

# LSU Northeast Research Station

## EVALUATE BAS 800 H FOR BURNDOWN WEED SPECTRUM IN COTTON

### GENERAL TRIAL INFORMATION

Study Director: BASF  
Investigator: Donnie Miller  
TRIAL LOCATION: ST. JOSEPH, LA

### CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1. POAAN	Annual bluegrass	Poa annua
2. LAMAM	Henbit	Lamium amplexicaule
3. OEOLA	Eveningprimrose, cutleaf	Oenothera laciniata
4. COPSS	Swinecress	Coronopus sp.
5. AMARE	Carelessweed	Amaranthus retroflexus
6. CASOB	Sickle pod	Cassia obtusifolia
7. DIGSA	Crabgrass, large	Digitaria sanguinalis
8. ECHCG	Barnyardgrass, common	Echinochloa crus-galli
9. ANVCR	Anoda, spurred	Anoda cristata
10. SEBEX	Coffeebean	Sesbania exaltata
11. IPOLA	Morningglory, pitted	Ipomoea lacunosa
12. IPOHG	Morningglory, entireleaf	Ipomoea hederacea integriuscul

Crop 1: GOSHI COTTON  
Variety: ST4554B2RF  
Planting Date: 16/Apr/2008

### SITE AND DESIGN

Plot Width, Unit: 6.67 FT  
Plot Length, Unit: 25 FT  
Reps: 4  
Study Design: RANDOMIZED COMPLETE BLOCK

### SOIL DESCRIPTION

% Sand: 50      % OM: 1.0  
% Silt: 28      pH: 6.5  
% Clay: 22      CEC: 12.8  
Texture: SILT LOAM

### APPLICATION DESCRIPTION

A  
Application Date: 28/Mar/2008  
Time of Day: 9:40 AM  
Application Method: SPRAY  
Application Timing: EARPRE  
Applic. Placement: BROFOL  
Air Temp., Unit: 71 F  
% Relative Humidity: 78  
Wind Velocity, Unit: 8.6 MPH  
Dew Presence (Y/N): N  
Water Hardness: N  
Soil Temp., Unit: 66 F  
Soil Moisture: DRY  
% Cloud Cover: 100

### WEED STAGE AT EACH APPLICATION

A  
Weed 1 Code, Stage: POAAN 4-5" DIA  
Weed 2 Code, Stage: LAMAM 3-4"  
Weed 3 Code, Stage: OEOLA 3-5" DIA  
Weed 4 Code, Stage: COPSS 3-4" DIA  
Weed 5 Code, Stage: AMARE n/a  
Weed 6 Code, Stage: CASOB n/a  
Weed 7 Code, Stage: DIGSA n/a  
Weed 8 Code, Stage: ECHCG n/a  
Weed 9 Code, Stage: ANVCR n/a  
Weed10 Code, Stage: SEBEX n/a  
Weed11 Code, Stage: IPOLA n/a  
Weed12 Code, Stage: IPOHG n/a

# APPLICATION EQUIPMENT

A

Appl. Equipment: CO2 BCPCCK  
Operating Pressure: 34 psi  
Nozzle Type: DG  
Nozzle Size: 11002  
Nozzle Spacing, Unit: 20 IN  
Nozzles/Row: 2  
Ground Speed, Unit: 3.2 MPH  
Carrier: WATER  
Spray Volume, Unit: 15 GPA

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Weed Code			POAAN	LAMAM	OEOLA	COPSS	CAPBP	POAAN	LAMAM	OEOLA	COPSS
Crop Code			CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Data Type			%	%	%	%	%	%	%	%	%
Rating Unit											
Rating Date			11/Apr/2008	11/Apr/2008	11/Apr/2008	11/Apr/2008	11/Apr/2008	25/Apr/2008	25/Apr/2008	25/Apr/2008	25/Apr/2008
Trt-Eval Interval			14 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A
Trt Treatment	Rate	Appl Code									
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8	9
1 ROUNDUP POWERMAX	21.3 oz/a	A	100.00 a	100.00 a	85.00 a	90.00 ab	100.00 a	100.00 a	100.00 a	88.75 a	97.50 ab
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	1 % w/v	A									
2 ROUNDUP POWERMAX	21.3 oz/a	A	100.00 a	100.00 a	92.50 a	86.25 abc	97.20 ab	100.00 a	100.00 a	93.75 a	93.75 b
BAS 8000 4H	1 oz/a	A									
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	1 % w/v	A									
3 ROUNDUP POWERMAX	21.3 oz/a	A	100.00 a	100.00 a	95.00 a	87.50 abc	96.25 ab	100.00 a	100.00 a	96.25 a	95.00 ab
BAS 8000 4H	0.72 oz/a	A									
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	1 % w/v	A									
4 ROUNDUP POWERMAX	21.3 oz/a	A	100.00 a	100.00 a	100.00 a	77.50 c	92.20 bc	100.00 a	100.00 a	100.00 a	93.75 b
CLARITY	8 oz/a	A									
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	1 % w/v	A									
5 ROUNDUP POWERMAX	21.3 oz/a	A	100.00 a	100.00 a	92.50 a	83.75 abc	97.50 ab	100.00 a	100.00 a	95.00 a	100.00 a
BAS 8000 4H	1 oz/a	A									
CLARITY	8 oz/a	A									
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	1 % w/v	A									
6 ROUNDUP POWERMAX	21.3 oz/a	A	100.00 a	100.00 a	100.00 a	80.00 bc	97.50 ab	100.00 a	100.00 a	100.00 a	95.00 ab
BAS 8000 4H	0.72 oz/a	A									
CLARITY	8 oz/a	A									
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	1 % w/v	A									
7 ROUNDUP POWERMAX	21.3 oz/a	A	100.00 a	100.00 a	100.00 a	83.75 abc	98.87 ab	100.00 a	100.00 a	100.00 a	100.00 a
BAS 8000 4H	1 oz/a	A									
2,4-D Amine	16.9 oz/a	A									
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	1 % w/v	A									
8 ROUNDUP POWERMAX	21.3 oz/a	A	100.00 a	100.00 a	100.00 a	91.25 a	100.00 a	100.00 a	100.00 a	97.50 a	100.00 a
BAS 8000 4H	1 oz/a	A									
HARMONY EXTRA	0.495 oz wt/a	A									
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	1 % w/v	A									
9 ROUNDUP POWERMAX	21.3 oz/a	A	100.00 a	100.00 a	92.50 a	78.75 c	87.50 c	100.00 a	100.00 a	97.50 a	98.75 ab
2,4-D Amine	16.9 oz/a	A									
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	1 % w/v	A									
10 NONTREATED			0.00 b	0.00 b	0.00 b	0.00 d	0.00 d	0.00 b	0.00 b	0.00 b	0.00 c
LSD (P=.05)			0.000	0.000	15.288	10.983	6.780	0.000	0.000	12.025	6.146
Standard Deviation			0.000	0.000	10.537	7.569	4.646	0.000	0.000	8.287	4.236
CV			0.0	0.0	12.29	9.98	5.36	0.0	0.0	9.54	4.85
Grand Mean			90.0	90.0	85.75	75.88	86.7	90.0	90.0	86.88	87.38
Bartlett's X2			0.0	0.0	1.128	5.416	3.451	0.0	0.0	7.907	7.201
P(Bartlett's X2)			.	.	0.89	0.712	0.631	.	.	0.161	0.206
Replicate F			0.000	0.000	1.284	0.273	3.171	0.000	0.000	1.708	0.871
Replicate Prob(F)			1.0000	1.0000	0.3000	0.8445	0.0426	1.0000	1.0000	0.1890	0.4682
Treatment F			0.000	0.000	33.580	51.104	174.717	0.000	0.000	54.970	211.622
Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001	0.0001	1.0000	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Weed Code		CAPBP	AMARE	CASOB	DIGSA	ECHCG	ANVCR	SEBEX	IPOLA	IPOHG		
Crop Code				GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI		
Rating Data Type		CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL		
Rating Unit		%	%	%	%	%	%	%	%	%		
Rating Date		25/Apr/2008	19/May/2008	19/May/2008	19/May/2008	19/May/2008	19/May/2008	19/May/2008	19/May/2008	19/May/2008		
Trt-Eval Interval		28 DA-A	14 DAE	14 DAE	14 DAE	14 DAE	14 DAE	14 DAE	14 DAE	14 DAE		
Trt Treatment	Rate	Unit	Appl Code	10	11	12	13	14	15	16	17	18
No. Name	Rate	Unit	Appl Code	10	11	12	13	14	15	16	17	18
1 ROUNDUP POWERMAX	21.3	oz/a	A	100.00 a	77.50 ab	45.00 a	27.50 a	27.50 b	80.00 ab	70.00 ab	68.75 b	78.75 b
AGRIDEX	1	% v/v	A									
AMMONIUM SULFATE	1	% w/v	A									
2 ROUNDUP POWERMAX	21.3	oz/a	A	100.00 a	87.50 ab	60.00 a	28.75 a	28.75 ab	76.25 ab	76.25 ab	91.25 a	90.00 a
BAS 8000 4H	1	oz/a	A									
AGRIDEX	1	% v/v	A									
AMMONIUM SULFATE	1	% w/v	A									
3 ROUNDUP POWERMAX	21.3	oz/a	A	100.00 a	91.25 ab	65.00 a	27.50 a	27.50 b	71.25 ab	76.25 ab	85.00 a	91.25 a
BAS 8000 4H	0.72	oz/a	A									
AGRIDEX	1	% v/v	A									
AMMONIUM SULFATE	1	% w/v	A									
4 ROUNDUP POWERMAX	21.3	oz/a	A	100.00 a	76.25 b	62.50 a	36.25 a	37.50 ab	78.75 ab	52.50 b	85.00 a	86.25 ab
CLARITY	8	oz/a	A									
AGRIDEX	1	% v/v	A									
AMMONIUM SULFATE	1	% w/v	A									
5 ROUNDUP POWERMAX	21.3	oz/a	A	100.00 a	88.75 ab	48.75 a	58.75 a	51.25 a	65.00 b	71.25 ab	90.00 a	88.75 a
BAS 8000 4H	1	oz/a	A									
CLARITY	8	oz/a	A									
AGRIDEX	1	% v/v	A									
AMMONIUM SULFATE	1	% w/v	A									
6 ROUNDUP POWERMAX	21.3	oz/a	A	100.00 a	92.50 a	57.50 a	33.75 a	31.25 ab	80.00 ab	73.75 ab	85.00 a	87.50 ab
BAS 8000 4H	0.72	oz/a	A									
CLARITY	8	oz/a	A									
AGRIDEX	1	% v/v	A									
AMMONIUM SULFATE	1	% w/v	A									
7 ROUNDUP POWERMAX	21.3	oz/a	A	100.00 a	91.25 ab	48.75 a	33.75 a	35.00 ab	86.25 a	65.00 ab	88.75 a	93.75 a
BAS 8000 4H	1	oz/a	A									
2,4-D Amine	16.9	oz/a	A									
AGRIDEX	1	% v/v	A									
AMMONIUM SULFATE	1	% w/v	A									
8 ROUNDUP POWERMAX	21.3	oz/a	A	100.00 a	88.75 ab	66.25 a	35.25 a	35.00 ab	83.75 a	73.75 ab	90.00 a	93.75 a
BAS 8000 4H	1	oz/a	A									
HARMONY EXTRA	0.495	oz wt/a	A									
AGRIDEX	1	% v/v	A									
AMMONIUM SULFATE	1	% w/v	A									
9 ROUNDUP POWERMAX	21.3	oz/a	A	100.00 a	81.25 ab	62.50 a	30.00 a	27.50 b	62.50 b	80.00 a	86.25 a	92.50 a
2,4-D Amine	16.9	oz/a	A									
AGRIDEX	1	% v/v	A									
AMMONIUM SULFATE	1	% w/v	A									
10 NONTREATED				0.00 b	0.00 c	0.00 b	0.00 a	0.00 c	0.00 c	0.00 c	0.00 c	0.00 c
LSD (P=.05)				0.000	15.876	26.505	29.107	23.034	18.262	24.355	8.189	8.962
Standard Deviation				0.000	10.942	18.267	20.060	15.875	12.586	16.785	5.644	6.176
CV				0.0	14.12	35.38	64.4	52.7	18.41	26.28	7.33	7.7
Grand Mean				90.0	77.5	51.63	31.15	30.13	68.38	63.88	77.0	80.25
Bartlett's X2				0.0	16.34	6.439	9.681	7.538	11.843	2.525	7.649	14.356
P(Bartlett's X2)				.	0.038*	0.598	0.288	0.48	0.158	0.961	0.468	0.073
Replicate F				0.000	0.432	0.821	1.830	3.375	11.978	0.606	5.390	0.721
Replicate Prob(F)				1.0000	0.7321	0.4937	0.1654	0.0328	0.0001	0.6171	0.0049	0.5483
Treatment F				0.000	25.905	4.608	2.013	2.609	16.064	7.988	97.029	85.442
Treatment Prob(F)				1.0000	0.0001	0.0009	0.0775	0.0260	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

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

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Weed Code  
 Crop Code GOSHI  
 Rating Data Type INJURY  
 Rating Unit %  
 Rating Date 19/May/2008  
 Trt-Eval Interval 14 DAE

Trt	Treatment	Rate	Unit	Appl	Code	19
1	ROUNDUP POWERMAX	21.3	oz/a	A		8.75 a
	AGRIDEX	1	% v/v	A		
	AMMONIUM SULFATE	1	% w/v	A		
2	ROUNDUP POWERMAX	21.3	oz/a	A		3.75 a
	BAS 8000 4H	1	oz/a	A		
	AGRIDEX	1	% v/v	A		
	AMMONIUM SULFATE	1	% w/v	A		
3	ROUNDUP POWERMAX	21.3	oz/a	A		10.00 a
	BAS 8000 4H	0.72	oz/a	A		
	AGRIDEX	1	% v/v	A		
	AMMONIUM SULFATE	1	% w/v	A		
4	ROUNDUP POWERMAX	21.3	oz/a	A		12.50 a
	CLARITY	8	oz/a	A		
	AGRIDEX	1	% v/v	A		
	AMMONIUM SULFATE	1	% w/v	A		
5	ROUNDUP POWERMAX	21.3	oz/a	A		5.00 a
	BAS 8000 4H	1	oz/a	A		
	CLARITY	8	oz/a	A		
	AGRIDEX	1	% v/v	A		
	AMMONIUM SULFATE	1	% w/v	A		
6	ROUNDUP POWERMAX	21.3	oz/a	A		7.50 a
	BAS 8000 4H	0.72	oz/a	A		
	CLARITY	8	oz/a	A		
	AGRIDEX	1	% v/v	A		
	AMMONIUM SULFATE	1	% w/v	A		
7	ROUNDUP POWERMAX	21.3	oz/a	A		11.25 a
	BAS 8000 4H	1	oz/a	A		
	2,4-D Amine	16.9	oz/a	A		
	AGRIDEX	1	% v/v	A		
	AMMONIUM SULFATE	1	% w/v	A		
8	ROUNDUP POWERMAX	21.3	oz/a	A		7.50 a
	BAS 8000 4H	1	oz/a	A		
	HARMONY EXTRA	0.495	oz wt/a	A		
	AGRIDEX	1	% v/v	A		
	AMMONIUM SULFATE	1	% w/v	A		
9	ROUNDUP POWERMAX	21.3	oz/a	A		6.25 a
	2,4-D Amine	16.9	oz/a	A		
	AGRIDEX	1	% v/v	A		
	AMMONIUM SULFATE	1	% w/v	A		
10	NONTREATED					0.00 a
LSD (P=.05)						7.736
Standard Deviation						5.332
CV						73.54
Grand Mean						7.25
Bartlett's X2						6.119
P(Bartlett's X2)						0.634
Replicate F						3.313
Replicate Prob(F)						0.0349
Treatment F						1.945
Treatment Prob(F)						0.0878

Means followed by same letter do not significantly differ (P=.05, LSD)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.