

Northeast Research & Extension Center

2008 Program approaches with new isoxadifen product blends and Prequel

Trial ID: 20 08 DUP USA-08-115 Protocol ID: 08 DUP USA-08-115
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: ZEAMX Zea mays Corn
Variety: Pioneer 35F40 Description: HX1 LL RR2
BBCH Scale: BCOR Planting Date: 06-04-08
Planting Method: seeded Rate, Unit: 24503 s/a
Depth, Unit: 1.75 in
Row Spacing, Unit: 30 in
Soil Moisture: ABOVE NORMAL
Harvest Date: 11-25-08 Harvest Equipment: SPC-40
Harvested Width, Unit: 5 ft Harvested Length, Unit: 27 ft
% Standard Moisture: 15.5 Moisture Meter: Almaco
Weighing Equipment: Almaco

Pest Description

Pest 1 Type: W Code: SETVI Setaria viridis (L.) P.Beauv.
Common Name: Foxtail, green
Pest 2 Type: W Code: ABUTH Abutilon theophrasti Medik.
Common Name: Velvetleaf
Pest 3 Type: W Code: AMATU Amaranthus tuberculatos (Moq.) J
Common Name: Waterhemp, tall

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

Maintenance

Table with 8 columns: No., Date, Maintenance Treatment Name, Form Conc, Form Unit, Form Type, Rate, Tank Mix. Contains 2 rows of maintenance data.

Soil Description

% Sand: 12 % OM: 3.4 Texture: SILT LOAM
% Silt: 62 pH: 6.7
% Clay: 26 CEC: 20.4 Fert. Level: EXCELLENT
Analyzed By:
Midwest Labs

Application Description

	A	B
Application Date:	06-04-08	07-01-08
Time of Day:	5:00 pm	10:00 am
Application Method:	spray	spray
Application Timing:	PRE	POST
Application Placement:	surface	foliar
Applied By:	js	js
Air Temperature, Unit:	75 F	78 F
% Relative Humidity:	70	60
Wind Velocity, Unit:	1 mph	2.5 mph
Wind Direction:	var	S
Dew Presence (Y/N):	n	n
Soil Temperature, Unit:	68 F	65 F
Soil Moisture:	EXCESSIVE	ADEQUATE
% Cloud Cover:	100	10
Next Rain Occurred On:	06-05-08	

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		V5 50
Stage Maximum, Percent:		V6 50
Height, Unit:		12 in

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	SETVI W	SETVI W
Height, Unit:		7 in
Height Minimum, Maximum:		6 8
Density, Unit:		10 m2
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W
Height, Unit:		7 in
Height Minimum, Maximum:		6 8
Density, Unit:		5 m2
Pest 3 Code, Disc., Scale:	AMATU W	AMATU W
Height, Unit:		7 in
Height Minimum, Maximum:		6 8
Density, Unit:		1 m2

Application Equipment

	A	B
Appl. Equipment:	backpack	BACKPACK
Operating Pressure, Unit:	20 psi	40 PSI
Nozzle Type:	Turbo Tee	TURBO TEE
Nozzle Size:	11003	11002
Nozzle Spacing, Unit:	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	12 IN	12 IN
Ground Speed, Unit:	2.7 MPH	2.7 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	20 GPA	20 GPA
Mix Size, Unit:	1.8 Liters	1.8 Liters
Propellant:	co2	co2

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Trial ID: 20 08 DUP USA-08-115 Protocol ID: 08 DUP USA-08-115
 Location: Concord, NE Study Director: Stevan Knezevic
 Investigator: Stevan Knezevic

Description						Corn, field	Corn, field	Corn	Corn	Corn	Green Foxtail	Green Foxtail
Rating Date						11-25-08	11-25-08	07-03-08	07-18-08	08-06-08	07-03-08	07-18-08
Rating Data Type						Yield	Moisture	Injury	Injury	Injury	Control	Control
Rating Unit						bu/A15.5		Percent	Percent	Percent	Percent	Percent
Days After First/Last Applic.						174 147	174 147	29 2	44 17	63 36	29 2	44 17
Plant-Eval Interval						174 DP-1	174 DP-1	29 DP-1	44 DP-1	63 DP-1	29 DP-1	44 DP-1
Trt No.	Treatment Name	Rate	Other Rate	Other Rate	Growth Stage							
1	Steadfast Q + Impact + At					200.9 a	14.3 a		0.0 a	0.0 a		53.3 c
	Rimsulfuron	0.75 oz/a	0.188 oz/a		POST							
	Nicosulfuron	0.5 oz/a	0.375 oz/a		POST							
	Isoxadifen-ethyl	0.25 oz/a	0.125 oz/a		POST							
	Impact	0.5 oz/a	0.175 oz/a		POST							
	Atrazine	8.9 oz/a	8 oz/a		POST							
	MSO	1 % v/v			POST							
	Ammonium Sulfate	10 lb/100 gal	32 oz/a		POST							
2	Cinch fb SteadfastQ + Impact + At(2pass)					194.1 a	14.1 a	0.0 a	0.0 a	0.0 a	69.7 b	85.0 b
	Cinch ATZ	1 qt/a			PRE							
	Rimsulfuron	0.75 oz/a	0.188 oz/a		POST							
	Nicosulfuron	0.5 oz/a	0.375 oz/a		POST							
	Isoxadifen-ethyl	0.25 oz/a	0.125 oz/a		POST							
	Impact	0.5 oz/a	0.175 oz/a		POST							
	Atrazine	8.9 oz/a	8 oz/a		POST							
	MSO	1 % v/v			POST							
	Ammonium Sulfate	10 lb/100 gal	32 oz/a		POST							
3	Resolve Q + Roundup (1pass)					194.4 a	14.6 a		0.0 a	0.0 a		93.3 ab
	Rimsulfuron	0.92 oz/a	0.229 oz/a		POST							
	Thifensulfuron	0.1 oz/a	0.05 oz/a		POST							
	Isoxadifen-ethyl	0.23 oz/a	0.115 oz/a		POST							
	Atrazine	8.9 oz/a	8 oz/a		POST							
	Roundup PowerMAX	22 oz/a	15.125 oz/a		POST							
	Ammonium Sulfate	10 lb/100 gal	32 oz/a		POST							
4	Cinch fb Resolve Q + Rdup (2pass)					199.0 a	14.5 a	0.0 a	0.0 a	0.0 a	70.0 b	97.7 ab
	Cinch ATZ	1 qt/a			PRE							
	Rimsulfuron	0.92 oz/a	0.229 oz/a		POST							
	Thifensulfuron	0.1 oz/a	0.05 oz/a		POST							
	Isoxadifen-ethyl	0.23 oz/a	0.115 oz/a		POST							
	Atrazine	8.9 oz/a	8 oz/a		POST							
	Roundup PowerMAX	22 oz/a	15.125 oz/a		POST							
	Ammonium Sulfate	10 lb/100 gal	32 oz/a		POST							
5	Require Q + Roundup (1pass)					192.7 a	14.6 a		0.0 a	0.0 a		97.3 ab
	Rimsulfuron	1 oz/a	0.25 oz/a		POST							
	dicamba	2.75 oz/a	1.925 oz/a		POST							
	Isoxadifen-ethyl	0.25 oz/a	0.125 oz/a		POST							
	Atrazine	8.9 oz/a	8 oz/a		POST							
	Roundup PowerMAX	22 oz/a	15.125 oz/a		POST							
	Ammonium Sulfate	10 lb/100 gal	32 oz/a		POST							
6	Cinch fb Require Q + Rdup (2pass)					191.8 a	14.7 a	0.0 a	0.0 a	0.0 a	71.7 ab	96.3 ab
	Cinch ATZ	1 qt/a			PRE							
	Rimsulfuron	1 oz/a	0.25 oz/a		POST							
	dicamba	2.75 oz/a	1.925 oz/a		POST							
	Isoxadifen-ethyl	0.25 oz/a	0.125 oz/a		POST							
	Atrazine	8.9 oz/a	8 oz/a		POST							
	Roundup PowerMAX	22 oz/a	15.125 oz/a		POST							
	Ammonium Sulfate	10 lb/100 gal	32 oz/a		POST							
7	Roundup (1 pass)					194.1 a	14.8 a		0.0 a	0.0 a		97.7 ab
	Roundup PowerMAX	22 oz/a	15.125 oz/a		POST							
	Ammonium Sulfate	10 lb/100 gal	32 oz/a		POST							
8	Cinch fb Roundup (2 pass)					193.5 a	14.6 a	0.0 a	0.0 a	0.0 a	80.0 ab	97.7 ab
	Cinch ATZ	1 qt/a			PRE							
	Roundup PowerMAX	22 oz/a	15.125 oz/a		POST							
	Ammonium Sulfate	10 lb/100 gal	32 oz/a		POST							

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Description	Corn, field	Corn, field	Corn	Corn	Corn	Green Foxtail	Green Foxtail
Rating Date	11-25-08	11-25-08	07-03-08	07-18-08	08-06-08	07-03-08	07-18-08
Rating Data Type	Yield	Moisture	Injury	Injury	Injury	Control	Control
Rating Unit	bu/A15.5		Percent	Percent	Percent	Percent	Percent
Days After First/Last Applic.	174 147	174 147	29 2	44 17	63 36	29 2	44 17
Plant-Eval Interval	174 DP-1	174 DP-1	29 DP-1	44 DP-1	63 DP-1	29 DP-1	44 DP-1
Trt Treatment	Rate	Other	Other	Growth			
No. Name	Rate Unit	Rate	Rate Unit	Stage			
9 Prequel fb Roundup (2 pass)					199.4 a	14.7 a	0.0 a
Rimsulfuron	1.5 oz/a	0.375 oz a/a		PRE			
Isoxaflutole	1 oz/a	0.75 oz a/a		PRE			
Roundup PowerMAX	22 oz/a	15.125 oz a/a		POST			
Ammonium Sulfate	10 lb/100 gal	32 oz a/a		POST			
10 Prequel fb Resolve Q + Rdup (2 pass)					193.5 a	14.7 a	0.0 a
Rimsulfuron	1.5 oz/a	0.375 oz a/a		PRE			
Isoxaflutole	1 oz/a	0.75 oz a/a		PRE			
Rimsulfuron	0.92 oz/a	0.229 oz a/a		POST			
Thifensulfuron	0.1 oz/a	0.05 oz a/a		POST			
Isoxadifen-ethyl	0.23 oz/a	0.115 oz a/a		POST			
Atrazine	8.9 oz/a	8 oz a/a		POST			
Roundup PowerMAX	22 oz/a	15.125 oz a/a		POST			
Ammonium Sulfate	10 lb/100 gal	32 oz a/a		POST			
11 Prequel fb Require Q + Rdup (2 pass)					188.0 a	14.8 a	0.0 a
Rimsulfuron	1.5 oz/a	0.375 oz a/a		PRE			
Isoxaflutole	1 oz/a	0.75 oz a/a		PRE			
Rimsulfuron	1 oz/a	0.25 oz a/a		POST			
dicamba	2.75 oz/a	1.925 oz a/a		POST			
Isoxadifen-ethyl	0.25 oz/a	0.125 oz a/a		POST			
Atrazine	8.9 oz/a	8 oz a/a		POST			
Roundup PowerMAX	22 oz/a	15.125 oz a/a		POST			
Ammonium Sulfate	10 lb/100 gal	32 oz a/a		POST			
12 Nontreated Check					134.9 b	15.6 a	0.0 a
LSD (P=.05)	21.25	1.24	0.00	0.00	0.00	18.18	13.09
Standard Deviation	12.55	0.73	0.00	0.00	0.00	10.31	7.73
CV	6.61	5.0	0.0	0.0	0.0	15.12	9.15
Grand Mean	189.7	14.65	0.0	0.0	0.0	68.17	84.47
Replicate F	0.182	0.136	0.000	0.000	0.000	4.399	0.638
Replicate Prob(F)	0.8350	0.8736	1.0000	1.0000	1.0000	0.0347	0.5377
Treatment F	5.911	0.741	0.000	0.000	0.000	22.788	43.838
Treatment Prob(F)	0.0002	0.6903	1.0000	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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Description						Green Foxtail	Green Foxtail	Velvetleaf	Velvetleaf	Velvetleaf	Velvetleaf	Waterhemp
Rating Date						07-18-08	08-06-08	07-03-08	07-18-08	07-18-08	08-06-08	07-03-08
Rating Data Type						Density	Control	Control	Control	Density	Control	Control
Rating Unit						m2 RunCH	Percent	Percent	Percent	m2 RunCH	Percent	Percent
Days After First/Last Applic.						44 17	63 36	29 2	44 17	44 17	63 36	29 2
Plant-Eval Interval						44 DP-1	63 DP-1	29 DP-1	44 DP-1	44 DP-1	63 DP-1	29 DP-1
Trt No.	Treatment Name	Rate	Other Rate	Other Rate Unit	Growth Stage							
1	Steadfast Q + Impact + At					18.3 a	81.7 c		86.7 b	30.0 a	94.7 abc	
	Rimsulfuron	0.75 oz/a	0.188 oz/a	oz/a	POST							
	Nicosulfuron	0.5 oz/a	0.375 oz/a	oz/a	POST							
	Isoxadifen-ethyl	0.25 oz/a	0.125 oz/a	oz/a	POST							
	Impact	0.5 oz/a	0.175 oz/a	oz/a	POST							
	Atrazine	8.9 oz/a	8 oz/a	oz/a	POST							
	MSO	1 % v/v			POST							
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	oz/a	POST							
2	Cinch fb SteadfastQ + Impact + At(2pass)					23.3 a	91.7 b	41.7 b	93.3 ab	18.3 a	96.3 ab	61.7 b
	Cinch ATZ	1 qt/a			PRE							
	Rimsulfuron	0.75 oz/a	0.188 oz/a	oz/a	POST							
	Nicosulfuron	0.5 oz/a	0.375 oz/a	oz/a	POST							
	Isoxadifen-ethyl	0.25 oz/a	0.125 oz/a	oz/a	POST							
	Impact	0.5 oz/a	0.175 oz/a	oz/a	POST							
	Atrazine	8.9 oz/a	8 oz/a	oz/a	POST							
	MSO	1 % v/v			POST							
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	oz/a	POST							
3	Resolve Q + Roundup (1pass)					48.3 a	97.7 a		88.3 ab	15.0 a	91.7 bcd	
	Rimsulfuron	0.92 oz/a	0.229 oz/a	oz/a	POST							
	Thifensulfuron	0.1 oz/a	0.05 oz/a	oz/a	POST							
	Isoxadifen-ethyl	0.23 oz/a	0.115 oz/a	oz/a	POST							
	Atrazine	8.9 oz/a	8 oz/a	oz/a	POST							
	Roundup PowerMAX	22 oz/a	15.125 oz/a	oz/a	POST							
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	oz/a	POST							
4	Cinch fb Resolve Q + Rdup (2pass)					18.3 a	99.0 a	33.3 b	91.7 ab	16.7 a	93.3 a-d	73.3 ab
	Cinch ATZ	1 qt/a			PRE							
	Rimsulfuron	0.92 oz/a	0.229 oz/a	oz/a	POST							
	Thifensulfuron	0.1 oz/a	0.05 oz/a	oz/a	POST							
	Isoxadifen-ethyl	0.23 oz/a	0.115 oz/a	oz/a	POST							
	Atrazine	8.9 oz/a	8 oz/a	oz/a	POST							
	Roundup PowerMAX	22 oz/a	15.125 oz/a	oz/a	POST							
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	oz/a	POST							
5	Require Q + Roundup (1pass)					16.7 a	97.7 a		90.3 ab	35.0 a	93.3 a-d	
	Rimsulfuron	1 oz/a	0.25 oz/a	oz/a	POST							
	dicamba	2.75 oz/a	1.925 oz/a	oz/a	POST							
	Isoxadifen-ethyl	0.25 oz/a	0.125 oz/a	oz/a	POST							
	Atrazine	8.9 oz/a	8 oz/a	oz/a	POST							
	Roundup PowerMAX	22 oz/a	15.125 oz/a	oz/a	POST							
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	oz/a	POST							
6	Cinch fb Require Q + Rdup (2pass)					15.0 a	97.7 a	33.3 b	91.3 ab	38.3 a	90.7 bcd	80.0 ab
	Cinch ATZ	1 qt/a			PRE							
	Rimsulfuron	1 oz/a	0.25 oz/a	oz/a	POST							
	dicamba	2.75 oz/a	1.925 oz/a	oz/a	POST							
	Isoxadifen-ethyl	0.25 oz/a	0.125 oz/a	oz/a	POST							
	Atrazine	8.9 oz/a	8 oz/a	oz/a	POST							
	Roundup PowerMAX	22 oz/a	15.125 oz/a	oz/a	POST							
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	oz/a	POST							
7	Roundup (1 pass)					20.0 a	99.0 a		93.0 ab	25.0 a	90.0 cd	
	Roundup PowerMAX	22 oz/a	15.125 oz/a	oz/a	POST							
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	oz/a	POST							
8	Cinch fb Roundup (2 pass)					5.0 a	99.0 a	33.3 b	86.7 b	28.3 a	87.7 d	73.3 ab
	Cinch ATZ	1 qt/a			PRE							
	Roundup PowerMAX	22 oz/a	15.125 oz/a	oz/a	POST							
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	oz/a	POST							
9	Prequel fb Roundup (2 pass)					10.0 a	99.0 a	88.7 a	95.0 a	10.0 a	93.7 abc	90.3 a
	Rimsulfuron	1.5 oz/a	0.375 oz/a	oz/a	PRE							
	Isoxaflutole	1 oz/a	0.75 oz/a	oz/a	PRE							
	Roundup PowerMAX	22 oz/a	15.125 oz/a	oz/a	POST							
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	oz/a	POST							

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Description	Green Foxtail 07-18-08 Density m2 RunCH 44 17 44 DP-1	Green Foxtail 08-06-08 Control Percent 63 36 63 DP-1	Velvetleaf 07-03-08 Control Percent 29 2 29 DP-1	Velvetleaf 07-18-08 Control Percent 44 17 44 DP-1	Velvetleaf 07-18-08 Density m2 RunCH 44 17 44 DP-1	Velvetleaf 08-06-08 Control Percent 63 36 63 DP-1	Waterhemp 07-03-08 Control Percent 29 2 29 DP-1	
Trt No.	Treatment Name	Rate	Other Rate	Other Rate	Growth Stage			
10	Prequel fb Resolve Q + Rdup (2 pass)							
	Rimsulfuron	1.5 oz/a	0.375 oz a/a		PRE	35.0 a	99.0 a	92.7 a
	Isoxaflutole	1 oz/a	0.75 oz a/a		PRE			93.0 ab
	Rimsulfuron	0.92 oz/a	0.229 oz a/a		POST			13.3 a
	Thifensulfuron	0.1 oz/a	0.05 oz a/a		POST			97.7 a
	Isoxadifen-ethyl	0.23 oz/a	0.115 oz a/a		POST			
	Atrazine	8.9 oz/a	8 oz a/a		POST			
	Roundup PowerMAX	22 oz/a	15.125 oz a/a		POST			
	Ammonium Sulfate	10 lb/100 gal	32 oz a/a		POST			
11	Prequel fb Require Q + Rdup (2 pass)							
	Rimsulfuron	1.5 oz/a	0.375 oz a/a		PRE	41.7 a	98.7 a	91.3 a
	Isoxaflutole	1 oz/a	0.75 oz a/a		PRE			94.7 a
	Rimsulfuron	1 oz/a	0.25 oz a/a		POST			21.7 a
	dicamba	2.75 oz/a	1.925 oz a/a		POST			95.7 abc
	Isoxadifen-ethyl	0.25 oz/a	0.125 oz a/a		POST			
	Atrazine	8.9 oz/a	8 oz a/a		POST			
	Roundup PowerMAX	22 oz/a	15.125 oz a/a		POST			
	Ammonium Sulfate	10 lb/100 gal	32 oz a/a		POST			
12	Nontreated Check						0.0 d	0.0 c
								0.0 c
								0.0 e
								0.0 c
	LSD (P=.05)	30.66	4.33	27.88	7.32	26.73	5.91	26.16
	Standard Deviation	18.00	2.56	15.81	4.32	15.69	3.49	14.83
	CV	78.68	2.89	30.53	5.16	68.59	4.09	20.91
	Grand Mean	22.88	88.33	51.79	83.67	22.88	85.39	70.92
	Replicate F	6.049	1.695	0.602	4.411	0.049	2.164	1.213
	Replicate Prob(F)	0.0088	0.2067	0.5622	0.0245	0.9521	0.1386	0.3289
	Treatment F	1.652	366.897	14.404	112.854	1.036	180.081	13.020
	Treatment Prob(F)	0.1629	0.0001	0.0001	0.0001	0.4503	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.

Northeast Research & Extension Center

Description						Waterhemp	Waterhemp	Waterhemp
Rating Date						07-18-08	07-18-08	08-06-08
Rating Data Type						Control	Density	Control
Rating Unit						Percent	m2 RunCH	Percent
Days After First/Last Applic.						44 17	44 17	63 36
Plant-Eval Interval						44 DP-1	44 DP-1	63 DP-1
Trt No.	Treatment Name	Rate Rate Unit	Other Rate	Other Rate Unit	Growth Stage			
1	Steadfast Q + Impact + At					83.3 b	15.0 a	99.0 a
	Rimsulfuron	0.75 oz/a	0.188 oz/a	a/a	POST			
	Nicosulfuron	0.5 oz/a	0.375 oz/a	a/a	POST			
	Isoxadifen-ethyl	0.25 oz/a	0.125 oz/a	a/a	POST			
	Impact	0.5 oz/a	0.175 oz/a	a/a	POST			
	Atrazine	8.9 oz/a	8 oz/a	a/a	POST			
	MSO	1 % v/v			POST			
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	a/a	POST			
2	Cinch fb SteadfastQ + Impact + At(2pass)					96.0 a	13.3 a	99.0 a
	Cinch ATZ	1 qt/a			PRE			
	Rimsulfuron	0.75 oz/a	0.188 oz/a	a/a	POST			
	Nicosulfuron	0.5 oz/a	0.375 oz/a	a/a	POST			
	Isoxadifen-ethyl	0.25 oz/a	0.125 oz/a	a/a	POST			
	Impact	0.5 oz/a	0.175 oz/a	a/a	POST			
	Atrazine	8.9 oz/a	8 oz/a	a/a	POST			
	MSO	1 % v/v			POST			
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	a/a	POST			
3	Resolve Q + Roundup (1pass)					97.7 a	21.7 a	99.0 a
	Rimsulfuron	0.92 oz/a	0.229 oz/a	a/a	POST			
	Thifensulfuron	0.1 oz/a	0.05 oz/a	a/a	POST			
	Isoxadifen-ethyl	0.23 oz/a	0.115 oz/a	a/a	POST			
	Atrazine	8.9 oz/a	8 oz/a	a/a	POST			
	Roundup PowerMAX	22 oz/a	15.125 oz/a	a/a	POST			
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	a/a	POST			
4	Cinch fb Resolve Q + Rdup (2pass)					99.0 a	8.3 a	99.0 a
	Cinch ATZ	1 qt/a			PRE			
	Rimsulfuron	0.92 oz/a	0.229 oz/a	a/a	POST			
	Thifensulfuron	0.1 oz/a	0.05 oz/a	a/a	POST			
	Isoxadifen-ethyl	0.23 oz/a	0.115 oz/a	a/a	POST			
	Atrazine	8.9 oz/a	8 oz/a	a/a	POST			
	Roundup PowerMAX	22 oz/a	15.125 oz/a	a/a	POST			
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	a/a	POST			
5	Require Q + Roundup (1pass)					97.7 a	20.0 a	99.0 a
	Rimsulfuron	1 oz/a	0.25 oz/a	a/a	POST			
	dicamba	2.75 oz/a	1.925 oz/a	a/a	POST			
	Isoxadifen-ethyl	0.25 oz/a	0.125 oz/a	a/a	POST			
	Atrazine	8.9 oz/a	8 oz/a	a/a	POST			
	Roundup PowerMAX	22 oz/a	15.125 oz/a	a/a	POST			
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	a/a	POST			
6	Cinch fb Require Q + Rdup (2pass)					99.0 a	5.7 a	99.0 a
	Cinch ATZ	1 qt/a			PRE			
	Rimsulfuron	1 oz/a	0.25 oz/a	a/a	POST			
	dicamba	2.75 oz/a	1.925 oz/a	a/a	POST			
	Isoxadifen-ethyl	0.25 oz/a	0.125 oz/a	a/a	POST			
	Atrazine	8.9 oz/a	8 oz/a	a/a	POST			
	Roundup PowerMAX	22 oz/a	15.125 oz/a	a/a	POST			
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	a/a	POST			
7	Roundup (1 pass)					99.0 a	13.3 a	97.7 b
	Roundup PowerMAX	22 oz/a	15.125 oz/a	a/a	POST			
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	a/a	POST			
8	Cinch fb Roundup (2 pass)					98.7 a	10.0 a	99.0 a
	Cinch ATZ	1 qt/a			PRE			
	Roundup PowerMAX	22 oz/a	15.125 oz/a	a/a	POST			
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	a/a	POST			
9	Prequel fb Roundup (2 pass)					98.7 a	3.7 a	99.0 a
	Rimsulfuron	1.5 oz/a	0.375 oz/a	a/a	PRE			
	Isoxaflutole	1 oz/a	0.75 oz/a	a/a	PRE			
	Roundup PowerMAX	22 oz/a	15.125 oz/a	a/a	POST			
	Ammonium Sulfate	10 lb/100 gal	32 oz/a	a/a	POST			

Northeast Research & Extension Center

Description						Waterhemp	Waterhemp	Waterhemp
Rating Date						07-18-08	07-18-08	08-06-08
Rating Data Type						Control	Density	Control
Rating Unit						Percent	m2 RunCH	Percent
Days After First/Last Applic.						44 17	44 17	63 36
Plant-Eval Interval						44 DP-1	44 DP-1	63 DP-1
Trt No.	Treatment Name	Rate Rate Unit	Other Rate	Other Rate Unit	Growth Stage			
10	Prequel fb Resolve Q + Rdup (2 pass)					98.7 a	10.0 a	99.0 a
	Rimsulfuron	1.5 oz/a	0.375 oz a/a		PRE			
	Isoxaflutole	1 oz/a	0.75 oz a/a		PRE			
	Rimsulfuron	0.92 oz/a	0.229 oz a/a		POST			
	Thifensulfuron	0.1 oz/a	0.05 oz a/a		POST			
	Isoxadifen-ethyl	0.23 oz/a	0.115 oz a/a		POST			
	Atrazine	8.9 oz/a	8 oz a/a		POST			
	Roundup PowerMAX	22 oz/a	15.125 oz a/a		POST			
	Ammonium Sulfate	10 lb/100 gal	32 oz a/a		POST			
11	Prequel fb Require Q + Rdup (2 pass)					98.7 a	14.0 a	99.0 a
	Rimsulfuron	1.5 oz/a	0.375 oz a/a		PRE			
	Isoxaflutole	1 oz/a	0.75 oz a/a		PRE			
	Rimsulfuron	1 oz/a	0.25 oz a/a		POST			
	dicamba	2.75 oz/a	1.925 oz a/a		POST			
	Isoxadifen-ethyl	0.25 oz/a	0.125 oz a/a		POST			
	Atrazine	8.9 oz/a	8 oz a/a		POST			
	Roundup PowerMAX	22 oz/a	15.125 oz a/a		POST			
	Ammonium Sulfate	10 lb/100 gal	32 oz a/a		POST			
12	Nontreated Check					0.0 c		0.0 c
LSD (P=.05)						3.33	18.85	1.13
Standard Deviation						1.97	11.07	0.67
CV						2.22	90.16	0.74
Grand Mean						88.86	12.27	90.64
Replicate F						1.211	0.520	1.000
Replicate Prob(F)						0.3170	0.6025	0.3840
Treatment F						620.974	0.745	5500.563
Treatment Prob(F)						0.0001	0.6761	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/100 GAL = Pounds Dry Product per 100 Gallons Mix (Metric=KG/100 L)]	
QT/A = Quarts Product per Acre (Metric=L/HA)Q	
<u>Other Rate Unit</u>	
OZ A/A = Ounces Active Ingredient per Acre	