

2007 Herbicide Treatment Comparison - Leafy Spurge

Trial ID: 07LeafySP-1	Protocol ID:
Location: O'Neill, NE	Study Director: Stevan Knezevic
	Investigator: Stevan Knezevic

General Trial Information

Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

Trial Location

City: O'Neill
State/Prov.: NE
Postal Code: 68763
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	

Pest Description

Pest 1 Type: W Code: EPHES Euphorbia esula
Common Name: Leafy spurge

Site and Design

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

Application Description

A	
Application Date:	05-31-07
Time of Day:	11am
Application Method:	spray
Application Timing:	POST
Application Placement:	foliar
Air Temperature, Unit:	64 f
% Relative Humidity:	60
Wind Velocity, Unit:	5 mph
Wind Direction:	sw
Dew Presence (Y/N):	n
Soil Temperature, Unit:	62 f
Soil Moisture:	adequate
% Cloud Cover:	90

Pest Stage At Each Application

A	
Pest 1 Code, Disc., Scale:	EPHES W
Stage Majority, Percent:	flower 80
Stage Minimum, Percent:	bud 20
Height, Unit:	8 in

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 L
Propellant:	co2

2007 Herbicide Treatment Comparison - Leafy Spurge

Trial ID: 07LeafySP-1
 Location: O'Neill, NE

Protocol ID:
 Study Director: Stevan Knezevic
 Investigator: Stevan Knezevic

Description	Leafy Spurge	Leafy Spurge	Leafy Spurge	Leafy Spurge	Leafy Spurge	Grass Vigor
Rating Date	06-19-07	06-30-07	08-06-07	09-13-07	10-13-07	09-13-07
Rating Data Type	Control	Control	Control	Control	Control	Vigor
Rating Unit	Percent	Percent	Percent	Percent	Percent	Percent
Days After First/Last Applic.	19 19	30 30	67 67	105 105	135 135	105 105
Trt-Eval Interval	19 DA-A	30 DA-A	67 DA-A	105 DA-A	135 DA-A	105 DA-A
Trt No.	Treatment Name	Rate	Other Rate	Other Rate	Growth Stage	
13	Tordon 22K MSO	4 oz a/a 1 % v/v	16 oz/a		POST POST	48.3 b 73.3 b 75.0 a 73.3 a 68.3 a 100.0 a
14	Nontreated Check					0.0 c 0.0 d 0.0 c 0.0 c 0.0 c 100.0 a
15	Grazon P and D	3 pt/a			POST	85.0 a 95.0 a 81.7 a 80.0 a 78.3 a 100.0 a
16	Overdrive Tordon 22K MSO	4 oz/a 3 oz a/a 1 % v/v	12 oz/a		POST POST POST	86.7 a 83.3 ab 80.0 a 83.3 a 75.0 a 100.0 a
17	Plateau NIS	3 oz/a 0.25 % v/v			POST POST	28.3 b 33.3 c 36.7 b 36.7 b 38.3 b 100.0 a
18	Plateau NIS	6 oz/a 0.25 % v/v			POST POST	28.3 b 46.7 c 36.7 b 40.0 b 38.3 b 90.0 b
LSD (P=.05)		21.25	16.83	12.43	15.10	13.35
Standard Deviation		11.68	9.25	6.83	8.30	7.34
CV		25.33	16.73	13.22	15.89	14.76
Grand Mean		46.11	55.28	51.67	52.22	49.72
Replicate F		4.409	2.403	2.500	2.258	4.433
Replicate Prob(F)		0.0424	0.1406	0.1317	0.1551	0.0418
Treatment F		26.045	44.198	69.000	46.194	50.500
Treatment Prob(F)		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.

Additional Treatment InformationRate Unit

OZ A/A = Ounces Active Ingredient per Acre (Metric=G A/HA)|B

% V/V = Percent, Volume Product per Volume Mix Basis (Metric=same)|Z

PT/A = Pints Product per Acre (Metric=L/HA)|P

OZ/A = Ounces Product per Acre (Metric=ML-G/HA)|O

Other Rate Unit

OZ/A = Ounces Product per Acre

2007 "Aquatic herbicide" treatments for Common Reed (Phragmites americanus)

Trial ID: 07 Phragmites	Protocol ID: 07 Phragmites
Location: Niobrara, NE	Study Director: Stevan Knezevic
	Investigator: Stevan Knezevic

General Trial Information

Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

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	

Pest Description

Pest 1 Type: W Code: PHR Phragmites americanus
Common Name: Common Reed

Site and Design

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

Application Description

A	
Application Date:	06-03-07
Time of Day:	8:30am
Application Method:	spray
Application Timing:	POST
Application Placement:	foliar
Applied By:	sk
Air Temperature, Unit:	68 f
% Relative Humidity:	35
Wind Velocity, Unit:	2 mph
Wind Direction:	nw
Dew Presence (Y/N):	n
Soil Temperature, Unit:	30 f
Soil Moisture:	dry
% Cloud Cover:	30
Next Rain Occurred On:	06-03-07

Pest Stage At Each Application

A	
Pest 1 Code, Disc., Scale:	PHR W
Height, Unit:	5 ft

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 L
Propellant:	co2

2007 "Aquatic herbicide" treatments for Common Reed (*Phragmites americanus*)

Trial ID: 07 Phragmites
Location: Niobrara, NE

Protocol ID: 07 Phragmites
Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

Description				Phragmites	Phragmites
Rating Date				07-04-07	08-25-07
Rating Data Type				Control	Control
Rating Unit				Percent	Percent
Days After First/Last Applic.				31 31	83 83
Trt-Eval Interval				31 DA-A	83 DA-A
Trt No.	Treatment Name	Rate	Unit	Growth Stage	
1	Rodeo	1	qt/a	POST	35.0 de
	Ammonium Sulfate	17	lb/100 gal	POST	
	NIS	0.25	% v/v	POST	
2	Rodeo	2	qt/a	POST	55.0 bc
	Ammonium Sulfate	17	lb/100 gal	POST	
	NIS	0.25	% v/v	POST	
3	Rodeo	3	qt/a	POST	61.7 ab
	Ammonium Sulfate	17	lb/100 gal	POST	
	NIS	0.25	% v/v	POST	
4	Habitat (imazapry)	1	pt/a	POST	30.0 e
	MSO	1	% v/v	POST	
	Ammonium Sulfate	17	lb/100 gal	POST	
5	Habitat (imazapry)	2	pt/a	POST	38.3 d
	MSO	1	% v/v	POST	
	Ammonium Sulfate	17	lb/100 gal	POST	
6	Habitat (imazapry)	3	pt/a	POST	38.3 d
	MSO	1	% v/v	POST	
	Ammonium Sulfate	17	lb/100 gal	POST	
7	Habitat (imazapry)	0.5	pt/a	POST	48.3 c
	Rodeo	0.5	qt/a	POST	
	Ammonium Sulfate	17	lb/100 gal	POST	
	MSO	1	% v/v	POST	
8	Habitat (imazapry)	1	pt/a	POST	63.3 a
	Rodeo	1	qt/a	POST	
	Ammonium Sulfate	17	lb/100 gal	POST	
	MSO	1	% v/v	POST	
LSD (P=.05)				6.86	4.87
Standard Deviation				3.92	2.78
CV				8.46	3.01
Grand Mean				46.25	92.5
Replicate F				0.612	4.846
Replicate Prob(F)				0.5563	0.0252
Treatment F				31.495	17.846
Treatment Prob(F)				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.

Additional Treatment InformationTreatment Name

Ammonium Sulfate = |

Rate Unit

QT/A = Quarts Product per Acre (Metric=L/HA)Q

LB/100 GAL = Pounds Dry Product per 100 Gallons Mix (Metric=KG/100 L)]

% V/V = Percent, Volume Product per Volume Mix Basis (Metric=same)]Z

PT/A = Pints Product per Acre (Metric=L/HA)P

2007 "Aquatic herbicide" treatments for Reed Canarygrass

Trial ID: 07ReedCanarygrassSPRIN Protocol ID: 07 Reed Canarygrass
 Location: Niobrara, NE Study Director: Stevan Knezevic
 Investigator: Stevan Knezevic

General Trial Information

Study Director: Stevan Knezevic
 Investigator: Stevan Knezevic

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

Pest Description

Pest 1 Type: W Code: PHAAP Phalaris arundinacea
 Common Name: Reed Canary Grass

Site and Design

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

Application Description

A	
Application Date:	06-04-07
Time of Day:	12:30 pm
Application Method:	spray
Application Timing:	POST
Application Placement:	foliar
Applied By:	sk
Air Temperature, Unit:	75 f
% Relative Humidity:	68
Wind Velocity, Unit:	3 mph
Wind Direction:	nw
Dew Presence (Y/N):	n
Soil Temperature, Unit:	66 f
Soil Moisture:	dry
% Cloud Cover:	30

Pest Stage At Each Application

A	
Pest 1 Code, Disc., Scale:	PHAAP W
Stage Majority, Percent:	flower 50
Height, Unit:	36 in
Height Minimum, Maximum:	24 48

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 L
Propellant:	co2

2007 "Aquatic herbicide" treatments for Reed Canarygrass

Trial ID: 07ReedCanarygrassSPRIN Protocol ID: 07 Reed Canarygrass
 Location: Niobrara, NE Study Director: Stevan Knezevic
 Investigator: Stevan Knezevic

Description				Reed Canary	Reed Canary
Rating Date				06-30-07	08-12-07
Rating Data Type				Control	Control
Rating Unit				Percent	Percent
Days After First/Last Applic.				26 26	69 69
Trt-Eval Interval				26 DA-A	69 DA-A
Trt No.	Treatment Name	Rate	Growth Unit Stage		
1	Rodeo	1 qt/a	Flower	56.7 b	66.7 b
	Ammonium Sulfate	17 lb/100 gal	Flower		
	NIS	0.25 % v/v	Flower		
2	Rodeo	2 qt/a	Flower	80.0 a	86.7 a
	Ammonium Sulfate	17 lb/100 gal	Flower		
	NIS	0.25 % v/v	Flower		
3	Rodeo	3 qt/a	Flower	88.3 a	92.7 a
	Ammonium Sulfate	17 lb/100 gal	Flower		
	NIS	0.25 % v/v	Flower		
4	Habitat (imazapyr)	1 pt/a	Flower	33.3 c	88.7 a
	Ammonium Sulfate	17 lb/100 gal	Flower		
	MSO	1 % v/v	Flower		
5	Habitat (imazapyr)	2 pt/a	Flower	33.3 c	97.7 a
	Ammonium Sulfate	17 lb/100 gal	Flower		
	MSO	1 % v/v	Flower		
6	Habitat (imazapyr)	3 pt/a	Flower	46.7 bc	96.0 a
	Ammonium Sulfate	17 lb/100 gal	Flower		
	MSO	1 % v/v	Flower		
7	Rodeo	1 qt/a	Flower	76.7 a	98.3 a
	Habitat (imazapyr)	1 pt/a	Flower		
	Ammonium Sulfate	17 lb/100 gal	Flower		
	NIS	0.25 % v/v	Flower		
LSD (P=.05)				14.00	18.12
Standard Deviation				7.87	10.19
CV				13.27	11.38
Grand Mean				59.29	89.52
Replicate F				0.058	0.042
Replicate Prob(F)				0.9442	0.9592
Treatment F				24.942	3.503
Treatment Prob(F)				0.0001	0.0307

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.

Additional Treatment InformationTreatment Name

Ammonium Sulfate = |

Rate Unit

QT/A = Quarts Product per Acre (Metric=L/HA)|Q

LB/100 GAL = Pounds Dry Product per 100 Gallons Mix (Metric=KG/100 L)|]

% V/V = Percent, Volume Product per Volume Mix Basis (Metric=same)|Z

PT/A = Pints Product per Acre (Metric=L/HA)|P