

University of Georgia

TOUGH VS. COBRA VS. ULTRA BLAZER FOR PALMER AMARANTH CONTROL
NON-CROP

Trial ID: NC-03-19 Study Dir.: DENNIS LONG
Location: PONDER FARM Investigator: Eric P. Prostko

Reps: 3 Plots: 6 by 40 feet
Appl. Amount: 15 GAL/AC Mix Size: 1.5 L (total for 3 plots; minimum=0.9385 L)

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Grow Stg	Appl Code	Amt Product to Measure	Diluent	Rep 1	Rep 2	Rep 3
1	NTC								-	101	204	303
2	COBRA 2,4-DB AGRIDEX	2 EC 1.75 SL		12.5 oz/a 16.0 oz/a 1.0 % v/v		POST A POST A POST A		9.765 mL/mx 12.5 mL/mx 15.0 mL/mx	1462.7 mL	102	201	304
3	ULTRA BLAZER 2,4-DB AGRIDEX	2 EC 1.75 SL		24.0 oz/a 16.0 oz/a 1.0 % v/v		POST A POST A POST A		18.75 mL/mx 12.5 mL/mx 15.0 mL/mx	1453.8 mL	103	202	301
4	TOUGH 2,4-DB AGRIDEX	5 EC 1.75 SL		8.0 oz/a 16.0 oz/a 1.0 % v/v		POST A POST A POST A		6.249 mL/mx 12.5 mL/mx 15.0 mL/mx	1466.3 mL	104	203	302

Sort Order: Treatment

Trial Comments

LAST TILLAGE ON MAY 15

SELECT MAX 12 OZ/A + INDUCE 0.25% (5/30/2019)

SUMMARY:

1) AT ALL RATINGS, TOUGH WAS LESS EFFECTIVE THAN COBRA OR ULTRA BLAZER IN CONTROLLING PALMER AMARANTH.

2) NO DIFFERENCE IN PALMER AMARANTH CONTROL BETWEEN COBRA OR ULTRA BLAZER AT 2 OR 6 DAT. HOWEVER, PALMER AMARANTH CONTROL WITH COBRA WAS BETTER THAN ULTRA BLAZER AT 14 DAT.

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WEED STAGE AT EACH APPLICATION							
		A	B	C	D	E	F
Weed 1	Stage: AMAPA 1-5 IN	_____	_____	_____	_____	_____	_____
Stage Scale:		_____	_____	_____	_____	_____	_____
Density, Unit:		_____	_____	_____	_____	_____	_____

		APPLICATION EQUIPMENT					
		A	B	C	D	E	F
Appl. Equipment:	BACKPACK	_____	_____	_____	_____	_____	_____
Operating Pressure:	38	_____	_____	_____	_____	_____	_____
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
_____	_____

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NON-CROP										
Trial ID:		NC-03-19		Study Dir.:		DENNIS LONG				
Location:		PONDER FARM		Investigator:		Eric P. Prostko				
Weed Code						Amapa	Amapa	Amapa		
Rating Data Type						Control	Control	Control		
Rating Unit						Percent	Percent	Percent		
Rating Date						May-30-19	Jun-3-19	Jun-11-19		
Trt-Eval Interval						2 DA-A	6 DA-A	14 DA-A		
Trt	Treatment	Form	Form	Rate	Grow	Appl				
No.	Name	Conc	Type	Rate	Unit	Stg	Code	1	2	3
1	NTC							0.0 c	0.0 c	0.0 d
2	COBRA	2	EC	12.5	oz/a	POST	A	95.0 a	95.0 a	86.7 a
	2,4-DB	1.75	SL	16.0	oz/a	POST	A			
	AGRIDEX			1.0	% v/v	POST	A			
3	ULTRA BLAZER	2	EC	24.0	oz/a	POST	A	93.3 a	88.3 a	66.7 b
	2,4-DB	1.75	SL	16.0	oz/a	POST	A			
	AGRIDEX			1.0	% v/v	POST	A			
4	TOUGH	5	EC	8.0	oz/a	POST	A	53.3 b	53.3 b	16.7 c
	2,4-DB	1.75	SL	16.0	oz/a	POST	A			
	AGRIDEX			1.0	% v/v	POST	A			
LSD P=.10								5.76	7.00	4.58
Standard Deviation								3.63	4.41	2.89
CV								6.01	7.45	6.79
Grand Mean								60.42	59.17	42.50
Bartlett's X2								0.84	0.00	1.248
P(Bartlett's X2)								0.359	.	0.536

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.

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Trial ID:	NC-03-19	Study Dir.:	DENNIS LONG
Location:	PONDER FARM	Investigator:	Eric P. Prostko

Randomized Complete Block (RCB) AOV For Amapa Control Percent May-30-19 2 DA-A (Data Column 1)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	11	18022.916667			
Replicate	2	4.166667	2.083333	0.158	0.8574
Treatment	3	17939.583333	5979.861111	453.211	0.0001
Error	6	79.166667	13.194444		

Randomized Complete Block (RCB) AOV For Amapa Control Percent Jun-3-19 6 DA-A (Data Column 2)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	11	17141.666667			
Replicate	2	16.666667	8.333333	0.429	0.6699
Treatment	3	17008.333333	5669.444444	291.571	0.0001
Error	6	116.666667	19.444444		

Randomized Complete Block (RCB) AOV For Amapa Control Percent Jun-11-19 14 DA-A (Data Column 3)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	11	15125.000000			
Replicate	2	50.000000	25.000000	3.000	0.1250
Treatment	3	15025.000000	5008.333333	601.000	0.0001
Error	6	50.000000	8.333333		

Weed Code Amapa = AMARANTH, PALMER / AMARANTHUS PALMERI S.WATS.

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Trial ID:	NC-03-19	Study Dir.:	DENNIS LONG
Location:	PONDER FARM	Investigator:	Eric P. Prostko

Weed Code	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	Amapa Control Percent	Amapa Control Percent	Amapa Control Percent	
					May-30-19 2 DA-A	Jun-3-19 6 DA-A	Jun-11-19 14 DA-A	
Trt Treatment	Form	Form	Rate	Grow	Appl			
No. Name	Conc	Type	Rate Unit	Stg	Code Plot	1	2	3
1 NTC					101	0.0	0.0	0.0
					204	0.0	0.0	0.0
					303	0.0	0.0	0.0
					Mean =	0.0	0.0	0.0
2 COBRA	2 EC		12.5 oz/a	POST	A 102	95.0	95.0	85.0
2,4-DB	1.75 SL		16.0 oz/a	POST	A 201	95.0	95.0	85.0
AGRIDEX			1.0 % v/v	POST	A 304	95.0	95.0	90.0
					Mean =	95.0	95.0	86.7
3 ULTRA BLAZER	2 EC		24.0 oz/a	POST	A 103	90.0	85.0	65.0
2,4-DB	1.75 SL		16.0 oz/a	POST	A 202	95.0	85.0	65.0
AGRIDEX			1.0 % v/v	POST	A 301	95.0	95.0	70.0
					Mean =	93.3	88.3	66.7
4 TOUGH	5 EC		8.0 oz/a	POST	A 104	60.0	60.0	20.0
2,4-DB	1.75 SL		16.0 oz/a	POST	A 203	50.0	50.0	10.0
AGRIDEX			1.0 % v/v	POST	A 302	50.0	50.0	20.0
					Mean =	53.3	53.3	16.7

Weed Code
 Amapa = AMARANTH, PALMER / AMARANTHUS PALMERI S.WATS.