

# LSU Northeast Research Station

## DEMONSTRATE BAS 800H AND BAS 804H APPLIED PREPLANT BURNDOWN TO SOYBEANS

### 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. POAN	Annual bluegrass	Poa annua
2. CAPBP	Shepherd's purse	Capsella bursa-pastoris
3. LAMAM	Henbit	Lamium amplexicaule
4. COPSS	Swinecress	Coronopus sp.
5. IPOHG	Entireleaf morningglory	
6. IPOLA	Pitted morningglory	
7. AMARE	Redroot pigweed	
8. SEBEX	Hemp sesbania	
9. ECHCG	Barnyardgrass	

Crop 1: GLXMA SOYBEAN  
Variety: DP4919STS  
Planting Date: 9/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: 8 % OM: 0.75  
% Silt: 49 pH: 5.8  
% Clay: 43 CEC: 17.3  
Texture: SILTY CLAY LOAM

### APPLICATION DESCRIPTION

	A	B
Application Date:	13/Mar/2008	13/May/2008
Time of Day:	11:05 AM	12:00 PM
Application Method:	SPRAY	SPRAY
Application Timing:	EAPRE	
Applic. Placement:	BROPOL	BROPOL
Air Temp., Unit:	65 F	
% Relative Humidity:	55	
Wind Velocity, Unit:	12.1 MPH	
Dew Presence (Y/N):	N	
Water Hardness:	N	
Soil Temp., Unit:	57 F	
Soil Moisture:	MOIST	
% Cloud Cover:	0	

### CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	GLXMA N/A	GLXMA

### WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	POAN 4-5"	POAN
Weed 2 Code, Stage:	CAPBP 8-10"	CAPBP
Weed 3 Code, Stage:	LAMAM 4-5"	LAMAM
Weed 4 Code, Stage:	COPSS 1-4"DIA	COPSS
Weed 5 Code, Stage:	IPOHG	IPOHG
Weed 6 Code, Stage:	IPOLA	IPOLA
Weed 7 Code, Stage:	AMARE	AMARE
Weed 8 Code, Stage:	SEBEX	SEBEX
Weed 9 Code, Stage:	ECHCG	ECHCG

### APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	CO2 BCPCCK	TRACTOR
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	CAPBP	COPSS	LAMAM	POAAN	CAPBP	COPSS	LAMAM	POAAN
Crop Code											
Rating Data Type			CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit			%	%	%	%	%	%	%	%	%
Rating Date			24/Mar/2008	24/Mar/2008	24/Mar/2008	24/Mar/2008	31/Mar/2008	31/Mar/2008	31/Mar/2008	31/Mar/2008	9/Apr/2008
Trt-Eval Interval			11 DA-A	11 DA-A	11 DA-A	11 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	27 DA-A
Trt Treatment	Rate	Appl Code									
No. Name	Unit		1	2	3	4	5	6	7	8	9
1 BAS 8000 4H	1 oz/a	A	61.25 b	88.75 b	95.00 b	95.00 b	75.00 b	90.00 b	100.00 a	100.00 a	80.00 b
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
2 ROUNDUP POWERMAX	21.3 oz/a	A	100.00 a	93.75 ab	100.00 a	100.00 a	100.00 a	100.00 a	100.00 a	100.00 a	100.00 a
NIS	0.25 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
3 ROUNDUP POWERMAX	21.3 oz/a	A	100.00 a	95.00 a	100.00 a	100.00 a	100.00 a	100.00 a	100.00 a	100.00 a	100.00 a
BARRAGE	12.8 oz/a	A									
NIS	0.25 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
4 BAS 8000 4H	1 oz/a	A	100.00 a	95.00 a	100.00 a	100.00 a	100.00 a	100.00 a	100.00 a	100.00 a	100.00 a
ROUNDUP POWERMAX	21.3 oz/a	A									
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
5 BAS 80400 H	2 oz wt/a	A	100.00 a	93.75 ab	100.00 a	100.00 a	100.00 a	100.00 a	100.00 a	100.00 a	100.00 a
ROUNDUP POWERMAX	21.3 oz/a	A									
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
6 BAS 8000 4H	1 oz/a	A	100.00 a	97.50 a	100.00 a	100.00 a	100.00 a	100.00 a	100.00 a	100.00 a	100.00 a
Scepter	2.8 oz wt/a	A									
ROUNDUP POWERMAX	21.3 oz/a	A									
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
7 NONTREATED			0.00 c	0.00 c	0.00 c	0.00 c	0.00 c	0.00 c	0.00 b	0.00 b	0.00 c
LSD (P=.05)			1.404	5.294	0.000	0.000	2.292	2.292	0.000	0.000	4.585
Standard Deviation			0.945	3.563	0.000	0.000	1.543	1.543	0.000	0.000	3.086
CV			1.18	4.42	0.0	0.0	1.88	1.83	0.0	0.0	3.72
Grand Mean			80.18	80.54	85.0	85.0	82.14	84.29	85.71	85.71	82.86
Bartlett's X2			0.0	1.804	0.0	0.0	0.0	0.0	0.0	0.0	0.0
P(Bartlett's X2)			.	0.772	.	.	.	.	.	.	.
Replicate F			1.000	0.070	0.000	0.000	1.000	1.000	0.000	0.000	1.000
Replicate Prob(F)			0.4155	0.9751	1.0000	1.0000	0.4155	0.4155	1.0000	1.0000	0.4155
Treatment F			6534.334	399.469	0.000	0.000	2350.000	2344.000	0.000	0.000	584.000
Treatment Prob(F)			0.0001	0.0001	1.0000	1.0000	0.0001	0.0001	1.0000	1.0000	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	COPSS	LAMAM	IPOHG	POAAN	AMARE	CAPBP	SEBEX	COPSS
Crop Code			CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Data Type			%	%	%	%	%	%	%	%	%
Rating Unit											
Rating Date			9/Apr/2008	9/Apr/2008	9/Apr/2008	12/May/2008	12/May/2008	12/May/2008	12/May/2008	12/May/2008	12/May/2008
Trt-Eval Interval			27 DA-A	27 DA-A	27 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A
Trt Treatment	Rate	Appl Code									
No. Name	Unit		10	11	12	13	14	15	16	17	18
1 BAS 8000 4H	1 oz/a	A	92.50 b	100.00 a	100.00 a	81.25 a	100.00 a	93.75 a	100.00 a	88.75 a	100.00 a
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
2 ROUNDUP POWERMAX	21.3 oz/a	A	100.00 a	100.00 a	100.00 a	80.00 a	100.00 a	93.75 a	100.00 a	92.50 a	100.00 a
NIS	0.25 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
3 ROUNDUP POWERMAX	21.3 oz/a	A	100.00 a	100.00 a	100.00 a	85.00 a	100.00 a	93.75 a	100.00 a	95.00 a	100.00 a
BARRAGE	12.8 oz/a	A									
NIS	0.25 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
4 BAS 8000 4H	1 oz/a	A	100.00 a	100.00 a	100.00 a	86.25 a	100.00 a	100.00 a	100.00 a	98.75 a	100.00 a
ROUNDUP POWERMAX	21.3 oz/a	A									
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
5 BAS 80400 H	2 oz wt/a	A	100.00 a	100.00 a	100.00 a	86.25 a	100.00 a	100.00 a	100.00 a	95.00 a	100.00 a
ROUNDUP POWERMAX	21.3 oz/a	A									
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
6 BAS 8000 4H	1 oz/a	A	100.00 a	100.00 a	100.00 a	91.25 a	100.00 a	100.00 a	100.00 a	100.00 a	100.00 a
Scepter	2.8 oz wt/a	A									
ROUNDUP POWERMAX	21.3 oz/a	A									
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
7 NONTREATED			0.00 c	0.00 b	0.00 b	0.00 b	0.00 b	0.00 b	0.00 b	0.00 b	0.00 b
LSD (P=.05)			1.621	0.000	0.000	15.364	0.000	8.239	0.000	13.260	0.000
Standard Deviation			1.091	0.000	0.000	10.341	0.000	5.546	0.000	8.925	0.000
CV			1.29	0.0	0.0	14.19	0.0	6.68	0.0	10.96	0.0
Grand Mean			84.64	85.71	85.71	72.86	85.71	83.04	85.71	81.43	85.71
Bartlett's X2			0.0	0.0	0.0	6.14	0.0	0.196	0.0	9.118	0.0
P(Bartlett's X2)			.	.	.	0.293	.	0.907	.	0.058	.
Replicate F			1.000	0.000	0.000	1.714	0.000	1.655	0.000	2.421	0.000
Replicate Prob(F)			0.4155	1.0000	1.0000	0.1998	1.0000	0.2122	1.0000	0.0995	1.0000
Treatment F			4707.000	0.000	0.000	39.111	0.000	175.645	0.000	65.443	0.000
Treatment Prob(F)			0.0001	1.0000	1.0000	0.0001	1.0000	0.0001	1.0000	0.0001	1.0000

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.

# LSU Northeast Research Station

Weed Code	ECHCG	LAMAM	IPOLA	IPOHG	IPOLA	AMARE	SEBEX	ECHCG	GLXMA		
Crop Code											
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL		
Rating Unit	%	%	%	%	%	%	%	%	%		
Rating Date	12/May/2008	12/May/2008	12/May/2008	11/Jun/2008	11/Jun/2008	11/Jun/2008	11/Jun/2008	11/Jun/2008	11/Jun/2008		
Trt-Eval Interval	60 DA-A	60 DA-A	60 DA-A	30 DA-B	30 DA-B	30 DA-B	30 DA-B	30 DA-B	30 DA-B		
Trt Treatment	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate		
No. Name	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit		
1 BAS 8000 4H	1 oz/a	A	93.75 a	100.00 a	98.75 a	86.25 a	96.25 ab	97.50 b	96.25 bc	87.50 a	0.00 a
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
2 ROUNDUP POWERMAX	21.3 oz/a	A	93.75 a	100.00 a	100.00 a	91.25 a	98.75 ab	98.75 ab	95.00 c	90.00 a	0.00 a
NIS	0.25 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
3 ROUNDUP POWERMAX	21.3 oz/a	A	78.75 a	98.75 a	91.25 b	93.75 a	93.75 b	100.00 a	98.75 ab	92.50 a	0.00 a
BARRAGE	12.8 oz/a	A									
NIS	0.25 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
4 BAS 8000 4H	1 oz/a	A	78.75 a	100.00 a	96.25 ab	91.25 a	100.00 a	100.00 a	98.75 ab	81.25 a	0.00 a
ROUNDUP POWERMAX	21.3 oz/a	A									
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
5 BAS 80400 H	2 oz wt/a	A	93.75 a	100.00 a	97.50 ab	91.25 a	100.00 a	100.00 a	98.75 ab	91.25 a	0.00 a
ROUNDUP POWERMAX	21.3 oz/a	A									
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
6 BAS 8000 4H	1 oz/a	A	85.00 a	100.00 a	100.00 a	90.00 a	100.00 a	100.00 a	100.00 a	85.00 a	0.00 a
Scepter	2.8 oz wt/a	A									
ROUNDUP POWERMAX	21.3 oz/a	A									
AGRIDEX	1 % v/v	A									
AMMONIUM SULFATE	17 lb/100 gal	A									
ROUNDUP POWERMAX	21.3 oz/a	B									
NIS	0.25 % v/v	B									
AMMONIUM SULFATE	17 lb/100 gal	B									
7 NONTREATED			0.00 b	0.00 b	0.00 c	0.00 b	0.00 c	0.00 c	0.00 d	0.00 b	0.00 a
LSD (P=.05)			16.497	1.404	6.941	9.110	5.253	2.040	2.647	12.755	0.000
Standard Deviation			11.105	0.945	4.672	6.132	3.536	1.373	1.782	8.585	0.000
CV			14.84	1.1	5.6	7.89	4.2	1.61	2.12	11.39	0.0
Grand Mean			74.82	85.54	83.39	77.68	84.11	85.18	83.93	75.36	0.0
Bartlett's X2			12.557	0.0	7.296	0.75	3.029	0.06	0.0	3.8	0.0
P(Bartlett's X2)			0.028*	.	0.063	0.98	0.22	0.806	1.00	0.579	.
Replicate F			0.741	1.000	0.586	0.594	0.833	1.737	1.875	0.727	0.000
Replicate Prob(F)			0.5414	0.4155	0.6317	0.6272	0.4929	0.1953	0.1700	0.5492	1.0000
Treatment F			36.804	6374.334	249.491	125.359	441.952	2995.737	1729.500	60.731	0.000
Treatment Prob(F)			0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	1.0000

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.