B	311	30.0	10.0	99.0	99.0	
	AMS XTRA	3.4 SL		2.5 % v/v	POST B	407	20.0	10.0	99.0	99.0	
						Mean =	21.3	10.0	99.0	98.0	
3	ANTHEM MAXX	4.3 SE		4.0 oz/a	PRE A	112	15.0	0.0	99.0	95.0	
	F9387-1	4 SC		3.0 oz/a	POST B	209	20.0	0.0	99.0	95.0	
	ROUNDUP POWERMAX	5.5 SL		22.0 oz/a	POST B	308	10.0	0.0	99.0	99.0	
	AMS XTRA	3.4 SL		2.5 % v/v	POST B	406	15.0	0.0	99.0	99.0	
						Mean =	15.0	0.0	99.0	97.0	
4	ANTHEM MAXX	4.3 SE		4.0 oz/a	PRE A	108	10.0	10.0	99.0	99.0	
	BALANCE FLEXX	2 SC		3.0 oz/a	PRE A	206	10.0	10.0	99.0	85.0	
	CADET	0.91 EC		0.9 oz/a	POST B	303	15.0	10.0	99.0	99.0	
	ROUNDUP POWERMAX	5.5 SL		22 oz/a	POST B	409	25.0	10.0	99.0	99.0	
	AMS XTRA	3.4 SL		2.5 % v/v	POST B						
						Mean =	15.0	10.0	99.0	95.5	
5	ANTHEM ATZ	4.5 SE		2.0 pt/a	PRE A	103	15.0	10.0	99.0	99.0	
	BALANCE FLEXX	2 SC		3.0 oz/a	PRE A	204	15.0	10.0	99.0	95.0	
	CADET	0.91 EC		0.9 oz/a	POST B	312	10.0	10.0	99.0	99.0	
	ROUNDUP POWERMAX	5.5 SL		22.0 oz/a	POST B	402	30.0	10.0	99.0	99.0	
	AMS XTRA	3.4 SL		2.5 % v/v	POST B						
						Mean =	17.5	10.0	99.0	98.0	
6	ANTHEM ATZ	4.5 SE		2.0 pt/a	PRE A	110	10.0	10.0	99.0	99.0	
	CADET	0.91 EC		0.9 oz/a	POST B	212	15.0	10.0	99.0	95.0	
	ROUNDUP POWERMAX	5.5 SL		22 oz/a	POST B	305	10.0	10.0	99.0	99.0	
	AMS XTRA	3.4 SL		2.5 % v/v	POST B	401	30.0	10.0	99.0	99.0	
						Mean =	16.3	10.0	99.0	98.0	
7	ANTHEM ATZ	4.5 SE		2.0 pt/a	PRE A	101	30.0	0.0	99.0	99.0	
	F9387-1	4 SC		3.0 oz/a	POST B	202	15.0	5.0	99.0	95.0	
	ROUNDUP POWERMAX	5.5 SL		22 oz/a	POST B	301	30.0	5.0	99.0	99.0	
	AMS XTRA	3.4 SL		2.5 % v/v	POST B	403	30.0	5.0	99.0	99.0	
						Mean =	26.3	3.8	99.0	98.0	
8	ANTHEM ATZ	4.5 SE		2.0 pt/a	PRE A	106	15.0	10.0	99.0	99.0	
	CADET	0.91 EC		0.9 oz/a	POST B	208	10.0	0.0	99.0	99.0	
	LIBERTY 280 SL	2.34 SL		22.0 oz/a	POST B	306	15.0	0.0	99.0	99.0	
						412	20.0	10.0	99.0	99.0	
						Mean =	15.0	5.0	99.0	99.0	

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	W Weed		W Weed AMAPA Amaranthus pal-> Palmer amaranth	AGRASS
Pest Type				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Part Rated				
Rating Date				
Rating Type				
Rating Unit				
Sample Size, Unit				
Number of Subsamples				
Days After First/Last Applic.				
Trt-Eval Interval				
Plant-Eval Interval				
ARM Action Codes				
Number of Decimals				
Trt Treatment	Form Form	Rate	Growth Appl	
No. Name	Conc Type	Rate Unit	Stage Code Plot	
				10
9 ATRAZINE	4 L	32.0 oz/a	PRE A 111	0.0
ATRAZINE	4 L	48.0 oz/a	POST B 207	0.0
ROUNDUP POWERMAX	5.5 SL	22.0 oz/a	POST B 309	0.0
			411	0.0
			Mean =	0.0
10 ATRAZINE	4 L	32.0 oz/a	PRE A 107	0.0
LIBERTY	2.34 SL	29.0 oz/a	POST B 205	0.0
ATRAZINE	4 SL	48.0 oz/a	POST B 307	0.0
			410	0.0
			Mean =	0.0
11 ATRAZINE	4 L	32.0 oz/a	PRE A 104	0.0
STEADFAST Q	37.7 WG	1.5 oz/a	POST B 210	0.0
ATRAZINE	4 L	48.0 oz/a	POST B 302	0.0
COC		1.0 % v/v	POST B 405	0.0
			Mean =	0.0
12 ATRAZINE	4 FL	32.0 oz/a	PRE A 105	0.0
CAPRENO	3.45 SL	3.0 oz/a	POST B 211	0.0
ATRAZINE	4 FL	48.0 oz/a	POST B 310	0.0
COC		1.0 % v/v	POST B 404	0.0
			Mean =	0.0

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Pest Type						W Weed	W Weed	AGRASS	W Weed		
Pest Code						CASOB	AMAPA				
Pest Scientific Name						Senna obtusifol>	Amaranthus pal>				
Pest Name						Sickle pod	Palmer amaranth				
Crop Code											
BBCH Scale											
Crop Scientific Name									ZEAMD		
Crop Name									BCOR		
Part Rated									Zea mays inden>		
Rating Date						May-4-15	Jun-9-15	Jun-9-15	Dent corn		
Rating Type											
Rating Unit											
Sample Size, Unit									YIELD		
Number of Subsamples						1	1	1	LBS/PLOT		
Days After First/Last Applic.						32 12	68 48	68 48	1 PLOT		
Trt-Eval Interval						32 DA-A	68 DA-A	68 DA-A	1		
Plant-Eval Interval						33 DP-1	69 DP-1	69 DP-1	1		
ARM Action Codes											
Number of Decimals									2		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Growth Stage	Appl Code	Plot 14	Plot 15	Plot 16	Plot 17	
1	CHECK						102	0.0	0.0	0.0	26.23
							203	0.0	0.0	0.0	32.21
							304	0.0	0.0	0.0	35.23
							408	0.0	0.0	0.0	30.93
							Mean =	0.0	0.0	0.0	31.15
2	ANTHEM MAXX	4.3	SE	4.0 oz/a	PRE	A 109	90.0	99.0	60.0	44.53	
	CADET	0.91	EC	0.9 oz/a	POST	B 201	95.0	99.0	85.0	29.18	
	ROUNDUP POWERMAX	5.5	SL	22.0 oz/a	POST	B 311	65.0	99.0	65.0	38.33*	
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B 407	50.0	99.0	60.0	37.67	
							Mean =	75.0	99.0	67.5	37.43
3	ANTHEM MAXX	4.3	SE	4.0 oz/a	PRE	A 112	99.0	99.0	65.0	41.04	
	F9387-1	4	SC	3.0 oz/a	POST	B 209	99.0	99.0	55.0	47.00	
	ROUNDUP POWERMAX	5.5	SL	22.0 oz/a	POST	B 308	50.0	99.0	55.0	45.38	
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B 406	50.0	99.0	50.0	36.47	
							Mean =	74.5	99.0	56.3	42.47
4	ANTHEM MAXX	4.3	SE	4.0 oz/a	PRE	A 108	85.0	99.0	65.0	43.87	
	BALANCE FLEXX	2	SC	3.0 oz/a	PRE	A 206	50.0	99.0	65.0	50.69	
	CADET	0.91	EC	0.9 oz/a	POST	B 303	50.0	99.0	85.0	40.74	
	ROUNDUP POWERMAX	5.5	SL	22 oz/a	POST	B 409	50.0	99.0	55.0	42.25*	
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B					
							Mean =	58.8	99.0	67.5	44.39
5	ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A 103	50.0	99.0	85.0	43.83	
	BALANCE FLEXX	2	SC	3.0 oz/a	PRE	A 204	50.0	99.0	85.0	43.07	
	CADET	0.91	EC	0.9 oz/a	POST	B 312	85.0	99.0	60.0	42.00*	
	ROUNDUP POWERMAX	5.5	SL	22.0 oz/a	POST	B 402	50.0	99.0	80.0	35.47	
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B					
							Mean =	58.8	99.0	77.5	41.09
6	ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A 110	99.0	99.0	80.0	43.02	
	CADET	0.91	EC	0.9 oz/a	POST	B 212	85.0	99.0	50.0	47.20	
	ROUNDUP POWERMAX	5.5	SL	22 oz/a	POST	B 305	50.0	99.0	60.0	47.64	
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B 401	50.0	99.0	90.0	36.61	
							Mean =	71.0	99.0	70.0	43.62
7	ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A 101	9.0	99.0	95.0	32.81	
	F9387-1	4	SC	3.0 oz/a	POST	B 202	50.0	99.0	85.0	30.51	
	ROUNDUP POWERMAX	5.5	SL	22 oz/a	POST	B 301	50.0	99.0	90.0	36.64	
	AMS XTRA	3.4	SL	2.5 % v/v	POST	B 403	50.0	99.0	65.0	36.86	
							Mean =	39.8	99.0	83.8	34.21
8	ANTHEM ATZ	4.5	SE	2.0 pt/a	PRE	A 106	50.0	99.0	50.0	41.99	
	CADET	0.91	EC	0.9 oz/a	POST	B 208	75.0	99.0	65.0	46.30	
	LIBERTY 280 SL	2.34	SL	22.0 oz/a	POST	B 306	50.0	99.0	50.0	48.70	
							412	50.0	99.0	55.0	40.46
							Mean =	56.3	99.0	55.0	44.36

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	W Weed CASOB Senna obtusifol Sickle pod	W Weed AMAPA Amaranthus pal Palmer amaranth	AGRASS	W Weed ZEAMD BCOR Zea mays inden Dent corn
Pest Type				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Part Rated				
Rating Date	May-4-15	Jun-9-15	Jun-9-15	
Rating Type				
Rating Unit				
Sample Size, Unit				YIELD LBS/PLOT 1 PLOT
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	32 12	68 48	68 48	
Trt-Eval Interval	32 DA-A	68 DA-A	68 DA-A	
Plant-Eval Interval	33 DP-1	69 DP-1	69 DP-1	
ARM Action Codes				
Number of Decimals				2
Trt Treatment	Form Form	Rate	Growth	Appl
No. Name	Conc Type	Rate Unit	Stage	Code Plot
			14	15
			16	17
9 ATRAZINE	4 L	32.0 oz/a	PRE A	111
ATRAZINE	4 L	48.0 oz/a	POST B	207
ROUNDUP POWERMAX	5.5 SL	22.0 oz/a	POST B	309
				411
				Mean =
				85.0
				95.0
				50.0
				49.17
				85.0
				90.0
				65.0
				50.24
				65.0
				99.0
				50.0
				52.20
				85.0
				99.0
				65.0
				46.19
				80.0
				95.8
				57.5
				49.45
10 ATRAZINE	4 L	32.0 oz/a	PRE A	107
LIBERTY	2.34 SL	29.0 oz/a	POST B	205
ATRAZINE	4 SL	48.0 oz/a	POST B	307
				410
				Mean =
				99.0
				80.0
				65.0
				46.18
				50.0
				95.0
				65.0
				48.52
				65.0
				99.0
				50.0
				40.57
				65.0
				99.0
				50.0
				45.27
				66.0
				92.3
				57.5
				45.14
11 ATRAZINE	4 L	32.0 oz/a	PRE A	104
STEADFAST Q	37.7 WG	1.5 oz/a	POST B	210
ATRAZINE	4 L	48.0 oz/a	POST B	302
COC		1.0 % v/v	POST B	405
				Mean =
				85.0
				99.0
				65.0
				45.43
				85.0
				99.0
				60.0
				47.67
				50.0
				99.0
				60.0
				42.81
				65.0
				99.0
				65.0
				44.71
				71.3
				99.0
				62.5
				45.16
12 ATRAZINE	4 FL	32.0 oz/a	PRE A	105
CAPRENO	3.45 SL	3.0 oz/a	POST B	211
ATRAZINE	4 FL	48.0 oz/a	POST B	310
COC		1.0 % v/v	POST B	404
				Mean =
				85.0
				99.0
				75.0
				45.00
				85.0
				99.0
				60.0
				46.51
				50.0
				99.0
				60.0
				44.34
				50.0
				99.0
				65.0
				45.19
				67.5
				99.0
				65.0
				45.26

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							W Weed		
Pest Type									
Pest Code									
Pest Scientific Name									
Pest Name									
Crop Code				ZEAMD				ZEAMD	
BBCH Scale				BCOR				BCOR	
Crop Scientific Name				Zea mays inden>				Zea mays inden>	
Crop Name				Dent corn				Dent corn	
Part Rated									
Rating Date									
Rating Type									
Rating Unit							YIELD		
Sample Size, Unit							BU/A		
Number of Subsamples							1 A		
Days After First/Last Applic.							1		
Trt-Eval Interval									
Plant-Eval Interval									
ARM Action Codes							TY1		
Number of Decimals							0		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Growth Stage	Appl Code	Plot		
							18		
							19		
1	CHECK						102 203 304 408 Mean =	10.88 15.07 13.38 12.98 13.08	143 168 187 165 166
2	ANTHEM MAXX CADET ROUNDUP POWERMAX AMS XTRA	4.3 0.91 5.5 3.4	SE EC SL SL	4.0 oz/a 0.9 oz/a 22.0 oz/a 2.5 % v/v	PRE POST POST POST	A B B B	109 201 311 407 Mean =	13.88 11.85 12.17* 13.43 12.83	235 158 207* 200 200
3	ANTHEM MAXX F9387-1 ROUNDUP POWERMAX AMS XTRA	4.3 4 5.5 3.4	SE SC SL SL	4.0 oz/a 3.0 oz/a 22.0 oz/a 2.5 % v/v	PRE POST POST POST	A B B B	112 209 308 406 Mean =	18.29 11.81 12.88 13.40 14.10	206 254 243 194 224
4	ANTHEM MAXX BALANCE FLEXX CADET ROUNDUP POWERMAX AMS XTRA	4.3 2 0.91 5.5 3.4	SE SC EC SL SL	4.0 oz/a 3.0 oz/a 0.9 oz/a 22 oz/a 2.5 % v/v	PRE PRE POST POST POST	A A B B B	108 206 303 409 Mean =	13.24 13.81 11.51 12.78* 12.84	234 268 221 226* 237
5	ANTHEM ATZ BALANCE FLEXX CADET ROUNDUP POWERMAX AMS XTRA	4.5 2 0.91 5.5 3.4	SE SC EC SL SL	2.0 pt/a 3.0 oz/a 0.9 oz/a 22.0 oz/a 2.5 % v/v	PRE PRE POST POST POST	A A B B B	103 204 312 402 Mean =	12.85 13.27 11.78* 11.87 12.44	234 229 227* 192 221
6	ANTHEM ATZ CADET ROUNDUP POWERMAX AMS XTRA	4.5 0.91 5.5 3.4	SE EC SL SL	2.0 pt/a 0.9 oz/a 22 oz/a 2.5 % v/v	PRE POST POST POST	A B B B	110 212 305 401 Mean =	14.71 14.82 13.78 11.80 13.78	225 247 252 198 231
7	ANTHEM ATZ F9387-1 ROUNDUP POWERMAX AMS XTRA	4.5 4 5.5 3.4	SE SC SL SL	2.0 pt/a 3.0 oz/a 22 oz/a 2.5 % v/v	PRE POST POST POST	A B B B	101 202 301 403 Mean =	12.25 12.13 10.90 11.38 11.67	177 165 200 200 186
8	ANTHEM ATZ CADET LIBERTY 280 SL	4.5 0.91 2.34	SE EC SL	2.0 pt/a 0.9 oz/a 22.0 oz/a	PRE POST POST	A B B	106 208 306 412 Mean =	14.80 13.62 13.36 16.79 14.64	220 245 259 207 233

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Pest Type		W Weed
Pest Code		
Pest Scientific Name		
Pest Name		
Crop Code	ZEAMD	ZEAMD
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays inden>	Zea mays inden>
Crop Name	Dent corn	Dent corn
Part Rated		
Rating Date		
Rating Type		
Rating Unit	MOISTURE PERCENT	YIELD BU/A
Sample Size, Unit		1 A
Number of Subsamples	1	1
Days After First/Last Applic.		
Trt-Eval Interval		
Plant-Eval Interval		
ARM Action Codes		TY1
Number of Decimals	2	0
Trt Treatment	Form Form Rate Growth Appl	
No. Name	Conc Type Rate Unit Stage Code Plot	
		18
		19
9 ATRAZINE	4 L 32.0 oz/a PRE A 111	13.91 260
ATRAZINE	4 L 48.0 oz/a POST B 207	13.04 268
ROUNDUP POWERMAX	5.5 SL 22.0 oz/a POST B 309	12.12 282
	411	12.59 248
	Mean =	12.92 264
10 ATRAZINE	4 L 32.0 oz/a PRE A 107	13.43 245
LIBERTY	2.34 SL 29.0 oz/a POST B 205	12.69 260
ATRAZINE	4 SL 48.0 oz/a POST B 307	12.60 218
	410	14.18 238
	Mean =	13.23 240
11 ATRAZINE	4 L 32.0 oz/a PRE A 104	12.40 244
STEADFAST Q	37.7 WG 1.5 oz/a POST B 210	13.88 252
ATRAZINE	4 L 48.0 oz/a POST B 302	10.77 234
COC	1.0 % v/v POST B 405	12.59 240
	Mean =	12.41 243
12 ATRAZINE	4 FL 32.0 oz/a PRE A 105	13.13 240
CAPRENO	3.45 SL 3.0 oz/a POST B 211	12.64 249
ATRAZINE	4 FL 48.0 oz/a POST B 310	13.67 235
COC	1.0 % v/v POST B 404	12.48 243
	Mean =	12.98 242

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ANTHEM/ANTHEM ATZ TANK MIXES FOR WEED CONTROL IN FIELD CORN

Trial ID: CN-05-15 Location: Georgia Trial Year: 2015
 Protocol ID: Investigator: Eric P. Prostko
 Project ID: Study Director: Craig Heim
 Sponsor Contact:

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

AMAPA, Amaranthus palmeri, = US

CASOB, Senna obtusifolia, = US

Crop Code

ZEAMD, BCOR, Zea mays indentata, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent

PLOT = total plot

A = acre

Plant-Eval Interval

8 DP-1 = 1 ZEAMX Apr-1-15

21 DP-1 = 1 ZEAMX Apr-1-15

33 DP-1 = 1 ZEAMX Apr-1-15

69 DP-1 = 1 ZEAMX Apr-1-15

ARM Action Codes

TY1 = 5.185714*[17]*(100-@MVAVGREP([18]))/84.5