

Northeast Research & Extension Center

2008 BAS 800H Soybean Preplant Burndown Pursuit Rate Tritation

Trial ID: 33 08 BASD91D SBBDPURS Protocol ID: 08 BAS D91D SB BD PURS
Location: Concord, NE Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

General Trial Information

Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

Trial Location

City: Concord
State/Prov.: NE
Postal Code: 68728
Country: USA

Cooperator/Landowner

Cooperator: Haskell Agricultural Laboratory Country: USA
Organization: University of Nebraska Phone No: 402-584-2261
Address 1: 57905 866 RD Fax No: 402-584-3859
City: Concord
State/Prov: NE
Postal Code: 68728

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: Kruger K245 RR SCN LINO Description: Rows 1 2 3 odd 4 5 6 on even
BBCH Scale: BSOY Planting Date: 06-01-08
Planting Method: seeded Rate, Unit: 196000 s/a
Depth, Unit: 1.25 in
Row Spacing, Unit: 30 in
Crop 2: GLXMA Glycine max Soybean
Variety: Asgrow DKB 27-52 RR Description: Rows 4 5 6 odd 1 2 3 on even
BBCH Scale: BSOY Planting Date: 06-01-08
Planting Method: seeded Rate, Unit: 196000 s/a
Depth, Unit: 1.25 in
Row Spacing, Unit: 30 in

Pest Description

Pest 1 Type: W Code: ERICA Erigeron canadensis L.
Common Name: Horseweed
Description: marestail
Pest 2 Type: W Code: THLAR Thlaspi arvense L.
Common Name: Pennycress, field
Pest 3 Type: W Code: LACSE Lactuca serriola L./Torn.
Common Name: Lettuce, prickly

Site and Design

Plot Width, Unit: 10 FT Site Type: FIELD
Plot Length, Unit: 30 FT Tillage Type: NO-TILL
Replications: 3 Study Design: Randomized Complete Block

Soil Description

Description Name: 08SBHF24
% Sand: 16 % OM: 2.7 Texture: SILT LOAM
% Silt: 58 pH: 6.1
% Clay: 26 CEC: 18.8 Fert. Level: EXCELLENT
Analyzed By:
Midwest labs

Application Description

	A
Application Date:	05-20-08
Time of Day:	11 am
Application Method:	spray
Application Timing:	BURNDOWN
Application Placement:	foliar
Applied By:	RR,JS
Air Temperature, Unit:	61 F
% Relative Humidity:	44
Wind Velocity, Unit:	5 mph
Wind Direction:	NNW
Dew Presence (Y/N):	n
Soil Temperature, Unit:	52 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	10

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	GLXMA BSOY
Crop 2 Code, BBCH Scale:	GLXMA BSOY

Pest Stage At Each Application

	A
Pest 1 Code, Disc., Scale:	ERICA W
Diameter, Unit:	4 in
Height, Unit:	2.5 in
Height Minimum, Maximum:	2 3
Density, Unit:	25 m2
Pest 2 Code, Disc., Scale:	THLAR W
Height, Unit:	12 in
Density, Unit:	3 m2
Pest 3 Code, Disc., Scale:	LACSE W
Diameter, Unit:	8 in
Height, Unit:	6 in
Density, Unit:	0.07 m2

Application Equipment

	A
Appl. Equipment:	backpack
Operating Pressure, Unit:	20 psi
Nozzle Type:	Turbo Tee
Nozzle Size:	11003
Nozzle Spacing, Unit:	20 IN
Boom Length, Unit:	10 FT
Boom Height, Unit:	12 IN
Ground Speed, Unit:	2.7 MPH
Carrier:	WATER
Spray Volume, Unit:	20 GPA
Mix Size, Unit:	1.8 Liters
Propellant:	co2

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 Trial ID: 33 08 BASD91D SBBDPURS Protocol ID: 08 BAS D91D SB BD PURS
 Location: Concord, NE Study Director: Stevan Knezevic
 Investigator: Stevan Knezevic

Description					Marestail	Marestail	Field Pennycress	Field Pennycress	Prickley Lettuce	Prickley Lettuce	
Rating Date					06-03-08	07-01-08	06-03-08	07-01-08	06-03-08	07-01-08	
Rating Data Type					Control	Control	Control	Control	Control	Control	
Rating Unit					Percent	Percent	Percent	Percent	Percent	Percent	
Days After First/Last Applic.					14 14	42 42	14 14	42 42	14 14	42 42	
Trt-Eval Interval					14 DA-A	42 DA-A	14 DA-A	42 DA-A	14 DA-A	42 DA-A	
Plant-Eval Interval					2 DP-1		2 DP-1		2 DP-1		
Trt No.	Treatment Name	Rate	Unit	Other Rate Other Rate Unit	Growth Stage						
1	BAS 80001H	0.1275	oz/a	6.25 g a/ha	Burndown	48.3 ef	43.3 hi	48.3 fg	43.3 fg	50.0 de	46.7 de
	Agridex	1	% v/v	1 % v/v	Burndown						
	Ammonium Sulfate	17	lb a/100 gal	17 lb a/100 gal	Burndown						
2	BAS 80001H	0.255	oz/a	12.5 g a/ha	Burndown	51.7 def	43.3 hi	50.0 fg	50.0 ef	56.7 d	50.0 d
	Agridex	1	% v/v	1 % v/v	Burndown						
	Ammonium Sulfate	17	lb a/100 gal	17 lb a/100 gal	Burndown						
3	BAS 80001H	0.367	oz/a	18 g a/ha	Burndown	75.0 c	66.7 fg	78.3 cde	73.3 d	83.3 bc	76.7 c
	Agridex	1	% v/v	1 % v/v	Burndown						
	Ammonium Sulfate	17	lb a/100 gal	17 lb a/100 gal	Burndown						
4	BAS 80001H	0.51	oz/a	25 g a/ha	Burndown	91.7 a	90.0 a-d	91.7 abc	90.0 abc	95.0 ab	93.3 ab
	Agridex	1	% v/v	1 % v/v	Burndown						
	Ammonium Sulfate	17	lb a/100 gal	17 lb a/100 gal	Burndown						
5	BAS 80001H	1.02	oz/a	50 g a/ha	Burndown	98.3 a	93.3 abc	100.0 a	95.0 ab	100.0 a	100.0 a
	Agridex	1	% v/v	1 % v/v	Burndown						
	Ammonium Sulfate	17	lb a/100 gal	17 lb a/100 gal	Burndown						
6	Pursuit	1.43	oz/a	70 g a/ha	Burndown	38.3 f	30.0 i	38.3 g	36.7 g	40.0 e	36.7 e
	Agridex	1	% v/v	1 % v/v	Burndown						
	Ammonium Sulfate	17	lb a/100 gal	17 lb a/100 gal	Burndown						
7	Roundup Original	32	oz/a	840 g a/ha	Burndown	76.7 bc	76.7 def	76.7 de	83.3 bcd	78.3 c	83.3 bc
	Agridex	1	% v/v	1 % v/v	Burndown						
	Ammonium Sulfate	17	lb a/100 gal	17 lb a/100 gal	Burndown						
8	Pursuit	1.43	oz/a	70 g a/ha	Burndown	53.3 de	46.7 h	53.3 f	56.7 e	58.3 d	56.7 d
	BAS 80001H	0.1275	oz/a	6.25 g a/ha	Burndown						
	Agridex	1	% v/v	1 % v/v	Burndown						
	Ammonium Sulfate	17	lb a/100 gal	17 lb a/100 gal	Burndown						
9	Pursuit	1.43	oz/a	70 g a/ha	Burndown	65.0 cd	56.7 gh	75.0 e	73.3 d	75.0 c	73.3 c
	BAS 80001H	0.255	oz/a	12.5 g a/ha	Burndown						
	Agridex	1	% v/v	1 % v/v	Burndown						
	Ammonium Sulfate	17	lb a/100 gal	17 lb a/100 gal	Burndown						
10	Pursuit	1.43	oz/a	70 g a/ha	Burndown	76.7 bc	70.0 efg	81.7 b-e	81.7 cd	83.3 bc	81.7 bc
	BAS 80001H	0.367	oz/a	18 g a/ha	Burndown						
	Agridex	1	% v/v	1 % v/v	Burndown						
	Ammonium Sulfate	17	lb a/100 gal	17 lb a/100 gal	Burndown						
11	Pursuit	1.43	oz/a	70 g a/ha	Burndown	90.0 ab	80.0 c-f	90.0 a-d	90.0 abc	95.0 ab	93.3 ab
	BAS 80001H	0.51	oz/a	25 g a/ha	Burndown						
	Agridex	1	% v/v	1 % v/v	Burndown						
	Ammonium Sulfate	17	lb a/100 gal	17 lb a/100 gal	Burndown						
12	Pursuit	1.43	oz/a	70 g a/ha	Burndown	90.0 ab	83.3 b-e	95.0 ab	96.7 a	98.3 a	93.3 ab
	BAS 80001H	1.02	oz/a	50 g a/ha	Burndown						
	Agridex	1	% v/v	1 % v/v	Burndown						
	Ammonium Sulfate	17	lb a/100 gal	17 lb a/100 gal	Burndown						
13	Pursuit	1.43	oz/a	70 g a/ha	Burndown	100.0 a	96.7 ab	100.0 a	100.0 a	100.0 a	100.0 a
	BAS 80001H	0.1275	oz/a	6.25 g a/ha	Burndown						
	Roundup Original	32	oz/a	840 g a/ha	Burndown						
	Agridex	1	% v/v	1 % v/v	Burndown						
	Ammonium Sulfate	17	lb a/100 gal	17 lb a/100 gal	Burndown						
14	Pursuit	1.43	oz/a	70 g a/ha	Burndown	95.0 a	100.0 a	93.3 ab	96.7 a	95.0 ab	96.7 a
	BAS 80001H	0.255	oz/a	12.5 g a/ha	Burndown						
	Roundup Original	32	oz/a	840 g a/ha	Burndown						
	Agridex	1	% v/v	1 % v/v	Burndown						
	Ammonium Sulfate	17	lb a/100 gal	17 lb a/100 gal	Burndown						
15	Pursuit	1.43	oz/a	70 g a/ha	Burndown	100.0 a	98.3 a	100.0 a	100.0 a	100.0 a	100.0 a
	BAS 80001H	0.367	oz/a	18 g a/ha	Burndown						
	Roundup Original	32	oz/a	840 g a/ha	Burndown						
	Agridex	1	% v/v	1 % v/v	Burndown						
	Ammonium Sulfate	17	lb a/100 gal	17 lb a/100 gal	Burndown						

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Description		Marestail	Marestail	Field Pennycress	Field Pennycress	Prickley Lettuce	Prickley Lettuce
Rating Date		06-03-08	07-01-08	06-03-08	07-01-08	06-03-08	07-01-08
Rating Data Type		Control	Control	Control	Control	Control	Control
Rating Unit		Percent	Percent	Percent	Percent	Percent	Percent
Days After First/Last Applic.		14 14	42 42	14 14	42 42	14 14	42 42
Trt-Eval Interval		14 DA-A	42 DA-A	14 DA-A	42 DA-A	14 DA-A	42 DA-A
Plant-Eval Interval		2 DP-1		2 DP-1		2 DP-1	
Trt No.	Treatment Name	Rate	Other Rate	Other Rate Unit	Growth Stage		
16	Pursuit	1.43 oz/a	70 g a/ha		Burndown	100.0 a	100.0 a
	BAS 80001H	0.51 oz/a	25 g a/ha		Burndown		
	Roundup Original	32 oz/a	840 g a/ha		Burndown		
	Agridex	1 % v/v	1 % v/v		Burndown		
	Ammonium Sulfate	17 lb a/100 gal	17 lb a/100 gal		Burndown		
17	Pursuit	1.43 oz/a	70 g a/ha		Burndown	100.0 a	100.0 a
	BAS 80001H	1.02 oz/a	50 g a/ha		Burndown		
	Roundup Original	32 oz/a	840 g a/ha		Burndown		
	Agridex	1 % v/v	1 % v/v		Burndown		
	Ammonium Sulfate	17 lb a/100 gal	17 lb a/100 gal		Burndown		
LSD (P=.05)		13.40	14.66	14.19	12.87	12.12	11.87
Standard Deviation		8.03	8.79	8.51	7.72	7.27	7.12
CV		10.12	11.72	10.55	9.6	8.77	8.76
Grand Mean		79.41	75.0	80.69	80.39	82.84	81.27
Replicate F		1.299	2.227	0.108	0.354	0.566	0.126
Replicate Prob(F)		0.2869	0.1243	0.8977	0.7049	0.5733	0.8822
Treatment F		20.380	21.381	18.180	23.107	22.853	26.976
Treatment Prob(F)		0.0001	0.0001	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.

<u>Additional Treatment Information</u>	
<u>Treatment Name</u>	Ammonium Sulfate =
<u>Rate Unit</u>	
	OZ/A = Ounces Product per Acre (Metric=ML-G/HA) O
	% V/V = Percent, Volume Product per Volume Mix Basis (Metric=same) Z
	LB A/100 GAL = Pounds AI per 100 Gallons Mix (Metric=KG A/100 L) L
<u>Other Rate Unit</u>	
	G A/HA = Grams Active Ingredient per Hectare
	% V/V = Percent, Volume Product per Volume Mix Basis
	LB A/100 GAL = Pounds Active Ingredient per 100 Gallons Mix