

2008

Weed Science Program

Weed Management

Field Trials

Department of Agronomy

Iowa State University Extension

Agricultural Experiment Station

Iowa State University

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Corn and Soybean Weed Management Studies Curtiss Research Farm, Yr 2008 Ames, IA

West Curtiss
Farm, North



West Curtiss
Farm, South

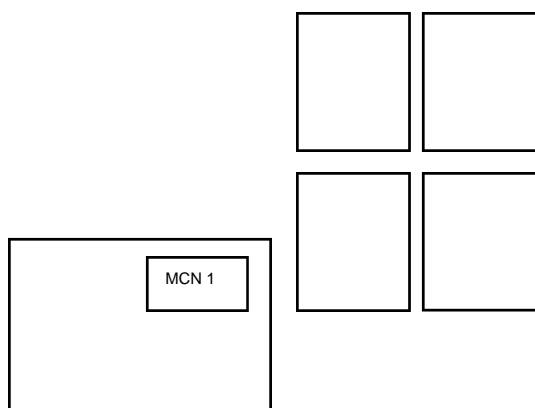
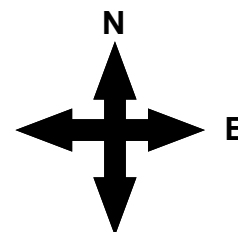
I.S.U.
Curtiss Farm

Corn Weed Management Study McNay Memorial Research Farm, Yr 2008 Chariton, IA

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Chariton, IA 50049

Jim Secor, Farm Manager
Office phone # (641) 766-6465

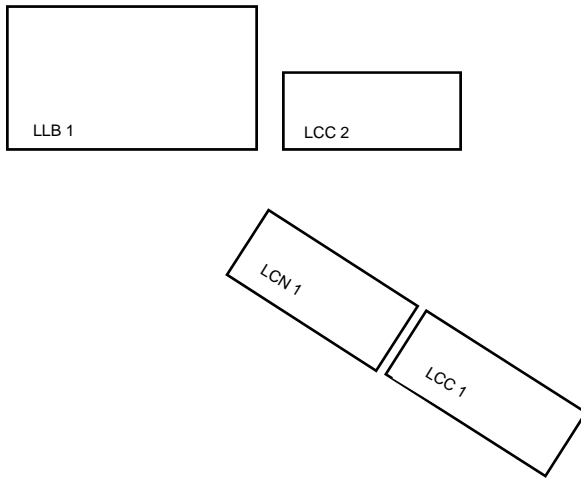
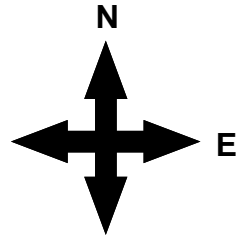


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Farm Information:

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Lewis, IA 51544

Bernie Havlovic, Farm Manager
Office phone # (712) 769-2402

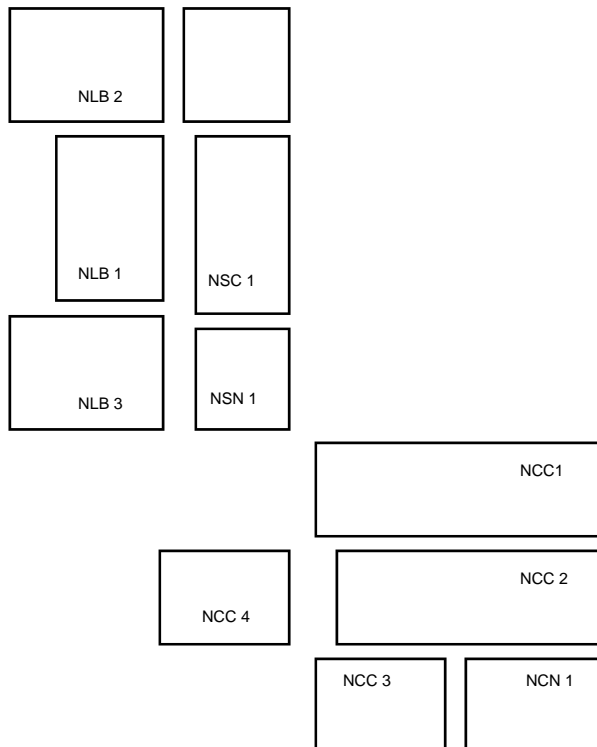
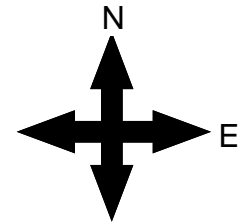


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Ken Pecinovsky , Farm Manager
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Temperature and Precipitation, Yr 2008
Ames, IA

Date	April			May			June			July			August		
	temp °F		precip inch	temp °F		precip inch	temp °F		precip inch	temp °F		precip inch	temp °F		precip inch
	max	min		max	min		max	min		max	min		max	min	
1	44	30	0.00	75	53	0.00	83	59	0.00						
2	51	27	0.00	66	41	0.49	77	62	0.51						
3	40	33	0.28	57	40	0.01	70	58	1.63						
4	59	30	0.00	71	36	0.00	71	61	0.08						
5	63	39	0.00	76	44	0.00	82	63	1.01						
6	61	34	0.00	81	51	1.68	75	64	0.10						
7	54	32	0.00	64	49	0.03	87	62	0.00						
8	42	34	0.01	66	44	0.00	76	64	1.06						
9	50	30	0.00	66	50	0.00	76	58	0.22						
10	51	37	0.81	61	49	0.27	82	55	0.01						
11	48	32	0.10	59	40	0.01									
12	33	30	0.04	69	42	0.00									
13	45	30	0.00	64	47	0.00									
14	53	27	0.00	66	41	0.00									
15	66	35	0.00	71	45	0.00									
16	76	49	0.00	76	46	0.00									
17	49	41	0.84	81	57	0.00									
18	48	41	0.28	68	48	0.00									
19	52	41	0.00	74	50	0.04									
20	66	47	0.00	68	46	0.00									
21	72	46	0.02	72	41	0.00									
22	70	42	0.46	62	51	0.00									
23	75	47	0.00	60	50	0.00									
24	72	57	0.36	65	48	0.04									
25	63	34	1.12	86	58	0.05									
26	54	33	0.00	79	59	0.00									
27	54	34	0.00	61	46	0.42									
28	44	29	0.00	64	47	0.00									
29	53	28	0.00	66	52	1.90									
30	68	36	0.00	78	60	1.19									
31				80	56	0.00									
	Avg temp °F		Sum precip	Avg temp °F		Sum	Avg temp °F		Sum	Avg temp °F		Sum	Avg temp °F		Sum
	max	min	inches	max	min	precip	max	min	precip	max	min	precip	max	min	precip
	56	36	4.32	69	48	6.13	78	61	4.62						

^

Temperature and Precipitation, Yr 2008
Chariton, IA

Date	April			May			June			July			August		
	temp °F		precip inch	temp °F		precip inch	temp °F		precip inch	temp °F		precip inch	temp °F		precip inch
	max	min		max	min		max	min		max	min		max	min	
1	42	30	0.00	76	56	0.00	83	58	0.01						
2	53	30	0.00	64	45	0.42	81	62	0.00						
3	41	33	0.25	57	40	0.02	76	61	0.91						
4	57	34	0.00	67	34	0.00	81	63	0.00						
5	61	38	0.00	78	47	0.00	82	64	2.06						
6	59	35	0.00	77	51	0.10	76	64	0.13						
7	54	30	0.01	69	51	0.51	85	64	0.00						
8	44	32	0.72	66	48	0.00	83	65	0.18						
9	45	26	0.01	64	48	0.17	76	59	0.02						
10	60	40	1.05	65	47	0.70	82	56	0.00						
11	50	33	0.08	58	41	0.03									
12	35	31	0.01	68	38	0.01									
13	45	31	0.00	63	48	0.00									
14	52	27	0.00	65	42	0.00									
15	64	36	0.00	65	43	0.00									
16	73	49	0.00	75	45	0.00									
17	56	45	0.95	82	55	0.00									
18	56	45	0.27	69	46	0.00									
19	51	43	0.01	75	51	0.00									
20	68	47	0.00	67	46	0.00									
21	72	54	0.00	70	41	0.00									
22	67	47	0.00	59	53	0.10									
23	75	48	0.25	59	50	0.34									
24	72	57	0.19	67	48	0.96									
25	66	36	0.54	84	59	0.05									
26	56	32	0.01	78	63	0.00									
27	55	39	0.00	65	51	0.01									
28	48	31	0.00	64	46	0.00									
29	56	30	0.00	80	53	0.00									
30	70	39	0.00	79	61	0.86									
31				80	59	0.00									
	Avg temp °F		Sum precip	Avg temp °F		Sum	Avg temp °F		Sum	Avg temp °F		Sum	Avg temp °F		Sum
	max	min	inches	max	min	precip	max	min	precip	max	min	precip	max	min	precip
	57	38	4.35	70	49	4.28	81	62	3.31						

Temperature and Precipitation, Yr 2008
Lewis, IA

Date	April			May			June			July			August		
	temp °F		precip inch	temp °F		precip inch	temp °F		precip inch	temp °F		precip inch	temp °F		precip inch
	max	min		max	min		max	min		max	min		max	min	
1	43	31	0.00	84	52	0.00	85	62	0.00						
2	53	28	0.00	55	40	0.26	82	65	0.02						
3	39	33	0.88	58	36	0.00	82	63	1.44						
4	58	29	0.00	70	35	0.00	76	61	1.39						
5	63	38	0.00	80	48	0.00	80	62	0.76						
6	61	31	0.00	78	52	0.11	76	63	0.00						
7	53	28	0.06	65	47	0.01	87	64	0.00						
8	41	30	0.10	68	42	0.00	80	64	1.84						
9	49	24	0.13	64	47	1.18	79	58	0.14						
10	56	38	1.13	60	40	0.53	83	55	0.00						
11	45	32	0.10	60	36	0.00									
12	36	30	0.01	71	40	0.00									
13	47	27	0.00	65	43	0.00									
14	54	25	0.00	67	38	0.00									
15	70	37	0.00	72	44	0.00									
16	72	48	0.00	76	48	0.00									
17	48	39	0.93	82	53	0.00									
18	45	41	0.42	73	47	0.00									
19	63	40	0.00	82	55	0.00									
20	68	42	0.00	69	47	0.00									
21	65	47	0.00	73	45	0.00									
22	72	42	0.03	61	53	0.21									
23	77	45	0.05	57	51	0.93									
24	75	58	0.08	75	49	0.91									
25	64	32	0.76	87	62	0.42									
26	56	31	0.06	76	58	0.02									
27	55	33	0.01	61	49	0.25									
28	51	29	0.00	59	45	0.30									
29	59	30	0.00	80	59	0.23									
30	75	40	0.00	80	61	1.46									
31				82	58	0.00									
	Avg temp °F		Sum precip	Avg temp °F		Sum	Avg temp °F		Sum	Avg temp °F		Sum	Avg temp °F		Sum
	max	min	inches	max	min	precip	max	min	precip	max	min	precip	max	min	precip
	57	35	4.75	71	48	6.82	81	62	5.59						

Temperature and Precipitation, Yr 2008
Nashua, IA

Date	April			May			June			July			August		
	temp °F		precip inch	temp °F		precip inch	temp °F		precip inch	temp °F		precip inch	temp °F		precip inch
	max	min		max	min		max	min		max	min		max	min	
1	43	27	0.01	63	47	0.02	83	53	0.00						
2	50	21	0.00	68	43	0.52	72	56	0.19						
3	45	30	0.02	55	37	0.03	63	57	0.38						
4	60	28	0.01	69	32	0.00	71	56	0.69						
5	65	34	0.00	74	41	0.00	82	63	1.01						
6	59	33	0.06	82	47	0.48	73	63	0.69						
7	43	32	0.00	62	46	0.24	88	60	0.81						
8	40	31	0.05	66	41	0.00	73	64	2.77						
9	43	31	0.00	63	49	0.00	75	60	0.00						
10	45	35	1.69	57	43	0.14	79	55	0.00						
11	46	33	0.26	59	41	0.04									
12	34	31	0.02	65	36	0.00									
13	44	27	0.00	63	45	0.01									
14	53	25	0.00	66	42	0.00									
15	65	32	0.00	70	40	0.00									
16	75	46	0.00	77	43	0.03									
17	47	41	0.66	79	48	0.00									
18	45	41	1.75	65	41	0.00									
19	52	45	0.00	66	46	0.01									
20	68	44	0.00	68	43	0.00									
21	77	47	0.09	70	38	0.00									
22	64	43	0.49	71	41	0.00									
23	75	40	0.00	66	48	0.10									
24	67	52	2.43	70	47	0.00									
25	65	33	1.44	78	58	0.41									
26	51	32	0.00	78	55	0.00									
27	52	30	0.00	58	45	0.00									
28	41	30	0.00	68	45	0.00									
29	51	26	0.00	59	49	1.89									
30	64	34	0.00	77	56	0.34									
31				79	55	0.02									
	Avg temp °F		Sum precip	Avg temp °F		Sum	Avg temp °F		Sum	Avg temp °F		Sum	Avg temp °F		Sum
	max	min	inches	max	min	precip	max	min	precip	max	min	precip	max	min	precip
	54	34	8.98	68	45	4.28	76	59	6.54						

Product List

Commercial Name or Experimental Number	Common Name or Experimental Number	Company
Herbicide		
Accent 75 WG	Nicosulfuron	Dupont
Arsenal 2 SL	Imazapyr	BASF
Assure II 0.88 EC	Quizalofop	Dupont
Atrazine 4 L	Atrazine	Syngenta
Atrazine 90 DF	Atrazine	Syngenta
Balance Flexx 4 SC	Isoxaflutole	Bayer CropScience
Balance Pro 4 SC	Isoxaflutole	Bayer CropScience
Basagran 4 SL	Bentazon	Agrilience, LLC
Cadet 0.91 EC	-	FMC
Callisto 4 SC	Mesotrione	Syngenta
Clarity 4 SL	Dicamba	BASF Corporation
Classic 25 WG	Chlorimuron ethyl	Dupont
Define 4 SC	Flufenacet	Bayer CropScience
Dual II Magnum 7.64 EC	S-metolachlor & CGA-154281	Syngenta
Durango DMA 4 SL (lb ae)	Glyphosate	Dow AgroSciences
ET 0.21 EC	Pyraflufen ethyl	Nichino America, Inc.
Express 50 SG	Tribenuron ethyl	Dupont
FirstRate 84 WG	Cloransulam-methyl	Dow AgroSciences
Fusilade DX 2 EC	Fluazifop-P-butyl	Syngenta
Gangster FR 84 WG	Cloransulam-methyl	Valent
Gangster V 51 WG	Flumioxazin	Valent
Glyfos X-tra 3 SL (lb ae)	Glyphosate	Cheminova
GWN-3041	-	Gowan Company
GWN-3124	-	Gowan Company
Halosulfuron 75 DG	Halosulfuron	-
Harmony GT XP 50 DF	Thifensulfuron	Dupont
Harness 7 EC	Acetochlor & MON 4660	Monsanto
Ignite 280 2.33 SL	Glufosinate	Bayer CropScience
Impact 2.8 SC	Topramezone	AMVAC Chemical
IntRRo 4 EC	Alachlor	Monsanto
Isoxidifen-ethyl	Isoxidifen-ethyl	-
KIH-485 85 WG	-	Kumiai Chemical
Laudis 3.5 SC	Tembotrione & safener	Bayer CropScience
Makaze 3 SL (lb ae)	Glyphosate	UAP-Loveland Ind.
Metribuzin 75 DF	Metribuzin	Cheminova
Nicosulfuron 75 DF	Nicosulfuron	-
Outlook 6 EC	Dimethenamid-P	BASF Corporation
Parallel 7.8 EC	Metolachlor	Makhteshim-Agan

Product List (continued)

Commercial Name or Experimental Number	Common Name or Experimental Number	Company
Herbicide		
Permit 75 DF	Halosulfuron	Gowan Company
Poast Plus 1 EC	Sethoxydim	BASF
Princep Caliber 90 WDG	Simazine	Syngenta
Prowl H2O 3.8 EC	Pendimethalin	BASF Corporation
Pursuit 2 SL	Imazethapyr	BASF Corporation
Python 80 WG	Flumetsulam	Dow AgroSciences
Resolve DF 25 DF	Rimsulfuron	Dupont
Resource 0.86 EC	Flumiclorac pentyl ester	Valent
Roundup Original 3 SL (lb ae)	Glyphosate	Monsanto
Roundup Original MAX 4.5 SL (lb ae)	Glyphosate	Monsanto
Roundup PowerMAX 4.5 SL (lb ae)	Glyphosate	Monsanto
Roundup WeatherMAX 4.5 SL (lb ae)	Glyphosate	Monsanto
Samson 4 SC	-	-
Select 2 EC	Clethodim	Valent
Select Max 0.97 EC	Clethodim	Valent
Sencor DF 75	Metribuzin	Bayer CropScience
Spartan 4 F	Sulfentrazone	FMC Corporation
Targa 0.88 EC	Quizalofop	Gowan Company
Touchdown Total 4.17 SL (lb ae)	Glyphosate	Syngenta
Ultra Blazer 2 SL	Acifluorfen	United Phosphorus, Inc.
Valor SX 51 WG	Flumioxazin	Valent
2, 4-D LV4 4 SL	2, 4-D ester	Agrilience, LLC
Herbicide Prepackage Mixture		
Authority Assist 4 SC	Sulfentrazone & imazethapyr	FMC Corporation
Authority First 70 DF	Sulfentrazone & chlorimuron ethyl	FMC Corporation
Authority MTZ 45 DF	Sulfentrazone & metribuzin	FMC Corporation
Bicep II Magnum 5.5 L	S-metolachlor & atrazine & CGA-154281	Syngenta
Boundary 6.5 EC	S-metolachlor & metribuzin & CGA-154281	Syngenta
Capreno	-	Bayer CropScience
Cinch ATZ 5.5 L	Atrazine & s-metolachlor	Dupont
Corvus	-	Bayer CropScience
Degree Xtra 4.04 CS	Acetochlor & safener & atrazine	Monsanto
Enlite 47.86 DG	Chlorimuron ethyl & flumioxazin & thifensulfuron methyl	Dupont

Product List (continued)

Commercial Name or Experimental Number	Common Name or Experimental Number	Company
Herbicide Prepackage Mixture		
Envive 41.3 DG	Chlorimuron ethyl & flumioxazin & thifensulfuron methyl	Dupont
Extreme 2.17 SL	Imazethapyr & glyphosate	BASF Corporation
Guardsman Max 5 SC	Dimethenamid-P & atrazine	BASF Corporation
Halex GT 4.38 CS	S-metolachlor & glyphosate & mesotrione	Syngenta
Harness Xtra 5.6 SE	Acetochlor & safener & atrazine	Monsanto
Harness Xtra 6 SE	Acetochlor & safener & atrazine	Monsanto
Lexar 3.7 SE	S-metolachlor & mesotrione & atrazine	Syngenta
Lumax 3.95 SE	S-metolachlor & mesotrione & atrazine	Syngenta
Parallel Plus 5.5 L	Atrazine & metolachlor	Makhteshim-Agan
Prefix 5.29 EC	S-metolachlor & fomesafen	Syngenta
Pursuit Plus 2.9 EC	Pendimethalin & imazethapyr	BASF
Radius 4 SC	Flufenacet & isoxaflutole	Bayer CropScience
Rage D-Tech 4 EC	Carfentrazone & 2, 4-D ester	FMC Corporation
Require Q	Rimsulfuron & dicamba	Dupont
Resolve Q	Rimsulfuron & thifensulfuron methyl	Dupont
Sonic 70 DF	Sulfentrazone & cloransulam-methyl	Dow AgroSciences
Status 56 WG	Diflufenzopyr & dicamba	BASF
SureStart 4.25 SE	Acetochlor & clopyralid monoethanolamine salt & flumetsulam	Dow AgroSciences
Synchrony 28.4 XP	Chlorimuron ethyl & thifensulfuron methyl	Dupont
Tackle 4 SL	-	-
Valor XLT 40.3 WG	Flumioxazin & chlorimuron	Valent
Yukon 67.5 DF	Halosulfuron & dicamba	Gowan Company
Additives & Classification		
28%N	Urea ammonium nitrate	United Suppliers
Activator 90 (NIS)	Non-ionic surfactant/penetrant/antifoaming agent	UAP-Loveland Ind.
Agridex	Non-ionic surfactant	-
AMS (S-Sul ammonium sulfate)	Sprayable ammonium sulfate	American Plant Food
AMSol	Liquid ammonium sulfate	United Suppliers
Awaken	Multi-purpose fertilizer additive	UAP-Loveland Ind.
Choice Weather Master	Water conditioning agent	UAP-Loveland Ind.
Citraplex Zn	Zinc sulfate	UAP-Loveland Ind.
COC (Herbimax Crop Oil Concentrate)	Oil-surfactant adjuvant	UAP-Loveland Ind.
LI 6000	-	UAP-Loveland Ind.

Product List (continued)

Commercial Name or Experimental Number	Common Name or Experimental Number	Company
Additives & Classification		
LI 6222	-	UAP-Loveland Ind.
LI 6263	-	UAP-Loveland Ind.
LI 6264	-	UAP-Loveland Ind.
MSO (Concentrate)	Modified vegetable oil and surfactant blend	UAP-Loveland Ind.
MSO (Succeed)	Methylated seed oil and surfactant blend	United Suppliers
NIS (Activator 90)	Non-ionic surfactant/penetrant	UAP-Loveland Ind.
Zn EDTA 9%	-	UAP-Loveland Ind.

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Application Description

	A	B	C
Application Date:	4/21/2008	5/5/2008	5/25/2008
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	EPP	PRE	EPOST
Application Placement:	BROSOI	BROSOI	BROFOL
Air Temperature, Unit:	69 F	78 F	80 F
% Relative Humidity:	61	29	72
Wind Velocity, Unit:	7 MPH	10 MPH	10 MPH
Soil Temperature, Unit:	54 F	65 F	67 F
Soil Moisture:	EXCESSIVE	ADEQUATE	ADEQUATE
% Cloud Cover:	100	5	90

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC
Stage Majority, Percent:			V1
Stage Minimum, Percent:			V1
Stage Maximum, Percent:			V2
Height, Unit:			1.5 IN
Height Minimum, Maximum:			1 1.5

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Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Stage Majority, Percent:		1 LEAF	2 LEAF
Stage Minimum, Percent:		1 LEAF	1 LEAF
Stage Maximum, Percent:		1 LEAF	4 LEAF
Height, Unit:		0.25 IN	0.75 IN
Height Minimum, Maximum:		0.25 0.25	0.25 1.5
Density, Unit:		5 FT2	5 FT2
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Stage Majority, Percent:		COTYL	1 LEAF
Stage Minimum, Percent:		COTYL	COTYL
Stage Maximum, Percent:		COTYL	2 LEAF
Height, Unit:		0.25 IN	0.5 IN
Height Minimum, Maximum:		0.25 0.25	0.25 0.75
Density, Unit:		0 FT2	3 FT2
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Stage Majority, Percent:			2 LEAF
Stage Minimum, Percent:			COTYL
Stage Maximum, Percent:			4 LEAF
Height, Unit:			0.38 IN
Height Minimum, Maximum:			0.25 0.5
Density, Unit:			2 FT2
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W
Stage Majority, Percent:	COTYL	4 LEAF	8 LEAF
Stage Minimum, Percent:	COTYL	COTYL	COTYL
Stage Maximum, Percent:	1 LEAF	8 LEAF	NUMERO
Height, Unit:	0.25 IN	0.5 IN	2 IN
Height Minimum, Maximum:	0.25 0.38	0.25 1	0.25 3
Density, Unit:	15 FT2	10 FT2	10 FT2

Application Equipment

	A	B	C
Appl. Equipment:	ATV	ATV	ATV
Operating Pressure, Unit:	30 PSI	30 PSI	30 PSI
Nozzle Size:	11002	11002	11002
Spray Volume, Unit:	20 GAL/AC	20 GAL/AC	20 GAL/AC

Iowa State University

Corvus and Balance Flexx applied early preplant, preemergence and early postemergence for one-pass weed control in corn, Ames, IA, 2008.

Trial ID: ACN 1
Location: Ames

Protocol ID: HP08NARJJA
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	212	306	
2	Corvus	3.88	SC	0.136	LB AI/A	4.5	FL OZ/A	EPP	A	102	210	314	
	Atrazine	4	L	1.0	LB AI/A	2.0	PT/A	EPP	A				
	COC	100	SL	1.0	% V/V	1.0	% V/V	EPP	A				
3	Corvus	3.88	SC	0.17	LB AI/A	5.6	FL OZ/A	EPP	A	103	207	311	
	Atrazine	4	L	1.0	LB AI/A	2.0	PT/A	EPP	A				
	COC	100	SL	1.0	% V/V	1.0	% V/V	EPP	A				
4	Balance Flexx	4	SC	0.156	LB AI/A	5.0	FL OZ/A	EPP	A	104	213	301	
	Atrazine	4	L	1.0	LB AI/A	2.0	PT/A	EPP	A				
	COC	100	SL	1.0	% V/V	1.0	% V/V	EPP	A				
5	Balance Flexx	4	SC	0.188	LB AI/A	6.0	FL OZ/A	EPP	A	105	209	303	
	Atrazine	4	L	1.0	LB AI/A	2.0	PT/A	EPP	A				
	COC	100	SL	1.0	% V/V	1.0	% V/V	EPP	A				
6	Lumax	3.95	SE	3.16	LB AI/A	3.2	QT/A	EPP	A	106	208	312	
	COC	100	SL	1.0	% V/V	1.0	% V/V	EPP	A				
7	Corvus	3.88	SC	0.136	LB AI/A	4.5	FL OZ/A	PRE	B	107	215	307	
	Atrazine	4	L	1.0	LB AI/A	2.0	PT/A	PRE	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	PRE	B				
8	Corvus	3.88	SC	0.17	LB AI/A	5.6	FL OZ/A	PRE	B	108	204	313	
	Atrazine	4	L	1.0	LB AI/A	2.0	PT/A	PRE	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	PRE	B				
9	Balance Flexx	4	SC	0.156	LB AI/A	5.0	FL OZ/A	PRE	B	109	202	316	
	Atrazine	4	L	1.0	LB AI/A	2.0	PT/A	PRE	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	PRE	B				
10	Balance Flexx	4	SC	0.188	LB AI/A	6.0	FL OZ/A	PRE	B	110	201	315	
	Atrazine	4	L	1.0	LB AI/A	2.0	PT/A	PRE	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	PRE	B				
11	Lumax	3.95	SE	3.16	LB AI/A	3.2	QT/A	PRE	B	111	203	308	
	COC	100	SL	1.0	% V/V	1.0	% V/V	PRE	B				
12	Corvus	3.88	SC	0.136	LB AI/A	4.5	FL OZ/A	EPOST	C	112	206	305	
	Atrazine	4	L	1.0	LB AI/A	2.0	PT/A	EPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	EPOST	C				
13	Corvus	3.88	SC	0.17	LB AI/A	5.6	FL OZ/A	EPOST	C	113	216	310	
	Atrazine	4	L	1.0	LB AI/A	2.0	PT/A	EPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	EPOST	C				
14	Balance Flexx	4	SC	0.156	LB AI/A	5.0	FL OZ/A	EPOST	C	114	214	302	
	Atrazine	4	L	1.0	LB AI/A	2.0	PT/A	EPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	EPOST	C				
15	Balance Flexx	4	SC	0.188	LB AI/A	6.0	FL OZ/A	EPOST	C	115	205	309	
	Atrazine	4	L	1.0	LB AI/A	2.0	PT/A	EPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	EPOST	C				
16	Lumax	3.95	SE	3.16	LB AI/A	3.2	QT/A	EPOST	C	116	211	304	
	X-77	100	SL	0.25	% V/V	0.25	% V/V	EPOST	C				

Sort Order: Replicate 1

Iowa State University

KIH-485 applied early preplant, and at reduced rates preemergence followed by postemergence applied Roundup PowerMAX in no-tillage corn, Ames, IA, 2008.
 Trial ID: ACN 2 Protocol ID: KIHcorn#1
 Location: Ames Study Director: Owen/Lux/Franzenburg/Grossnickle
 Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames **Trial Status:** ONE-YEAR/INTERIM
State/Prov.: IA
Postal Code: 50014 **Initiation Date:** 4/16/2008
Country: USA

Objectives:

The purpose of this study was to evaluate several rates of KIH-485 applied early preplant, and at reduced rates applied preemergence followed by postemergence Roundup PowerMAX for crop phytotoxicity and weed control in no-tillage corn production.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: DEKALB DKC 52-43 VT3
BBCH Scale: BCOR **Planting Date:** 5/15/2008
Planting Method: DIRECT DRILLED **Rate, Unit:** 32000 SEEDS/A
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL **Emergence Date:** 5/25/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ERBVI **Eriochloa villosa**
Common Name: Woolly cupgrass
Pest 3 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 4 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 5 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

The study area was left un-tilled from the 2007 soybean cropping year. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 65 to 70% at planting.

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Soil Description
% OM: 6.4
pH: 7.6
Texture: CANISTEO CLAY LOAM, NICOLLET LOAM
Soil Name: CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Application Description

	A	B	C
Application Date:	4/16/2008	5/16/2008	
Application Method:	SPRAY	SPRAY	
Application Timing:	EPP	PRE	
Application Placement:	BROSOI	BROSOI	
Air Temperature, Unit:	73 F	77 F	
% Relative Humidity:	40	21	
Wind Velocity, Unit:	10 MPH	13 MPH	
Soil Temperature, Unit:	58 F	67 F	
Soil Moisture:	ADEQUATE	ADEQUATE	
% Cloud Cover:	30	20	

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC

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Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Stage Majority, Percent:		2 LEAF	
Stage Minimum, Percent:		1 LEAF	
Stage Maximum, Percent:		2 LEAF	
Height, Unit:		0.5 IN	
Height Minimum, Maximum:		0.25 0.75	
Density, Unit:		3 FT2	
Pest 2 Code, Disc., Scale:	ERBVI W	ERBVI W	ERBVI W
Stage Majority, Percent:		2 LEAF	
Stage Minimum, Percent:		1 LEAF	
Stage Maximum, Percent:		2 LEAF	
Height, Unit:		0.5 IN	
Height Minimum, Maximum:		0.25 0.75	
Density, Unit:		3 FT2	
Pest 3 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Stage Majority, Percent:		COTYL	
Stage Minimum, Percent:		COTYL	
Stage Maximum, Percent:		1 LEAF	
Height, Unit:		0.25 IN	
Height Minimum, Maximum:		0.25 0.5	
Density, Unit:		2 FT2	
Pest 4 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Stage Majority, Percent:		COTYL	
Stage Minimum, Percent:		COTYL	
Stage Maximum, Percent:		COTYL	
Height, Unit:		0.25 IN	
Height Minimum, Maximum:		0.25 0.25	
Density, Unit:		1 FT2	
Pest 5 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W
Stage Majority, Percent:	COTYL	10 LF	
Stage Minimum, Percent:	COTYL	COTYL	
Stage Maximum, Percent:	COTYL	NUMERO	
Height, Unit:	0.25 IN	0.25 IN	
Height Minimum, Maximum:	0.25 0.38	0.25 2	
Density, Unit:	30 FT2	40 FT2	

Application Equipment

	A	B	C
Appl. Equipment:	ATV	ATV	
Operating Pressure, Unit:	30 PSI	30 PSI	
Nozzle Size:	11002	11002	
Spray Volume, Unit:	20 GAL/AC	20 GAL/AC	

Iowa State University

KIH-485 applied early preplant, and at reduced rates preemergence followed by postemergence applied Roundup PowerMAX in no-tillage corn, Ames, IA, 2008.

Trial ID: ACN 2

Protocol ID: KIHcorn#1

Location: Ames

Study Director: Owen/Lux/Franzenburg/Grossnickle

Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	207	303	
2	KIH-485	85	WG	0.22	LB AI/A	4.14	OZ WT/A	EPP	A	102	205	308	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPP	A				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPP	A				
	Clarity	4	SL	0.5	LB AI/A	16.0	FL OZ/A	POST	C				
	COC	100	SL	1.0	QT/A	1.0	QT/A	POST	C				
3	KIH-485	85	WG	0.27	LB AI/A	5.1	OZ WT/A	EPP	A	103	201	304	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPP	A				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPP	A				
	Clarity	4	SL	0.5	LB AI/A	16.0	FL OZ/A	POST	C				
	COC	100	SL	1.0	QT/A	1.0	QT/A	POST	C				
4	KIH-485	85	WG	0.45	LB AI/A	8.5	OZ WT/A	EPP	A	104	208	301	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPP	A				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPP	A				
	Clarity	4	SL	0.5	LB AI/A	16.0	FL OZ/A	POST	C				
	COC	100	SL	1.0	QT/A	1.0	QT/A	POST	C				
5	Dual II Magnum	7.64	EC	1.9	LB AI/A	2.0	PT/A	EPP	A	105	206	305	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPP	A				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPP	A				
	Clarity	4	SL	0.5	LB AI/A	16.0	FL OZ/A	POST	C				
	COC	100	SL	1.0	QT/A	1.0	QT/A	POST	C				
6	KIH-485	85	WG	0.15	LB AI/A	2.82	OZ WT/A	PRE	B	106	204	302	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	C				
7	KIH-485	85	WG	0.19	LB AI/A	3.58	OZ WT/A	PRE	B	107	203	306	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	C				
8	Dual II Magnum	7.64	EC	1.28	LB AI/A	1.34	PT/A	PRE	B	108	202	307	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	C				

Sort Order: Replicate 1

Iowa State University

Early preplant and preemergence BAS 78102H and preemergence BAS 80004H in one and two-pass weed control programs in no-tillage corn, Ames, IA, 2008.

Trial ID: ACN 3
Location: Ames

Protocol ID: 2008-US-C9F-C-02.0
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA

Trial Status: ONE-YEAR/INTERIM
Initiation Date: 4/21/2008

Objectives:

The purpose of this study was to evaluate crop phytotoxicity and weed control of early preplant and preemergence applied BAS 78102H, and preemergence applied BAS 80004H in one and two-pass programs in no-tillage corn production.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: DEKALB DKC 52-43 VT3
BBCH Scale: BCOR
Planting Method: DIRECT DRILLED
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL
Planting Date: 5/5/2008
Rate, Unit: 32000 SEEDS/A
Emergence Date: 5/15/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: NO-TILL
Study Design: Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

The study area was left un-tilled from the 2007 soybean cropping year. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 60 to 70% at planting.

Soil Description

% OM: 6.4
pH: 7.6
Texture: CANISTEO CLAY LOAM, NICOLLET LOAM
Soil Name: CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B	C
Application Date:	4/21/2008	5/5/2008	
Application Method:	SPRAY	SPRAY	
Application Timing:	EPP	PRE	
Application Placement:	BROSOI	BROSOI	
Air Temperature, Unit:	69 f	78 F	
% Relative Humidity:	61	29	
Wind Velocity, Unit:	7 MPH	10 MPH	
Soil Temperature, Unit:	54 f	65 F	
Soil Moisture:	EXCESSIVE	ADEQUATE	
% Cloud Cover:	100	5	

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Stage Majority, Percent:		1 LEAF	
Stage Minimum, Percent:		1 LEAF	
Stage Maximum, Percent:		1 LEAF	
Height, Unit:		0.25 IN	
Height Minimum, Maximum:		0.25 0.25	
Density, Unit:		5 FT2	
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Stage Majority, Percent:		COTYL	
Stage Minimum, Percent:		COTYL	
Stage Maximum, Percent:		COTYL	
Height, Unit:		0.25 IN	
Height Minimum, Maximum:		0.25 0.25	
Density, Unit:		0 FT2	
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W
Stage Majority, Percent:	COTYL	4 LEAF	
Stage Minimum, Percent:	COTYL	COTYL	
Stage Maximum, Percent:	1 LEAF	8 LEAF	
Height, Unit:	0.25 IN	0.5 IN	
Height Minimum, Maximum:	0.25 0.38	0.25 1	
Density, Unit:	15 FT2	10 FT2	

Application Equipment

	A	B	C
Appl. Equipment:	ATV	ATV	
Operating Pressure, Unit:	30 PSI	30 PSI	
Nozzle Size:	11002	11002	
Spray Volume, Unit:	20 GAL/AC	20 GAL/AC	

Iowa State University

Early preplant and preemergence BAS 78102H and preemergence BAS 80004H in one and two-pass weed control programs in no-tillage corn, Ames, IA, 2008.

Trial ID: ACN 3
Location: Ames

Protocol ID: 2008-US-C9F-C-02.0
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Plot No. 1	Plot No. 2	Plot No. 3	By Rep Notes
1	Untreated									101	207	303	
2	BAS 78102H	5.57	EC	1.09	LB AI/A	25.0	FL OZ/A	PRE	B	102	205	308	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
3	BAS 80004H	2.85	SC	0.089	LB AI/A	4.0	FL OZ/A	PRE	B	103	209	302	
	Guardsman Max	5	SC	2.85	LB AI/A	73.0	FL OZ/A	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
4	Lumax	3.95	SE	2.96	LB AI/A	96.0	FL OZ/A	PRE	B	104	201	305	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
5	BAS 78102H	5.57	EC	0.74	LB AI/A	17.0	FL OZ/A	PRE	B	105	202	307	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	MPOST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	MPOST	C				
6	BAS 80004H	2.85	SC	0.067	LB AI/A	3.0	FL OZ/A	PRE	B	106	208	301	
	Guardsman Max	5	SC	1.56	LB AI/A	40.0	FL OZ/A	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	MPOST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	MPOST	C				
7	Harness Xtra	6	SE	1.8	LB AI/A	38.4	FL OZ/A	PRE	B	107	204	304	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	MPOST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	MPOST	C				
8	BAS 78102H	5.57	EC	1.09	LB AI/A	25.0	FL OZ/A	EPP	A	108	206	309	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPP	A				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	EPP	A				
9	BAS 78102H	5.57	EC	0.74	LB AI/A	17.0	FL OZ/A	PRE	B	109	203	306	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	Status	56	WG	0.0875	LB AI/A	2.5	OZ WT/A	MPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	MPOST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	MPOST	C				

Sort Order: Replicate 1

Iowa State University

Glyphos X-tra and metribuzin applied early preplant and postemergence in no-tillage corn, Ames, IA, 2008.

Trial ID: ACN 4
Location: Ames

Protocol ID: HZEAMXMET0801
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA
Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/5/2008

Objectives:

The purpose of this study was to evaluate early preplant and postemergence applied Glyphos X-tra and Metribuzin in no-tillage corn production for phytotoxicity and weed control.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: DEKALB DKC 52-43 VT3
BBCH Scale: BCOR
Planting Method: DIRECT DRILLED
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL
Planting Date: 5/5/2008
Rate, Unit: 32000 SEEDS/A
Emergence Date: 5/15/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: NO-TILL
Study Design: Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

The study area was left un-tilled from the 2007 soybean cropping year. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 60 to 70% at planting.

Soil Description

% OM: 6.4
pH: 7.6
Texture: CANISTEO CLAY LOAM, NICOLLET LOAM
Soil Name: CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B
Application Date:	5/5/2008	5/28/2008
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	POST
Application Placement:	BROSOI	BROFOL
Air Temperature, Unit:	78 F	60 F
% Relative Humidity:	29	60
Wind Velocity, Unit:	10 MPH	7 MPH
Soil Temperature, Unit:	65 F	58 F
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	5	70

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC
Stage Majority, Percent:		V2
Stage Minimum, Percent:		V1
Stage Maximum, Percent:		V2
Height, Unit:		2.5 IN
Height Minimum, Maximum:		2 3

Iowa State University

Pest Stage At Each Application

	A		B	
Pest 1 Code, Disc., Scale:	SETFA	W	SETFA	W
Stage Majority, Percent:	1 LEAF		2 LEAF	
Stage Minimum, Percent:	1 LEAF		1 LEAF	
Stage Maximum, Percent:	1 LEAF		3 LEAF	
Height, Unit:	0.25	IN	0.75	IN
Height Minimum, Maximum:	0.25	0.25	0.25	1.5
Density, Unit:	5	FT2	25	FT2
Pest 2 Code, Disc., Scale:	ABUTH	W	ABUTH	W
Stage Majority, Percent:	COTYL		1 LEAF	
Stage Minimum, Percent:	COTYL		COTYL	
Stage Maximum, Percent:	COTYL		3 LEAF	
Height, Unit:	0.25	IN	0.5	IN
Height Minimum, Maximum:	0.25	0.25	0.25	1.5
Density, Unit:	0	FT2	2	FT2
Pest 3 Code, Disc., Scale:	AMATA	W	AMATA	W
Stage Majority, Percent:			4 LEAF	
Stage Minimum, Percent:			COTYL	
Stage Maximum, Percent:			8 LEAF	
Height, Unit:			0.25	IN
Height Minimum, Maximum:			0.25	0.5
Density, Unit:			2	FT2
Pest 4 Code, Disc., Scale:	CHEAL	W	CHEAL	W
Stage Majority, Percent:	4 LEAF		8 LEAF	
Stage Minimum, Percent:	COTYL		COTYL	
Stage Maximum, Percent:	8 LEAF		NUMERO	
Height, Unit:	0.5	IN	0.75	IN
Height Minimum, Maximum:	0.25	1	0.25	3
Density, Unit:	10	FT2	2	FT2

Application Equipment

	A		B	
Appl. Equipment:	ATV		ATV	
Operating Pressure, Unit:	30	PSI	30	PSI
Nozzle Size:	11002		11002	
Spray Volume, Unit:	20	GAL/AC	20	GAL/AC

Iowa State University

**Glyfos X-tra and metribuzin applied early preplant and postemergence in
no-tillage corn, Ames, IA, 2008.**

Trial ID: ACN 4
Location: Ames

Protocol ID: HZEAMXMET0801
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trit No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	205	303	
2	Glyfos X-tra	3	SL	0.75	LB AE/A	32.0	FL OZ/A	PRE	A	102	204	306	
	Metribuzin	75	DF	0.125	LB AI/A	2.67	OZ WT/A	PRE	A				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	PRE	A				
3	Glyfos X-tra	3	SL	0.75	LB AE/A	32.0	FL OZ/A	PRE	A	103	206	304	
	Metribuzin	75	DF	0.1875	LB AI/A	4.0	OZ WT/A	PRE	A				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	PRE	A				
4	Glyfos X-tra	3	SL	0.75	LB AE/A	32.0	FL OZ/A	PRE	A	104	202	302	
	Metribuzin	75	DF	0.25	LB AI/A	5.33	OZ WT/A	PRE	A				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	PRE	A				
5	Glyfos X-tra	3	SL	0.75	LB AE/A	32.0	FL OZ/A	PRE	A	105	201	305	
	Metribuzin	75	DF	0.094	LB AI/A	2.0	OZ WT/A	PRE	A				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	PRE	A				
	Glyfos X-tra	3	SL	0.75	LB AE/A	32.0	FL OZ/A	POST	B				
	Metribuzin	75	DF	0.094	LB AI/A	2.0	OZ WT/A	POST	B				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	POST	B				
6	Glyfos X-tra	3	SL	0.75	LB AE/A	32.0	FL OZ/A	PRE	A	106	203	301	
	Atrazine	4	L	1.0	LB AI/A	32.0	FL OZ/A	PRE	A				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	PRE	A				

Sort Order: Replicate 1

Iowa State University

Standard one-pass programs in corn involving Isoxadifen product blends and with Rimsulfuron & Isoxaflutole as foundations in two-pass programs, Ames, IA, 2008.
 Trial ID: ACC 1 Protocol ID: USA-08-115
 Location: Ames Study Director: Owen/Lux/Franzenburg/Grossnickle
 Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames **Trial Status:** ONE-YEAR/INTERIM
State/Prov.: IA **Initiation Date:** 5/15/2008
Postal Code: 50014
Country: USA

Objectives:

The purpose of this study was to evaluate standard one-pass programs in corn involving Isoxadifen product blends and with Rimsulfuron & Isoxaflutole as foundations in two-pass programs for corn phytotoxicity, weed control and corn yield.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: DEKALB DKC 52-43 VT3
BBCH Scale: BCOR **Planting Date:** 5/15/2008
Planting Method: DIRECT DRILLED **Rate, Unit:** 32000 SEEDS/A
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL **Emergence Date:** 5/25/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT **Tillage Type:** MINIMUM-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

Tillage included a field cultivation to prepare the seedbed for planting. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 25 to 30% at planting.

Soil Description

% OM: 6.4 **Texture:** CANISTEO CLAY LOAM, NICOLLET LOAM
pH: 7.6 **Soil Name:** CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B
Application Date:	5/16/2008	6/7/2008
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	POST
Application Placement:	BROSOI	BROFOL
Air Temperature, Unit:	77 F	79 F
% Relative Humidity:	21	79
Wind Velocity, Unit:	13 MPH	15 MPH
Soil Temperature, Unit:	67 F	65 F
Soil Moisture:	ADEQUATE	EXCESSIVE
% Cloud Cover:	20	60

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC
Stage Majority, Percent:		V3
Stage Minimum, Percent:		V2
Stage Maximum, Percent:		V3
Height, Unit:		3.5 IN
Height Minimum, Maximum:		3 5

Iowa State University

Pest Stage At Each Application

	A		B	
Pest 1 Code, Disc., Scale:	SETFA	W	SETFA	W
Stage Majority, Percent:			4	LEAF
Stage Minimum, Percent:			1	LEAF
Stage Maximum, Percent:			4L, 1T	
Height, Unit:			0.75	IN
Height Minimum, Maximum:			0.25	1.5
Density, Unit:			10	FT2
Pest 2 Code, Disc., Scale:	ABUTH	W	ABUTH	W
Stage Majority, Percent:			3	LEAF
Stage Minimum, Percent:			COTYL	
Stage Maximum, Percent:			4	LEAF
Height, Unit:			0.75	IN
Height Minimum, Maximum:			0.25	1.5
Density, Unit:			10	FT2
Pest 3 Code, Disc., Scale:	AMATA	W	AMATA	W
Stage Majority, Percent:			3	LEAF
Stage Minimum, Percent:			COTYL	
Stage Maximum, Percent:			4	LEAF
Height, Unit:			0.38	IN
Height Minimum, Maximum:			0.25	0.5
Density, Unit:			10	FT2
Pest 4 Code, Disc., Scale:	CHEAL	W	CHEAL	W
Stage Majority, Percent:			4	LEAF
Stage Minimum, Percent:			COTYL	
Stage Maximum, Percent:			5	LEAF
Height, Unit:			0.38	IN
Height Minimum, Maximum:			0.25	0.5
Density, Unit:			15	FT2

Application Equipment

	A		B	
Appl. Equipment:	ATV		HAND	SPRAYER
Operating Pressure, Unit:	30	PSI	35	PSI
Nozzle Size:	11002		11003	
Spray Volume, Unit:	20	GAL/AC	20	GAL/AC

Iowa State University

Standard one-pass programs in corn involving Isoxadifen product blends and with Rimsulfuron & Isoxaflutole as foundations in two-pass programs, Ames, IA, 2008.

Trial ID: ACC 1

Protocol ID: USA-08-115

Location: Ames

Study Director: Owen/Lux/Franzenburg/Grossnickle

Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Plot No. 1	Plot No. 2	By Rep 3	Notes
1	Untreated									101	210	304	
2	Rimsulfuron	25	SG	0.188	OZ AI/A	0.75	OZ WT/A	POST	B	102	212	305	
	Nicosulfuron	75	WG	0.375	OZ AI/A	0.5	OZ WT/A	POST	B				
	Isoxadifen-ethyl	50	WG	0.125	OZ AI/A	0.25	OZ WT/A	POST	B				
	Impact	2.8	SC	0.175	OZ AI/A	0.5	FL OZ/A	POST	B				
	Atrazine	90	DF	8.0	OZ AI/A	0.556	LB/A	POST	B				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	POST	B				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	B				
3	Cinch ATZ	5.5	EC	22.0	OZ AI/A	1.0	QT/A	PRE	A	103	207	309	
	Rimsulfuron	25	SG	0.188	OZ AI/A	0.75	OZ WT/A	POST	B				
	Nicosulfuron	75	WG	0.375	OZ AI/A	0.5	OZ WT/A	POST	B				
	Isoxadifen-ethyl	50	WG	0.125	OZ AI/A	0.25	OZ WT/A	POST	B				
	Impact	2.8	SC	0.175	OZ AI/A	0.5	FL OZ/A	POST	B				
	Atrazine	90	DF	8.0	OZ AI/A	8.9	OZ WT/A	POST	B				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	POST	B				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	B				
4	Rimsulfuron	25	SG	0.229	OZ AI/A	0.92	OZ WT/A	POST	B	104	201	308	
	Thifensulfuron	50	SG	0.05	OZ AI/A	0.1	OZ WT/A	POST	B				
	Isoxadifen-ethyl	50	WG	0.115	OZ AI/A	0.23	OZ WT/A	POST	B				
	Atrazine	90	DF	8.0	OZ AI/A	8.9	OZ WT/A	POST	B				
	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	B				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	B				
5	Cinch ATZ	5.5	EC	22.0	OZ AI/A	1.0	QT/A	PRE	A	105	202	306	
	Rimsulfuron	25	SG	0.229	OZ AI/A	0.92	OZ WT/A	POST	B				
	Thifensulfuron	50	SG	0.05	OZ AI/A	0.1	OZ WT/A	POST	B				
	Isoxadifen-ethyl	50	WG	0.115	OZ AI/A	0.23	OZ WT/A	POST	B				
	Atrazine	90	DF	8.0	OZ AI/A	8.9	OZ WT/A	POST	B				
	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	B				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	B				
6	Rimsulfuron	25	SG	0.25	OZ AI/A	1.0	OZ WT/A	POST	B	106	211	301	
	Dicamba	70	WG	1.925	OZ AI/A	2.75	OZ WT/A	POST	B				
	Isoxadifen-ethyl	50	WG	0.125	OZ AI/A	0.25	OZ WT/A	POST	B				
	Atrazine	90	DF	8.0	OZ AI/A	8.9	OZ WT/A	POST	B				
	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	B				
	AMS	100	SG	32.0	OZ/A	2.0	LB/A	POST	B				
7	Cinch ATZ	5.5	EC	22.0	OZ AI/A	1.0	QT/A	PRE	A	107	203	310	
	Rimsulfuron	25	SG	0.25	OZ AI/A	1.0	OZ WT/A	POST	B				
	Dicamba	70	WG	1.925	OZ AI/A	2.75	OZ WT/A	POST	B				
	Isoxadifen-ethyl	50	WG	0.125	OZ AI/A	0.25	OZ WT/A	POST	B				
	Atrazine	90	DF	8.0	OZ AI/A	8.9	OZ WT/A	POST	B				
	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	B				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	B				
8	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	B	108	208	303	
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	B				
9	Cinch ATZ	5.5	EC	22.0	OZ AI/A	1.0	QT/A	PRE	A	109	205	312	
	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	B				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	B				
10	Rimsulfuron	25	SG	0.375	OZ AI/A	1.5	OZ WT/A	PRE	A	110	206	311	
	Isoxaflutole	75	WG	0.75	OZ AI/A	1.0	OZ WT/A	PRE	A				
	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	B				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	B				

Iowa State University

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
11	Rimsulfuron	25	SG	0.375	OZ AI/A	1.5	OZ WT/A	PRE	A	111	209	302	
	Isoxaflutole	75	WG	0.75	OZ AI/A	1.0	OZ WT/A	PRE	A				
	Rimsulfuron	25	SG	0.229	OZ AI/A	0.92	OZ WT/A	POST	B				
	Thifensulfuron	50	SG	0.05	OZ AI/A	0.1	OZ WT/A	POST	B				
	Isoxadifen-ethyl	50	WG	0.115	OZ AI/A	0.23	OZ WT/A	POST	B				
	Atrazine	90	DF	8.0	OZ AI/A	8.9	OZ WT/A	POST	B				
	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	B				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	B				
12	Rimsulfuron	25	SG	0.375	OZ AI/A	1.5	OZ WT/A	PRE	A	112	204	307	
	Isoxaflutole	75	WG	0.75	OZ AI/A	1.0	OZ WT/A	PRE	A				
	Rimsulfuron	25	SG	0.25	OZ AI/A	1.0	OZ WT/A	POST	B				
	Dicamba	70	WG	1.925	OZ AI/A	2.75	OZ WT/A	POST	B				
	Isoxadifen-ethyl	50	WG	0.125	OZ AI/A	0.25	OZ WT/A	POST	B				
	Atrazine	90	DF	8.0	OZ AI/A	8.9	OZ WT/A	POST	B				
	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	B				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	B				

Sort Order: Replicate 1

Iowa State University

Postemergence applied Callisto, Atrazine, Impact, Laudis, Status, Northstar and Touchdown Total in corn, Ames, IA, 2008.

Trial ID: ACC 2
Location: Ames

Protocol ID: HBRM11A4
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA
Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/15/2008

Objectives:

The purpose of this study was to compare various postemergence applied herbicide combinations for crop phytotoxicity, weed control and corn yield.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: DEKALB DKC 52-43 VT3
BBCH Scale: BCOR
Planting Method: DIRECT DRILLED
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL
Planting Date: 5/15/2008
Rate, Unit: 32000 SEEDS/A
Emergence Date: 5/25/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 4
Tillage Type: MINIMUM-TILL
Study Design: Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

Tillage included a field cultivation to prepare the seedbed for planting. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 25 to 30% at planting.

Soil Description

% OM: 6.4
pH: 7.6
Texture: CANISTEO CLAY LOAM, NICOLLET LOAM
Soil Name: CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B	C
Application Date:	5/16/2008		
Application Method:	SPRAY		
Application Timing:	PRE		
Application Placement:	BROSOI		
Air Temperature, Unit:	77 F		
% Relative Humidity:	21		
Wind Velocity, Unit:	13 MPH		
Soil Temperature, Unit:	67 F		
Soil Moisture:	ADEQUATE		
% Cloud Cover:	20		

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W

Application Equipment

	A	B	C
Appl. Equipment:	ATV		
Operating Pressure, Unit:	30 PSI		
Nozzle Size:	11002		
Spray Volume, Unit:	20 GAL/AC		

Iowa State University

Postemergence applied Callisto, Atrazine, Impact, Laudis, Status, Northstar and Touchdown Total in corn, Ames, IA, 2008.

Trial ID: ACC 2
Location: Ames

Protocol ID: HBRM11A4
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep				Notes
										1	2	3	4	
1	Untreated									101	204	309	406	
2	Dual II Magnum	7.64	EC	0.79	LB A/A	0.83	PT/A	PRE	A	102	208	305	402	
	Callisto	4	SC	0.094	LB A/A	3.0	FL OZ/A	MPOST	C					
	Atrazine	4	SC	0.25	LB A/A	0.5	PT/A	MPOST	C					
	COC	100	L	0.25	% V/V	0.25	% V/V	MPOST	C					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	MPOST	C					
3	Dual II Magnum	7.64	EC	0.79	LB A/A	0.83	PT/A	PRE	A	103	210	304	408	
	Impact	2.8	SC	0.0164	LB A/A	0.75	FL OZ/A	MPOST	C					
	Atrazine	4	SC	0.25	LB A/A	0.5	PT/A	MPOST	C					
	COC	100	L	0.25	% V/V	0.25	% V/V	MPOST	C					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	MPOST	C					
4	Dual II Magnum	7.64	EC	0.79	LB A/A	0.83	PT/A	PRE	A	104	207	311	405	
	Laudis	3.5	SC	0.082	LB A/A	3.0	FL OZ/A	MPOST	C					
	Atrazine	4	SC	0.25	LB A/A	0.5	PT/A	MPOST	C					
	COC	100	L	0.25	% V/V	0.25	% V/V	MPOST	C					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	MPOST	C					
5	Dual II Magnum	7.64	EC	0.79	LB A/A	0.83	PT/A	PRE	A	105	203	308	403	
	Status	56	WG	0.175	LB A/A	5.0	OZ WT/A	MPOST	C					
	COC	100	L	0.25	% V/V	0.25	% V/V	MPOST	C					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	MPOST	C					
6	Callisto	4	SC	0.094	LB A/A	3.0	FL OZ/A	POST	B	106	201	306	409	
	Touchdown Total	4.17	SL	0.78	LB A/A	24.0	FL OZ/A	POST	B					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	B					
7	Impact	2.8	SC	0.0164	LB A/A	0.75	FL OZ/A	POST	B	107	202	310	407	
	Touchdown Total	4.17	SL	0.78	LB A/A	24.0	FL OZ/A	POST	B					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	B					
8	Laudis	3.5	SC	0.082	LB A/A	3.0	FL OZ/A	POST	B	108	211	302	411	
	Touchdown Total	4.17	SL	0.78	LB A/A	24.0	FL OZ/A	POST	B					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	B					
9	Status	56	WG	0.0875	LB A/A	2.5	OZ WT/A	POST	B	109	206	303	401	
	Touchdown Total	4.17	SL	0.78	LB A/A	24.0	FL OZ/A	POST	B					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	B					
10	Northstar	47.4	WG	0.074	LB A/A	2.5	OZ WT/A	POST	B	110	209	301	404	
	Touchdown Total	4.17	SL	0.78	LB A/A	24.0	FL OZ/A	POST	B					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	B					
11	Touchdown Total	4.17	SL	0.78	LB A/A	24.0	FL OZ/A	POST	B	111	205	307	410	
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	B					

Sort Order: Replicate 1

Iowa State University

Application Description

	A	B	C
Application Date:	5/16/2008		
Application Method:	SPRAY		
Application Timing:	PRE		
Application Placement:	BROSOI		
Air Temperature, Unit:	77 F		
% Relative Humidity:	21		
Wind Velocity, Unit:	13 MPH		
Soil Temperature, Unit:	67 F		
Soil Moisture:	ADEQUATE		
% Cloud Cover:	20		

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W

Application Equipment

	A	B	C
Appl. Equipment:	ATV		
Operating Pressure, Unit:	30 PSI		
Nozzle Size:	11002		
Spray Volume, Unit:	20 GAL/AC		

Iowa State University

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
13	Parallel Plus	5.5	L	2.06	LB A/A	1.5	QT/A	PRE	A	113	210	318	
	Callisto	4	SC	0.094	LB A/A	3.0	FL OZ/A	POST	B				
	COC	100	L	1.0	% V/V	1.0	% V/V	POST	B				
	28 % UAN	100	SL	2.5	% V/V	2.5	% V/V	POST	B				
14	Bicep II Magnum	5.5	L	2.06	LB A/A	1.5	QT/A	PRE	A	114	206	310	
	Roundup WeatherMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	B				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	B				
15	Bicep II Magnum	5.5	L	2.06	LB A/A	1.5	QT/A	PRE	A	115	202	315	
	Laudis	3.5	SC	0.082	LB A/A	3.0	FL OZ/A	POST	B				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	POST	B				
	28 % UAN	100	SL	1.5	QT/A	1.5	QT/A	POST	B				
16	Bicep II Magnum	5.5	L	2.06	LB A/A	1.5	QT/A	PRE	A	116	212	304	
	Impact	2.8	SC	0.0164	LB A/A	0.75	FL OZ/A	POST	B				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	POST	B				
	28 % UAN	100	SL	2.5	% V/V	2.5	% V/V	POST	B				
17	Bicep II Magnum	5.5	L	2.06	LB A/A	1.5	QT/A	PRE	A	117	204	312	
	Callisto	4	SC	0.094	LB A/A	3.0	FL OZ/A	POST	B				
	COC	100	L	1.0	% V/V	1.0	% V/V	POST	B				
	28 % UAN	100	SL	2.5	% V/V	2.5	% V/V	POST	B				
18	Roundup WeatherMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	B	118	214	307	
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	B				
	Roundup WeatherMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	SPOST	C				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	SPOST	C				

Sort Order: Replicate 1

Iowa State University

Preemergence SureStart, Corvus, Harness Xtra. Postemergence SureStart, Durango DMA, Roundup PowerMAX, Laudis, Capreno and Halex GT in corn, Ames, IA, 2008.
 Trial ID: ACC 5 Protocol ID: Numerous
 Location: Ames Study Director: Owen/Lux/Franzenburg/Grossnickle
 Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames **Trial Status:** ONE-YEAR/INTERIM
State/Prov.: IA
Postal Code: 50014 **Initiation Date:** 5/21/2008
Country: USA

Objectives:

The purpose of this study was to evaluate various herbicide combinations applied in two-pass and one-pass programs for phytotoxicity and weed control in corn.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: DEKALB DKC 52-43 VT3
BBCH Scale: BCOR **Planting Date:** 5/21/2008
Planting Method: DIRECT DRILLED **Rate, Unit:** 32000 SEEDS/A
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL **Emergence Date:** 6/1/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT **Tillage Type:** MINIMUM-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

Tillage included a field cultivation to prepare the seedbed for planting. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 25 to 30% at planting.

Soil Description

% OM: 7.4 **Texture:** CANISTEO CLAY LOAM, NICOLLET & HARPS LOAM
pH: 7.5 **Soil Name:** CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B	C
Application Date:	5/22/2008		
Application Method:	SPRAY		
Application Timing:	PRE		
Application Placement:	BROSOI		
Air Temperature, Unit:	61 F		
% Relative Humidity:	58		
Wind Velocity, Unit:	9 MPH		
Soil Temperature, Unit:	56 F		
Soil Moisture:	ADEQUATE		
% Cloud Cover:	100		

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W

Application Equipment

	A	B	C
Appl. Equipment:	HAND SPRAYER		
Operating Pressure, Unit:	35 PSI		
Nozzle Size:	11003		
Spray Volume, Unit:	20 GAL/AC		

Iowa State University

Preemergence SureStart, Corvus, Harness Xtra. Postemergence SureStart, Durango DMA, Roundup PowerMAX, Laudis, Capreno and Halex GT in corn, Ames, IA, 2008.

Trial ID: ACC 5 Protocol ID: Numerous
 Location: Ames Study Director: Owen/Lux/Franzenburg/Grossnickle
 Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	208	303	
2	SureStart	4.25	SE	0.93	LB AI/A	1.75	PT/A	PRE	A	102	210	306	
	Durango DMA	4	SL	0.75	LB AE/A	24.0	FL OZ/A	POST	C				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	POST	C				
3	SureStart	4.25	SE	1.06	LB AI/A	2.0	PT/A	PRE	A	103	205	308	
	Durango DMA	4	SL	0.75	LB AE/A	24.0	FL OZ/A	POST	C				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	POST	C				
4	SureStart	4.25	SE	1.06	LB AI/A	2.0	PT/A	PRE	A	104	206	301	
	Atrazine	4	L	1.0	LB AI/A	2.0	PT/A	PRE	A				
	Durango DMA	4	SL	0.75	LB AE/A	24.0	FL OZ/A	POST	C				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	POST	C				
5	SureStart	4.25	SE	0.93	LB AI/A	1.75	PT/A	EPOST	B	105	202	309	
	Durango DMA	4	SL	0.75	LB AE/A	24.0	FL OZ/A	EPOST	B				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	EPOST	B				
6	Corvus	3.88	SC	0.091	LB AI/A	3.0	FL OZ/A	PRE	A	106	207	302	
	Roundup PowerMAX	4.5	SL	0.77	LB AI/A	22.0	FL OZ/A	POST	C				
	Laudis	3.5	SC	0.082	LB AI/A	3.0	FL OZ/A	POST	C				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	POST	C				
7	Capreno	3.45	SC	0.081	LB AI/A	3.0	FL OZ/A	EPOST	B	107	201	307	
	COC	100	SL	1.0	QT/A	1.0	QT/A	EPOST	B				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	EPOST	B				
8	Capreno	3.45	SC	0.081	LB AI/A	3.0	FL OZ/A	EPOST	B	108	209	304	
	Atrazine	4	L	1.0	LB AI/A	2.0	PT/A	EPOST	B				
	COC	100	SL	1.0	QT/A	1.0	QT/A	EPOST	B				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	EPOST	B				
9	Harness Xtra	5.6	SE	2.1	LB AI/A	1.5	QT/A	PRE	A	109	204	310	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	C				
10	Halex GT	4.38	CS	1.97	LB AI/A	3.6	PT/A	EPOST	B	110	203	305	
	Atrazine	4	L	0.5	LB AI/A	1.0	PT/A	EPOST	B				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	EPOST	B				
	AMS	100	SG	1.0	% W/V	1.0	% W/V	EPOST	B				

Sort Order: Replicate 1

Iowa State University

Postemergence applications of Permit with Atrazine, Callisto, Laudis, Impact and GWN-3124 in corn, Ames, IA, 2008.

Trial ID: ACC 6
Location: Ames

Protocol ID: D-PER-08-10-2
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA

Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/21/2008

Objectives:

The purpose of this study was to evaluate postemergence applications in corn of Permit in combination with various companion herbicides and Yukon for crop phytotoxicity and weed control.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: DEKALB DKC 52-43 VT3
BBCH Scale: BCOR
Planting Method: DIRECT DRILLED
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL
Planting Date: 5/21/2008
Rate, Unit: 32000 SEEDS/A
Emergence Date: 6/1/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: MINIMUM-TILL
Study Design: Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

Tillage included a field cultivation to prepare the seedbed for planting. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 25 to 30% at planting.

Soil Description

% OM: 7.4
pH: 7.5
Texture: CANISTEO CLAY LOAM, NICOLLET & HARPS LOAM
Soil Name: CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B
Application Date:	5/22/2008	
Application Method:	SPRAY	
Application Timing:	PRE	
Application Placement:	BROSOI	
Air Temperature, Unit:	61 F	
% Relative Humidity:	58	
Wind Velocity, Unit:	9 MPH	
Soil Temperature, Unit:	56 F	
Soil Moisture:	ADEQUATE	
% Cloud Cover:	100	

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W

Application Equipment

	A	B
Appl. Equipment:	ATV	
Operating Pressure, Unit:	30 PSI	
Nozzle Size:	11002	
Spray Volume, Unit:	20 GAL/AC	

Iowa State University

Postemergence applications of Permit with Atrazine, Callisto, Laudis, Impact and GWN-3124 in corn, Ames, IA, 2008.

Trial ID: ACC 6
Location: Ames

Protocol ID: D-PER-08-10-2
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Plot No. 1	Plot No. 2	Plot No. 3	By Rep	Notes
1	Untreated									101	208	303		
2	Dual II Magnum Permit	7.64	EC	0.477	LB A/A	0.5	PT/A	PRE	A	102	204	309		
	Atrazine	75	DF	0.0314	LB A/A	0.67	OZ WT/A	EPOST	B					
	COC	4	L	1.0	LB A/A	2.0	PT/A	EPOST	B					
	AMS	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B					
	AMS	100	SG	2.5	LB/A	2.5	LB/A	EPOST	B					
3	Dual II Magnum Permit	7.64	EC	0.477	LB A/A	0.5	PT/A	PRE	A	103	206	304		
	Callisto	75	DF	0.0314	LB A/A	0.67	OZ WT/A	EPOST	B					
	COC	4	SC	0.0313	LB A/A	1.0	FL OZ/A	EPOST	B					
	AMS	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B					
	AMS	100	SG	2.5	LB/A	2.5	LB/A	EPOST	B					
4	Dual II Magnum Permit	7.64	EC	0.477	LB A/A	0.5	PT/A	PRE	A	104	207	301		
	Laudis	75	DF	0.0314	LB A/A	0.67	OZ WT/A	EPOST	B					
	COC	3.5	SC	0.0273	LB A/A	1.0	FL OZ/A	EPOST	B					
	AMS	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B					
	AMS	100	SG	2.5	LB/A	2.5	LB/A	EPOST	B					
5	Dual II Magnum Permit	7.64	EC	0.477	LB A/A	0.5	PT/A	PRE	A	105	209	305		
	Impact	75	DF	0.0314	LB A/A	0.67	OZ WT/A	EPOST	B					
	COC	2.8	SC	0.0109	LB A/A	0.5	FL OZ/A	EPOST	B					
	AMS	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B					
	AMS	100	SG	2.5	LB/A	2.5	LB/A	EPOST	B					
6	Dual II Magnum Permit	7.64	EC	0.477	LB A/A	0.5	PT/A	PRE	A	106	202	308		
	GWN-3124	75	DF	0.0314	LB A/A	0.67	OZ WT/A	EPOST	B					
	COC				LB A/A	0.083	OZ WT/A	EPOST	B					
	AMS	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B					
	AMS	100	SG	2.5	LB/A	2.5	LB/A	EPOST	B					
7	Dual II Magnum Yukon	7.64	EC	0.477	LB A/A	0.5	PT/A	PRE	A	107	205	302		
	COC	67.5	SG	0.169	LB A/A	4.0	OZ WT/A	EPOST	B					
	AMS	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B					
	AMS	100	SG	2.5	LB/A	2.5	LB/A	EPOST	B					
8	Dual II Magnum Callisto	7.64	EC	0.477	LB A/A	0.5	PT/A	PRE	A	108	203	307		
	Atrazine	4	SC	0.094	LB A/A	3.0	FL OZ/A	EPOST	B					
	COC	4	L	0.33	LB A/A	0.66	PT/A	EPOST	B					
	AMS	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B					
	AMS	100	SG	2.5	LB/A	2.5	LB/A	EPOST	B					
9	Dual II Magnum Permit	7.64	EC	0.477	LB A/A	0.5	PT/A	PRE	A	109	201	306		
	COC	75	DF	0.0314	LB A/A	0.67	OZ WT/A	EPOST	B					
	AMS	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B					
	AMS	100	SG	2.5	LB/A	2.5	LB/A	EPOST	B					

Sort Order: Replicate 1

Iowa State University

Postemergence applications of nutrients and additives with Makaze herbicide in corn, Ames, IA, 2008.

Trial ID: ACC 7
Location: Ames

Protocol ID: Corn#7
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA

Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/21/2008

Objectives:

The purpose of this study was to evaluate postemergence applications of nutrients with Makaze in corn for phytotoxicity, weed control, and yield.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: DEKALB DKC 52-43 VT3
BBCH Scale: BCOR
Planting Method: DIRECT DRILLED
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL
Planting Date: 5/21/2008
Rate, Unit: 32000 SEEDS/A
Emergence Date: 6/1/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 4
Tillage Type: MINIMUM-TILL
Study Design: Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

Tillage included a field cultivation to prepare the seedbed for planting. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 25 to 30% at planting.

Soil Description

% OM: 7.4
pH: 7.5
Texture: CANISTEO CLAY LOAM, NICOLLET & HARPS LOAM
Soil Name: CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B
Application Date:	5/22/2008	
Application Method:	SPRAY	
Application Timing:	PRE	
Application Placement:	BROSOI	
Air Temperature, Unit:	61 F	
% Relative Humidity:	58	
Wind Velocity, Unit:	9 MPH	
Soil Temperature, Unit:	56 F	
Soil Moisture:	ADEQUATE	
% Cloud Cover:	100	

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W

Application Equipment

	A	B
Appl. Equipment:	ATV	
Operating Pressure, Unit:	30 PSI	
Nozzle Size:	11002	
Spray Volume, Unit:	20 GAL/AC	

Iowa State University

Postemergence applications of nutrients and additives with Makaze herbicide in corn, Ames, IA, 2008.

Trial ID: ACC 7
 Location: Ames

Protocol ID: Corn#7
 Study Director: Owen/Lux/Franzenburg/Grossnickle
 Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep				Notes
										1	2	3	4	
1	Atrazine	4	L	0.75	LB A/A	1.5	PT/A	PRE	A	101	211	304	408	
2	Atrazine	4	L	0.75	LB A/A	1.5	PT/A	PRE	A	102	213	302	411	
	Makaze	3	SL	0.75	LB AE/A	32.0	FL OZ/A	POST	B					
	LI 6222	100	SL	5.0	FL OZ/A	5.0	FL OZ/A	POST	B					
	Choice Weather Master	100	SL	0.5	% V/V	0.5	% V/V	POST	B					
3	Atrazine	4	L	0.75	LB A/A	1.5	PT/A	PRE	A	103	207	310	406	
	Makaze	3	SL	0.75	LB AE/A	32.0	FL OZ/A	POST	B					
	LI 6222	100	SL	10.0	FL OZ/A	10.0	FL OZ/A	POST	B					
	Choice Weather Master	100	SL	0.5	% V/V	0.5	% V/V	POST	B					
4	Atrazine	4	L	0.75	LB A/A	1.5	PT/A	PRE	A	104	210	301	404	
	Makaze	3	SL	0.75	LB AE/A	32.0	FL OZ/A	POST	B					
	Citraplex Zn	100	SG	1.0	LB/A	1.0	LB/A	POST	B					
	Choice Weather Master	100	SL	0.5	% V/V	0.5	% V/V	POST	B					
5	Atrazine	4	L	0.75	LB A/A	1.5	PT/A	PRE	A	105	208	313	407	
	Makaze	3	SL	0.75	LB AE/A	32.0	FL OZ/A	POST	B					
	Awaken	100	SL	48.0	FL OZ/A	48.0	FL OZ/A	POST	B					
	Choice Weather Master	100	SL	0.5	% V/V	0.5	% V/V	POST	B					
6	Atrazine	4	L	0.75	LB A/A	1.5	PT/A	PRE	A	106	201	306	410	
	Makaze	3	SL	0.75	LB AE/A	32.0	FL OZ/A	POST	B					
	LI 6263	100	SL	16.0	FL OZ/A	16.0	FL OZ/A	POST	B					
	Choice Weather Master	100	SL	0.5	% V/V	0.5	% V/V	POST	B					
7	Atrazine	4	L	0.75	LB A/A	1.5	PT/A	PRE	A	107	202	308	412	
	Makaze	3	SL	0.75	LB AE/A	32.0	FL OZ/A	POST	B					
	LI 6263	100	SL	32.0	FL OZ/A	32.0	FL OZ/A	POST	B					
	Choice Weather Master	100	SL	0.5	% V/V	0.5	% V/V	POST	B					
8	Atrazine	4	L	0.75	LB A/A	1.5	PT/A	PRE	A	108	212	305	401	
	Makaze	3	SL	0.75	LB AE/A	32.0	FL OZ/A	POST	B					
	Zn EDTA 9%	100	SL	32.0	FL OZ/A	32.0	FL OZ/A	POST	B					
	Choice Weather Master	100	SL	0.5	% V/V	0.5	% V/V	POST	B					
9	Atrazine	4	L	0.75	LB A/A	1.5	PT/A	PRE	A	109	204	312	403	
	Makaze	3	SL	0.75	LB AE/A	32.0	FL OZ/A	POST	B					
	LI 6264	100	SL	16.0	FL OZ/A	16.0	FL OZ/A	POST	B					
	Choice Weather Master	100	SL	0.5	% V/V	0.5	% V/V	POST	B					
10	Atrazine	4	L	0.75	LB A/A	1.5	PT/A	PRE	A	110	206	303	413	
	Makaze	3	SL	0.75	LB AE/A	32.0	FL OZ/A	POST	B					
	Choice Weather Master	100	SL	0.5	% V/V	0.5	% V/V	POST	B					
11	Atrazine	4	L	0.75	LB A/A	1.5	PT/A	PRE	A	111	209	307	402	
	Makaze	3	SL	0.75	LB AE/A	32.0	FL OZ/A	POST	B					
	LI 6000	100	SL	16.0	FL OZ/A	16.0	FL OZ/A	POST	B					
	Choice Weather Master	100	SL	0.5	% V/V	0.5	% V/V	POST	B					
12	Atrazine	4	L	0.75	LB A/A	1.5	PT/A	PRE	A	112	203	311	409	
	Makaze	3	SL	0.75	LB AE/A	32.0	FL OZ/A	POST	B					
	LI 6000	100	SL	32.0	FL OZ/A	32.0	FL OZ/A	POST	B					
	Choice Weather Master	100	SL	0.5	% V/V	0.5	% V/V	POST	B					
13	Atrazine	4	L	0.75	LB A/A	1.5	PT/A	PRE	A	113	205	309	405	
	Makaze	3	SL	0.75	LB AE/A	32.0	FL OZ/A	POST	B					
	LI 6000	100	SL	64.0	FL OZ/A	64.0	FL OZ/A	POST	B					
	Choice Weather Master	100	SL	0.5	% V/V	0.5	% V/V	POST	B					

Iowa State University

Application Description

	A	B	C
Application Date:	5/19/2008		
Application Method:	SPRAY		
Application Timing:	PRE		
Application Placement:	BROSOI		
Air Temperature, Unit:	71 F		
% Relative Humidity:	35		
Wind Velocity, Unit:	6 MPH		
Soil Temperature, Unit:	72 F		
% Cloud Cover:	10		

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W

Application Equipment

	A	B	C
Appl. Equipment:	ATV		
Operating Pressure, Unit:	30 PSI		
Nozzle Size:	11002		
Spray Volume, Unit:	20 GAL/AC		

Iowa State University

Two and one-pass programs in corn. Pre applied Balance Flexx, Lumax, Harness Xtra. Post applied Capreno, Lumax, Impact, Roundup, Halex GT, Ames, IA, 2008.
 Trial ID: ACC 8 Protocol ID: HP08NARDLL
 Location: Ames Study Director: Owen/Lux/Franzenburg/Grossnickle
 Investigator: Micheal D. K. Owen

Trit No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	210	304	
2	Balance Flexx	4	SC	0.094	LB AI/A	3.0	FL OZ/A	PRE	A	102	209	303	
	Atrazine	4	SC	0.5	LB AI/A	1.0	PT/A	PRE	A				
	Capreno	3.45	SC	0.081	LB AI/A	3.0	FL OZ/A	MPOST	C				
	Atrazine	4	SC	0.5	LB AI/A	1.0	PT/A	MPOST	C				
	COC	100	SL	1.0	% V/V	1.0	% V/V	MPOST	C				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	MPOST	C				
3	Balance Flexx	4	SC	0.094	LB AI/A	3.0	FL OZ/A	PRE	A	103	208	312	
	Atrazine	4	SC	0.5	LB AI/A	1.0	PT/A	PRE	A				
	Capreno	3.45	SC	0.081	LB AI/A	3.0	FL OZ/A	MPOST	C				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	MPOST	C				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	MPOST	C				
4	Lumax	3.95	SE	1.48	LB AI/A	1.5	QT/A	PRE	A	104	206	307	
	Lumax	3.95	SE	1.48	LB AI/A	1.5	QT/A	MPOST	C				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	MPOST	C				
5	Capreno	3.45	SC	0.081	LB AI/A	3.0	FL OZ/A	MPOST	C	105	201	310	
	Atrazine	4	SC	0.5	LB AI/A	1.0	PT/A	MPOST	C				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	MPOST	C				
6	Capreno	3.45	SC	0.081	LB AI/A	3.0	FL OZ/A	MPOST	C	106	202	309	
	Atrazine	4	SC	0.5	LB AI/A	1.0	PT/A	MPOST	C				
	Roundup PowerMAX	4.5	SL	0.387	LB AE/A	11.0	FL OZ/A	MPOST	C				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	MPOST	C				
7	Capreno	3.45	SC	0.081	LB AI/A	3.0	FL OZ/A	EPOST	B	107	211	301	
	Atrazine	4	SC	0.5	LB AI/A	1.0	PT/A	EPOST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	EPOST	B				
8	Impact	2.8	SC	0.0164	LB AI/A	0.75	FL OZ/A	EPOST	B	108	212	306	
	Atrazine	4	SC	0.5	LB AI/A	1.0	PT/A	EPOST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	EPOST	B				
9	Impact	2.8	SC	0.0109	LB AI/A	0.5	FL OZ/A	EPOST	B	109	205	302	
	Atrazine	4	SC	0.5	LB AI/A	1.0	PT/A	EPOST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	EPOST	B				
10	Capreno	3.45	SC	0.081	LB AI/A	3.0	FL OZ/A	EPOST	B	110	207	305	
	Atrazine	4	SC	0.5	LB AI/A	1.0	PT/A	EPOST	B				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	EPOST	B				
11	Harness Xtra	5.6	SE	2.1	LB AI/A	1.5	QT/A	PRE	A	111	204	311	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	MPOST	C				
12	Halex GT	4.38	CS	3.94	LB AI/A	3.6	QT/A	EPOST	B	112	203	308	
	NIS	100	SL	0.25	% V/V	0.25	% V/V	EPOST	B				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	EPOST	B				

Sort Order: Replicate 1

Iowa State University

Two and one-pass herbicide programs in corn. Lumax, Lexar, Harness Xtra, SureStart, Halex, Roundup PowerMAX, Laudis, Status and Impact, Ames, IA, 2008.
 Trial ID: ACC 9 Protocol ID: HMS002A4
 Location: Ames Study Director: Owen/Lux/Franzenburg/Grossnickle
 Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames **Trial Status:** ONE-YEAR/INTERIM
State/Prov.: IA
Postal Code: 50014 **Initiation Date:** 5/19/2008
Country: USA

Objectives:

The purpose of this study was to evaluate various two-pass programs using Lumax, Lexar, Harness Xtra followed by postemergence applied Touchdown Total, Halex GT, and Roundup PowerMAX for crop phytotoxicity, weed control and corn yield. One-pass programs were also evaluated and included Halex GT plus Atrazine, and Laudis, SureStart, Status, and Impact in tank-mixtures with glyphosate.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: DEKALB DKC 52-43 VT3
BBCH Scale: BCOR **Planting Date:** 5/19/2008
Planting Method: DIRECT DRILLED **Rate, Unit:** 32000 SEEDS/A
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL **Emergence Date:** 5/30/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT **Tillage Type:** MINIMUM-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

Tillage included a field cultivation to prepare the seedbed for planting. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 25 to 30% at planting.

Iowa State University

Soil Description

% OM: 4.1
 pH: 6.6
 Texture: CANISTEO/WEBSTER CLAY LOAM, CLARION LOAM
 Soil Name: CLARION, WEBSTER, NICOLLET
 Fert. Level: EXCELLENT

Application Description

	A	B	C	D
Application Date:	5/19/2008			
Application Method:	SPRAY			
Application Timing:	PRE			
Application Placement:	BROSOI			
Air Temperature, Unit:	71 F			
% Relative Humidity:	35			
Wind Velocity, Unit:	6 MPH			
Soil Temperature, Unit:	72 F			
% Cloud Cover:	10			

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W	CHEAL W

Application Equipment

	A	B	C	D
Appl. Equipment:	ATV			
Operating Pressure, Unit:	30 PSI			
Nozzle Size:	11002			
Spray Volume, Unit:	20 GAL/AC			

Iowa State University

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
16	Lexar	3.7	SE	2.08	LB AI/A	2.25	QT/A	PRE	A	116	206	302	
	Touchdown Total	4.17	SL	0.78	LB AE/A	24.0	FL OZ/A	POST	C				
	AMS	100	SG	1.0	% W/V	1.0	% W/V	POST	C				
17	Lexar	3.7	SE	1.62	LB AI/A	1.75	QT/A	PRE	A	117	202	311	
	Halex GT	4.38	CS	1.97	LB AI/A	3.6	PT/A	POST	C				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	POST	C				
	AMS	100	SG	1.0	% W/V	1.0	% W/V	POST	C				

Sort Order: Replicate 1

Iowa State University

Postemergence applied Samson in tank-mixture with Impact, Callisto, Clarity, and Atrazine in corn, Ames, IA, 2008.

Trial ID: ACC 10
Location: Ames

Protocol ID: NIC015USIA0801PWR
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA
Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/19/2008

Objectives:

The purpose of this study was to evaluate postemergence applied Samson in tank-mixture with various herbicides for crop phytotoxicity and weed control in corn.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: DEKALB DKC 52-43 VT3
BBCH Scale: BCOR
Planting Method: DIRECT DRILLED
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL
Planting Date: 5/19/2008
Rate, Unit: 32000 SEEDS/A
Emergence Date: 5/30/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: MINIMUM-TILL
Study Design: Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

Tillage included a field cultivation to prepare the seedbed for planting. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 25 to 30% at planting.

Soil Description

% OM: 4.1
pH: 6.6
Texture: CANISTEO/WEBSTER CLAY LOAM, CLARION LOAM
Soil Name: CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A
Application Method:	SPRAY
Application Placement:	BROFOL
	F
	MPH
	F

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	ZEAMD BCOR
Stage Scale Used:	DESC

Pest Stage At Each Application

	A
Pest 1 Code, Disc., Scale:	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W

Iowa State University

**Postemergence applied Samson in tank-mixture with Impact, Callisto, Clarity,
and Atrazine in corn, Ames, IA, 2008.**

Trial ID: ACC 10
Location: Ames

Protocol ID: NICO15USIA0801PWR
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trit No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	206	304	
2	Samson	4	SC	0.0313	LB A/A	12.0	FL OZ/A	POST	A	102	204	306	
	Impact	2.8	SC	0.0164	LB A/A	0.75	FL OZ/A	POST	A				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	A				
3	Samson	4	SC	0.0313	LB A/A	12.0	FL OZ/A	POST	A	103	207	303	
	Callisto	4	SC	0.094	LB A/A	3.0	FL OZ/A	POST	A				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	A				
4	Samson	4	SC	0.0313	LB A/A	12.0	FL OZ/A	POST	A	104	202	307	
	Clarity	4	SL	0.5	LB A/A	16.0	FL OZ/A	POST	A				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	A				
5	Samson	4	SC	0.0313	LB A/A	12.0	FL OZ/A	POST	A	105	201	305	
	Atrazine	4	L	0.47	LB A/A	15.0	FL OZ/A	POST	A				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	A				
6	Samson	4	SC	0.0313	LB A/A	12.0	FL OZ/A	POST	A	106	203	301	
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	A				
7	Accent	75	WG	0.0313	LB A/A	0.67	OZ WT/A	POST	A	107	205	302	
	COC	100	SL	1.0	% V/V	1.0	% V/V	POST	A				
	AMS	100	SG	2.0	LB/A	2.0	LB/A	POST	A				

Sort Order: Replicate 1

Iowa State University

Postemergence applications of Cadet, Resource and Roundup PowerMAX in corn, Ames, IA, 2008.

Trial ID: ACC 11
Location: Ames

Protocol ID: G037
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA
Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/19/2008

Objectives:

The purpose of this study was to evaluate Cadet, Resource and Roundup PowerMAX applied postemergence for crop phytotoxicity and weed control in corn.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: DEKALB DKC 52-43 VT3
BBCH Scale: BCOR
Planting Method: DIRECT DRILLED
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL
Planting Date: 5/19/2008
Rate, Unit: 32000 SEEDS/A
Emergence Date: 5/30/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: MINIMUM-TILL
Study Design: Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

Tillage included a field cultivation to prepare the seedbed for planting. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 25 to 30% at planting.

Soil Description

% OM: 4.1
pH: 6.6
Texture: CANISTEO/WEBSTER CLAY LOAM, CLARION LOAM
Soil Name: CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B
Application Date:	5/21/2008	
Application Method:	SPRAY	
Application Timing:	PRE	
Application Placement:	BROSOI	
Air Temperature, Unit:	66 F	
% Relative Humidity:	25	
Wind Velocity, Unit:	6 MPH	
Soil Temperature, Unit:	56 F	
% Cloud Cover:	5	

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W

Application Equipment

	A	B
Appl. Equipment:	ATV	
Operating Pressure, Unit:	30 PSI	
Nozzle Size:	11002	
Spray Volume, Unit:	20 GAL/AC	

Iowa State University

Postemergence applications of Cadet, Resource and Roundup PowerMAX in corn, Ames, IA, 2008.

Trial ID: ACC 11
Location: Ames

Protocol ID: G037
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Dual II Magnum	7.64	EC	0.955	LB AI/A	1.0	PT/A	PRE	A	101	203	302	
2	Dual II Magnum	7.64	EC	0.955	LB AI/A	1.0	PT/A	PRE	A	102	201	303	
	Cadet	0.91	EC	0.00284	LB AI/A	0.4	FL OZ/A	POST	B				
	Roundup PowerMAX	4.5	SL	0.56	LB AE/A	16.0	FL OZ/A	POST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	B				
3	Dual II Magnum	7.64	EC	0.955	LB AI/A	1.0	PT/A	PRE	A	103	204	301	
	Resource	0.86	EC	0.0202	LB AI/A	3.0	FL OZ/A	POST	B				
	Roundup PowerMAX	4.5	SL	0.56	LB AE/A	16.0	FL OZ/A	POST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	B				
4	Dual II Magnum	7.64	EC	0.955	LB AI/A	1.0	PT/A	PRE	A	104	202	304	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	B				

Sort Order: Replicate 1

Iowa State University

Preemergence Corvus, Atrazine, Lumax, Harness Xtra and postemergence Laudis, Lumax, Ignite, Roundup PowerMAX, Impact and Capreno in corn, Ames, IA, 2008.
 Trial ID: ACC 12 Protocol ID: HP08NARDLA
 Location: Ames Study Director: Owen/Lux/Franzenburg/Grossnickle
 Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames **Trial Status:** ONE-YEAR/INTERIM
State/Prov.: IA
Postal Code: 50014 **Initiation Date:** 5/19/2008
Country: USA

Objectives:

The purpose of this study was to evaluate two-pass preemergence followed by postemergence and one-pass postemergence programs for crop phytotoxicity and weed control in corn.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: Pioneer 34A20
BBCH Scale: BCOR **Planting Date:** 5/19/2008
Planting Method: DIRECT DRILLED **Rate, Unit:** 32000 SEEDS/A
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL **Emergence Date:** 5/30/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT **Tillage Type:** MINIMUM-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

Tillage included a field cultivation to prepare the seedbed for planting. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 25% at planting.

Soil Description

% OM: 4.1 **Texture:** CANISTEO/WEBSTER CLAY LOAM, CLARION LOAM
pH: 6.6 **Soil Name:** CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B	C
Application Date:	5/19/2008		
Application Method:	SPRAY		
Application Timing:	PRE		
Application Placement:	BROSOI		
Air Temperature, Unit:	71 F		
% Relative Humidity:	35		
Wind Velocity, Unit:	6 MPH		
Soil Temperature, Unit:	72 F		
% Cloud Cover:	10		

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W

Application Equipment

	A	B	C
Appl. Equipment:	ATV		
Operating Pressure, Unit:	30 PSI		
Nozzle Size:	11002		
Spray Volume, Unit:	20 GAL/AC		

Iowa State University

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
13	Harness Xtra	5.6	SE	2.1	LB AI/A	1.5	QT/A	PRE	A	113	203	306	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	MPOST	C				

Sort Order: Replicate 1

Iowa State University

Application Description

	A	B	C	D	E
Application Date:	5/20/2008				
Application Method:	SPRAY				
Application Timing:	PRE				
Application Placement:	BROSIOI				
Air Temperature, Unit:	60 F				
% Relative Humidity:	43				
Wind Velocity, Unit:	8 MPH				
Soil Temperature, Unit:	60 F				
% Cloud Cover:	20				

Crop Stage At Each Application

	A	B	C	D	E
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C	D	E
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W	CHEAL W	CHEAL W

Application Equipment

	A	B	C	D	E
Appl. Equipment:	ATV				
Operating Pressure, Unit:	30 PSI				
Nozzle Size:	11002				
Spray Volume, Unit:	20 GAL/AC				

Iowa State University

**Postemergence applied Status and Impact, alone and in tank-mixture with Roundup
PowerMAX in corn, Ames, IA, 2008.**

Trial ID: ACC 13
Location: Ames

Protocol ID: 2008-01-04-01
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	216	307	
2	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	102	214	319	
	Impact	2.8	SC	0.0109	LB AI/A	0.5	FL OZ/A	EPOST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	EPOST	B				
3	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	103	211	309	
	Impact	2.8	SC	0.0109	LB AI/A	0.5	FL OZ/A	EPOST	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	EPOST	B				
4	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	104	207	316	
	Impact	2.8	SC	0.0164	LB AI/A	0.75	FL OZ/A	EPOST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	EPOST	B				
5	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	105	218	313	
	Impact	2.8	SC	0.0164	LB AI/A	0.75	FL OZ/A	EPOST	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	EPOST	B				
6	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	106	203	312	
	Status	56	WG	0.0875	LB AI/A	2.5	OZ WT/A	EPOST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	EPOST	B				
7	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	107	204	317	
	Status	56	WG	0.0875	LB AI/A	2.5	OZ WT/A	EPOST	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	EPOST	B				
8	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	108	215	306	
	Status	56	WG	0.175	LB AI/A	5.0	OZ WT/A	EPOST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	EPOST	B				
9	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	109	206	314	
	Status	56	WG	0.175	LB AI/A	5.0	OZ WT/A	EPOST	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	EPOST	B				
10	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	110	213	303	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	EPOST	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	SPOST1	D				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	SPOST1	D				
11	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	111	201	311	
	Impact	2.8	SC	0.0109	LB AI/A	0.5	FL OZ/A	POST	C				
	COC	100	SL	1.0	% V/V	1.0	% V/V	POST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	C				
12	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	112	208	302	
	Impact	2.8	SC	0.0109	LB AI/A	0.5	FL OZ/A	POST	C				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	C				
13	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	113	217	305	
	Impact	2.8	SC	0.0164	LB AI/A	0.75	FL OZ/A	POST	C				
	COC	100	SL	1.0	% V/V	1.0	% V/V	POST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	C				

Iowa State University

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
14	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	114	219	308	
	Impact	2.8	SC	0.0164	LB AI/A	0.75	FL OZ/A	POST	C				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	C				
15	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	115	210	318	
	Status	56	WG	0.0875	LB AI/A	2.5	OZ WT/A	POST	C				
	COC	100	SL	1.0	% V/V	1.0	% V/V	POST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	C				
16	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	116	212	301	
	Status	56	WG	0.0875	LB AI/A	2.5	OZ WT/A	POST	C				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	C				
17	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	117	205	315	
	Status	56	WG	0.175	LB AI/A	5.0	OZ WT/A	POST	C				
	COC	100	SL	1.0	% V/V	1.0	% V/V	POST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	C				
18	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	118	209	304	
	Status	56	WG	0.175	LB AI/A	5.0	OZ WT/A	POST	C				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	C				
19	Dual II Magnum	7.64	EC	1.2	LB AI/A	1.25	PT/A	PRE	A	119	202	310	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	C				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	SPOST2	E				
AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	SPOST2	E					

Sort Order: Replicate 1

Iowa State University

Various preemergence followed by postemergence applied herbicide programs in corn, Ames, IA, 2008.

Trial ID: ACC 14
Location: Ames

Protocol ID: 2008-01-04-02
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA

Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/19/2008

Objectives:

The purpose of this study was to compare various two-pass herbicide programs including preemergence applied Harness Xtra, Lexar, Bicep II Magnum and SureStart followed by postemergence Roundup PowerMAX, Touchdown Total and Callisto for crop phytotoxicity, weed control and corn yield.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: DEKALB DKC 52-43 VT3
BBCH Scale: BCOR
Planting Method: DIRECT DRILLED
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL
Planting Date: 5/19/2008
Rate, Unit: 32000 SEEDS/A
Emergence Date: 5/30/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: MINIMUM-TILL
Study Design: Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

Tillage included a field cultivation to prepare the seedbed for planting. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 25 to 30% at planting.

Iowa State University

Soil Description
% OM: 4.1 **Texture:** CANISTEO/WEBSTER CLAY LOAM, CLARION LOAM
pH: 6.6 **Soil Name:** CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Application Description

	A	B	C
Application Date:	5/20/2008		
Application Method:	SPRAY		
Application Timing:	PRE		
Application Placement:	BROSIOI		
Air Temperature, Unit:	60 F		
% Relative Humidity:	43		
Wind Velocity, Unit:	8 MPH		
Soil Temperature, Unit:	60 F		
% Cloud Cover:	20		

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W

Application Equipment

	A	B	C
Appl. Equipment:	ATV		
Operating Pressure, Unit:	30 PSI		
Nozzle Size:	11002		
Spray Volume, Unit:	20 GAL/AC		

Iowa State University

Various preemergence followed by postemergence applied herbicide programs in corn, Ames, IA, 2008.

Trial ID: ACC 14
Location: Ames

Protocol ID: 2008-01-04-02
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trit No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	205	309	
2	Harness Xtra	5.6	SE	2.1	LB AI/A	1.5	QT/A	PRE	A	102	211	303	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	B				
3	Degree Xtra	4.04	CS	2.01	LB AI/A	2.0	QT/A	PRE	A	103	208	305	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	B				
4	Guardsman Max	5	SC	1.56	LB AI/A	2.5	PT/A	PRE	A	104	207	311	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	B				
5	Lexar	3.7	SE	1.86	LB AI/A	2.0	QT/A	PRE	A	105	203	308	
	Touchdown Total	4.17	SL	0.78	LB AE/A	24.0	FL OZ/A	POST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	B				
6	Bicep II Magnum	5.5	L	2.0	LB AI/A	1.45	QT/A	PRE	A	106	201	310	
	Callisto	4	SC	0.094	LB AI/A	3.0	FL OZ/A	POST	B				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	B				
7	Atrazine	4	SC	1.0	LB AI/A	2.0	PT/A	PRE	A	107	210	302	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	B				
8	SureStart	4.25	EW	0.64	LB AI/A	1.2	PT/A	PRE	A	108	206	301	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	B				
9	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	B	109	209	304	
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	B				
10	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	B	110	204	307	
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	SPOST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	SPOST	C				
11	Define	4	SC	0.26	LB AI/A	8.3	FL OZ/A	PRE	A	111	202	306	
	Balance Pro	4	SC	0.0625	LB AI/A	2.0	FL OZ/A	PRE	A				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	B				

Sort Order: Replicate 1

Iowa State University

Corvus, Balance Flexx and Atrazine applied preemergence and Ignite, Laudis and Roundup PowerMAX applied postemergence in corn, Ames, IA, 2008.
 Trial ID: ACC 15 Protocol ID: HP08NARJJB
 Location: Ames Study Director: Owen/Lux/Franzenburg/Grossnickle
 Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames **Trial Status:** ONE-YEAR/INTERIM
State/Prov.: IA
Postal Code: 50014 **Initiation Date:** 5/19/2008
Country: USA

Objectives:

The purpose of this study was to evaluate a one and two-pass herbicide program in corn utilizing Corvus, Balance FLeXX, Atrazine, Ignite, Laudis, and Roundup PowerMAX for crop phytotoxicity and weed control.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: Pioneer 34A20
BBCH Scale: BCOR **Planting Date:** 5/19/2008
Planting Method: DIRECT DRILLED **Rate, Unit:** 32000 SEEDS/A
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL **Emergence Date:** 5/30/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT **Tillage Type:** MINIMUM-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

Tillage included a field cultivation to prepare the seedbed for planting. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 25% at planting.

Soil Description

% OM: 4.1 **Texture:** CANISTEO/WEBSTER CLAY LOAM, CLARION LOAM
pH: 6.6 **Soil Name:** CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B
Application Date:	5/19/2008	
Application Method:	SPRAY	
Application Timing:	PRE	
Application Placement:	BROSOI	
Air Temperature, Unit:	71 F	
% Relative Humidity:	35	
Wind Velocity, Unit:	6 MPH	
Soil Temperature, Unit:	72 F	
% Cloud Cover:	10	

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W

Application Equipment

	A	B
Appl. Equipment:	ATV	
Operating Pressure, Unit:	30 PSI	
Nozzle Size:	11002	
Spray Volume, Unit:	20 GAL/AC	

Iowa State University

Corvus, Balance Flexx and Atrazine applied preemergence and Ignite, Laudis and Roundup PowerMAX applied postemergence in corn, Ames, IA, 2008.

Trial ID: ACC 15

Protocol ID: HP08NARJJB

Location: Ames

Study Director: Owen/Lux/Franzenburg/Grossnickle

Investigator: Micheal D. K. Owen

Trit No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	205	310	
2	Corvus	3.88	SC	0.067	LB A/A	2.2	FL OZ/A	PRE	A	102	209	305	
	Ignite 280	2.34	SL	0.402	LB A/A	22.0	FL OZ/A	MPOST	B				
	Laudis	3.5	SC	0.0547	LB A/A	2.0	FL OZ/A	MPOST	B				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	MPOST	B				
3	Corvus	3.88	SC	0.091	LB A/A	3.0	FL OZ/A	PRE	A	103	207	313	
	Ignite 280	2.34	SL	0.402	LB A/A	22.0	FL OZ/A	MPOST	B				
	Laudis	3.5	SC	0.0547	LB A/A	2.0	FL OZ/A	MPOST	B				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	MPOST	B				
4	Corvus	3.88	SC	0.067	LB A/A	2.2	FL OZ/A	PRE	A	104	211	312	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	B				
	Laudis	3.5	SC	0.082	LB A/A	3.0	FL OZ/A	MPOST	B				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	MPOST	B				
5	Corvus	3.88	SC	0.091	LB A/A	3.0	FL OZ/A	PRE	A	105	203	308	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	B				
	Laudis	3.5	SC	0.082	LB A/A	3.0	FL OZ/A	MPOST	B				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	MPOST	B				
6	Balance Flexx	4	SC	0.094	LB A/A	3.0	FL OZ/A	PRE	A	106	212	302	
	Atrazine	4	SC	1.0	LB A/A	2.0	PT/A	PRE	A				
	Ignite 280	2.34	SL	0.402	LB A/A	22.0	FL OZ/A	MPOST	B				
	Laudis	3.5	SC	0.0547	LB A/A	2.0	FL OZ/A	MPOST	B				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	MPOST	B				
7	Balance Flexx	4	SC	0.125	LB A/A	4.0	FL OZ/A	PRE	A	107	213	307	
	Atrazine	4	SC	1.0	LB A/A	2.0	PT/A	PRE	A				
	Ignite 280	2.34	SL	0.402	LB A/A	22.0	FL OZ/A	MPOST	B				
	Laudis	3.5	SC	0.0547	LB A/A	2.0	FL OZ/A	MPOST	B				
	AMS	100	SG	1.5	LB/A	1.5	LB/A	MPOST	B				
8	Corvus	3.88	SC	0.067	LB A/A	2.2	FL OZ/A	PRE	A	108	204	311	
	Atrazine	4	SC	1.0	LB A/A	2.0	PT/A	PRE	A				
9	Corvus	3.88	SC	0.091	LB A/A	3.0	FL OZ/A	PRE	A	109	201	309	
	Atrazine	4	SC	1.0	LB A/A	2.0	PT/A	PRE	A				
10	Corvus	3.88	SC	0.136	LB A/A	4.5	FL OZ/A	PRE	A	110	202	304	
	Atrazine	4	SC	1.0	LB A/A	2.0	PT/A	PRE	A				
11	Corvus	3.88	SC	0.17	LB A/A	5.6	FL OZ/A	PRE	A	111	206	301	
	Atrazine	4	SC	1.0	LB A/A	2.0	PT/A	PRE	A				
12	Balance Flexx	4	SC	0.125	LB A/A	4.0	FL OZ/A	PRE	A	112	210	306	
	Harness Xtra	6	SE	2.25	LB A/A	1.5	QT/A	PRE	A				
13	Lumax	3.95	SL	3.16	LB A/A	3.2	QT/A	PRE	A	113	208	303	

Sort Order: Replicate 1

Iowa State University

Postemergence applications of Roundup PowerMAX, Harness, Callisto, Status and Impact in corn, Ames, IA, 2008.

Trial ID: ACC 16
Location: Ames

Protocol ID: 2008-01-04-04
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA
Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/19/2008

Objectives:

The purpose of this study was to evaluate postemergence applied tank-mixtures of Harness, Callisto, Status, or Impact with Roundup PowerMAX for crop phytotoxicity, weed control and corn yield.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: DEKALB DKC 52-43 VT3
BBCH Scale: BCOR
Planting Method: DIRECT DRILLED
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL
Planting Date: 5/19/2008
Rate, Unit: 32000 SEEDS/A
Emergence Date: 5/30/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abrutylon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: MINIMUM-TILL
Study Design: Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

Tillage included a field cultivation to prepare the seedbed for planting. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 25 to 30% at planting.

Soil Description

% OM: 4.1
pH: 6.6
Texture: CANISTEO/WEBSTER CLAY LOAM, CLARION LOAM
Soil Name: CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B	C
Application Date:	5/21/2008		
Application Method:	SPRAY		
Application Timing:	PRE		
Application Placement:	BROSOI		
Air Temperature, Unit:	66 F		
% Relative Humidity:	25		
Wind Velocity, Unit:	6 MPH		
Soil Temperature, Unit:	56 F		
% Cloud Cover:	5		

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W

Application Equipment

	A	B	C
Appl. Equipment:	ATV		
Operating Pressure, Unit:	30 PSI		
Nozzle Size:	11002		
Spray Volume, Unit:	20 GAL/AC		

Iowa State University

Postemergence applications of Roundup PowerMAX, Harness, Callisto, Status and Impact in corn, Ames, IA, 2008.

Trial ID: ACC 16
Location: Ames

Protocol ID: 2008-01-04-04
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Plot No. 1	Plot No. 2	Plot No. 3	By Rep	Notes
1	Untreated									101	209	305		
2	Harness Xtra	5.6	SE	2.1	LB AI/A	1.5	QT/A	PRE	A	102	204	311		
	Roundup PowerMAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	POST	B					
	AMS	100	SG	2.0	% W/W	2.0	% W/W	POST	B					
3	Harness Xtra	5.6	SE	2.1	LB AI/A	1.5	QT/A	PRE	A	103	210	301		
	Harness	7	EC	1.31	LB AI/A	1.5	PT/A	POST	B					
	Roundup PowerMAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	POST	B					
	AMS	100	SG	2.0	% W/W	2.0	% W/W	POST	B					
4	Harness Xtra	5.6	SE	2.1	LB AI/A	1.5	QT/A	PRE	A	104	203	310		
	Harness	7	EC	2.6	LB AI/A	2.97	PT/A	POST	B					
	Roundup PowerMAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	POST	B					
	AMS	100	SG	2.0	% W/W	2.0	% W/W	POST	B					
5	Harness Xtra	5.6	SE	2.1	LB AI/A	1.5	QT/A	PRE	A	105	202	307		
	Harness	7	EC	1.31	LB AI/A	1.5	PT/A	LPOST	C					
	Roundup PowerMAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	LPOST	C					
	AMS	100	SG	2.0	% W/W	2.0	% W/W	LPOST	C					
6	Harness Xtra	5.6	SE	2.1	LB AI/A	1.5	QT/A	PRE	A	106	207	309		
	Harness	7	EC	2.6	LB AI/A	2.97	PT/A	LPOST	C					
	Roundup PowerMAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	LPOST	C					
	AMS	100	SG	2.0	% W/W	2.0	% W/W	LPOST	C					
7	Harness Xtra	5.6	SE	2.1	LB AI/A	1.5	QT/A	PRE	A	107	206	303		
	Callisto	4	SC	0.094	LB AI/A	3.0	FL OZ/A	POST	B					
	Roundup PowerMAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	POST	B					
	AMS	100	SG	2.0	% W/W	2.0	% W/W	POST	B					
8	Harness Xtra	5.6	SE	2.1	LB AI/A	1.5	QT/A	PRE	A	108	205	306		
	Status	56	WG	0.0875	LB AI/A	2.5	OZ WT/A	POST	B					
	Roundup PowerMAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	POST	B					
	AMS	100	SG	2.0	% W/W	2.0	% W/W	POST	B					
9	Harness Xtra	5.6	SE	2.1	LB AI/A	1.5	QT/A	PRE	A	109	211	304		
	Impact	2.8	SC	0.011	LB AI/A	0.503	FL OZ/A	POST	B					
	Roundup PowerMAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	POST	B					
	AMS	100	SG	2.0	% W/W	2.0	% W/W	POST	B					
10	Harness Xtra	5.6	SE	4.2	LB AI/A	3.0	QT/A	PRE	A	110	201	308		
11	Lexar	3.7	SE	3.24	LB AI/A	3.5	QT/A	PRE	A	111	208	302		

Sort Order: Replicate 1

Iowa State University

Two and one-pass weed management systems in corn utilizing various preemergence and postemergence applied herbicides, Ames, IA, 2008.

Trial ID: ACC 17
Location: Ames

Protocol ID: BASF
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA

Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/19/2008

Objectives:

The purpose of this study was to evaluate one and two-pass systems in corn utilizing various preemergence and postemergence applied herbicides for crop phytotoxicity, weed control and yield.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: DEKALB DKC 52-43 VT3
BBCH Scale: BCOR
Planting Method: DIRECT DRILLED
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL
Planting Date: 5/19/2008
Rate, Unit: 32000 SEEDS/A
Emergence Date: 5/30/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: MINIMUM-TILL
Study Design: Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

Tillage included a field cultivation to prepare the seedbed for planting. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 25 to 30% at planting.

Soil Description

% OM: 4.1
pH: 6.6
Texture: CANISTEO/WEBSTER CLAY LOAM, CLARION LOAM
Soil Name: CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B	C
Application Date:	5/21/2008		
Application Method:	SPRAY		
Application Timing:	PRE		
Application Placement:	BROSOI		
Air Temperature, Unit:	66 F		
% Relative Humidity:	25		
Wind Velocity, Unit:	6 MPH		
Soil Temperature, Unit:	56 F		
% Cloud Cover:	5		

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W

Application Equipment

	A	B	C
Appl. Equipment:	ATV		
Operating Pressure, Unit:	30 PSI		
Nozzle Size:	11002		
Spray Volume, Unit:	20 GAL/AC		

Iowa State University

Two and one-pass weed management systems in corn utilizing various preemergence and postemergence applied herbicides, Ames, IA, 2008.

Trial ID: ACC 17
Location: Ames

Protocol ID: BASF
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	209	304	
2	Roundup WeatherMAX AMS	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B	102	205	310	
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B				
3	Roundup WeatherMAX Status AMS	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B	103	207	309	
		56	WG	0.0875	LB AI/A	2.5	OZ WT/A	EPOST	B				
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B				
4	Roundup WeatherMAX Status AMS	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B	104	202	307	
		56	WG	0.175	LB AI/A	5.0	OZ WT/A	EPOST	B				
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B				
5	Outlook Roundup WeatherMAX AMS	6	EC	0.56	LB AI/A	12.0	FL OZ/A	PRE	A	105	210	301	
		4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	C				
6	Outlook Roundup WeatherMAX Status AMS	6	EC	0.56	LB AI/A	12.0	FL OZ/A	PRE	A	106	204	308	
		4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
		56	WG	0.0875	LB AI/A	2.5	OZ WT/A	POST	C				
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	C				
7	Roundup WeatherMAX AMS	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C	107	203	305	
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	C				
8	Outlook Roundup WeatherMAX Status AMS	6	EC	0.56	LB AI/A	12.0	FL OZ/A	PRE	A	108	208	302	
		4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
		56	WG	0.175	LB AI/A	5.0	OZ WT/A	POST	C				
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	C				
9	Roundup WeatherMAX Callisto AMS	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B	109	201	306	
		4	SC	0.047	LB AI/A	1.5	FL OZ/A	EPOST	B				
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B				
10	Laudis Atrazine COC AMS	3.5	SC	0.082	LB AI/A	3.0	FL OZ/A	EPOST	B	110	206	303	
		4	L	0.5	LB AI/A	1.0	PT/A	EPOST	B				
		100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B				

Sort Order: Replicate 1

Iowa State University

Postemergence applied Impact in various tank-mixtures in corn, Ames, IA, 2008.

Trial ID: ACC 18
Location: Ames

Protocol ID: 08-TPZ-H-100
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA

Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/19/2008

Objectives:

The purpose of this study was to evaluate the performance in corn of Impact in sequential weed control programs and in tank-mixtures with Roundup PowerMAX.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: DEKALB DKC 52-43 VT3
BBCH Scale: BCOR
Planting Method: DIRECT DRILLED
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL
Planting Date: 5/19/2008
Rate, Unit: 32000 SEEDS/A
Emergence Date: 5/30/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abrutylon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: MINIMUM-TILL
Study Design: Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

Tillage included a field cultivation to prepare the seedbed for planting. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 25 to 30% at planting.

Soil Description

% OM: 4.1
pH: 6.6
Texture: CANISTEO/WEBSTER CLAY LOAM, CLARION LOAM
Soil Name: CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B	C
Application Date:	5/21/2008		
Application Method:	SPRAY		
Application Timing:	PRE		
Application Placement:	BROSOI		
Air Temperature, Unit:	66 F		
% Relative Humidity:	25		
Wind Velocity, Unit:	6 MPH		
Soil Temperature, Unit:	56 F		
% Cloud Cover:	5		

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W

Application Equipment

	A	B	C
Appl. Equipment:	ATV		
Operating Pressure, Unit:	30 PSI		
Nozzle Size:	11002		
Spray Volume, Unit:	20 GAL/AC		

Iowa State University

Postemergence applied Impact in various tank-mixtures in corn, Ames, IA, 2008.

Trial ID: ACC 18
Location: Ames

Protocol ID: 08-TPZ-H-100
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trit No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	208	304	
2	Dual II Magnum	7.64	EC	0.955	LB AI/A	1.0	PT/A	PRE	A	102	206	308	
3	Dual II Magnum	7.64	EC	0.955	LB AI/A	1.0	PT/A	PRE	A	103	210	303	
	Impact	2.8	SC	0.016	LB AI/A	0.73	FL OZ/A	EPOST	B				
	Atrazine	4	L	0.5	LB AI/A	1.0	PT/A	EPOST	B				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
	28 % UAN	100	SL	2.5	% V/V	2.5	% V/V	EPOST	B				
4	Dual II Magnum	7.64	EC	0.955	LB AI/A	1.0	PT/A	PRE	A	104	207	302	
	Callisto	4	SC	0.094	LB AI/A	3.0	FL OZ/A	EPOST	B				
	Atrazine	4	L	0.5	LB AI/A	1.0	PT/A	EPOST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
	28 % UAN	100	SL	2.5	% V/V	2.5	% V/V	EPOST	B				
5	Dual II Magnum	7.64	EC	0.955	LB AI/A	1	PT/A	PRE	A	105	201	305	
	Laudis	3.5	SC	0.082	LB AI/A	3.0	FL OZ/A	EPOST	B				
	Atrazine	4	L	0.5	LB AI/A	1.0	PT/A	EPOST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
	28 % UAN	100	SL	2.5	% V/V	2.5	% V/V	EPOST	B				
6	Harness	7	EC	0.875	LB AI/A	1.0	PT/A	PRE	A	106	202	309	
	Impact	2.8	SC	0.011	LB AI/A	0.503	FL OZ/A	POST	C				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	C				
7	Harness	7	EC	0.875	LB AI/A	1.0	PT/A	PRE	A	107	209	306	
	Impact	2.8	SC	0.011	LB AI/A	0.503	FL OZ/A	POST	C				
	Atrazine	4	L	0.5	LB AI/A	1.0	PT/A	POST	C				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	C				
8	Harness	7	EC	0.875	LB AI/A	1.0	PT/A	PRE	A	108	203	310	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	C				
9	Impact	2.8	SC	0.016	LB AI/A	0.73	FL OZ/A	EPOST	B	109	204	301	
	Atrazine	4	L	0.5	LB AI/A	1.0	PT/A	EPOST	B				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
	28 % UAN	100	SL	2.5	% V/V	2.5	% V/V	EPOST	B				
10	Laudis	3.5	SC	0.082	LB AI/A	3.0	FL OZ/A	EPOST	B	110	205	307	
	Atrazine	4	L	0.5	LB AI/A	1.0	PT/A	EPOST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
	28 % UAN	100	SL	2.5	% V/V	2.5	% V/V	EPOST	B				

Sort Order: Replicate 1

Iowa State University

Weed management programs in corn. Preemergence applied Balance Flexx, Radius and Corvus and postemergence applied Ignite, Laudis and Capreno, Ames, IA, 2008.
 Trial ID: ACC 19 Protocol ID: HP08NARMRF
 Location: Ames Study Director: Owen/Lux/Franzenburg/Grossnickle
 Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames **Trial Status:** ONE-YEAR/INTERIM
State/Prov.: IA
Postal Code: 50014 **Initiation Date:** 5/19/2008
Country: USA

Objectives:

The purpose of this study was to evaluate two and one-pass herbicide programs in corn involving preemergence applied Balance Flexx, Radius, Atrazine, Corvus and postemergence applied Ignite, Laudis, Capreno, and Roundup PowerMAX for crop phytotoxicity and weed control.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: Pioneer 34A20
BBCH Scale: BCOR **Planting Date:** 5/19/2008
Planting Method: DIRECT DRILLED **Rate, Unit:** 32000 SEEDS/A
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL **Emergence Date:** 5/30/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT **Tillage Type:** MINIMUM-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

Tillage included a field cultivation to prepare the seedbed for planting. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 25% at planting.

Soil Description

% OM: 4.1 **Texture:** CANISTEO/WEBSTER CLAY LOAM, CLARION LOAM
pH: 6.6 **Soil Name:** CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B	C
Application Date:	5/19/2008		
Application Method:	SPRAY		
Application Timing:	PRE		
Application Placement:	BROSOI		
Air Temperature, Unit:	71 F		
% Relative Humidity:	35		
Wind Velocity, Unit:	6 MPH		
Soil Temperature, Unit:	72 F		
% Cloud Cover:	10		

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W

Application Equipment

	A	B	C
Appl. Equipment:	ATV		
Operating Pressure, Unit:	30 PSI		
Nozzle Size:	11002		
Spray Volume, Unit:	20 GAL/AC		

Iowa State University

Postemergence applications of Halosulfuron applied, alone and in combination with Impact in corn, Ames, IA, 2008.

Trial ID: ACC 20
Location: Ames

Protocol ID: 2008-HC28
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA

Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/19/2008

Conclusions:

The purpose of this study was to evaluate Halosulfuron applied postemergence, alone, and in tank-mixture with Impact for crop phytotoxicity and weed control in corn.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: DEKALB DKC 52-43 VT3
BBCH Scale: BCOR
Planting Method: DIRECT DRILLED
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL
Planting Date: 5/19/2008
Rate, Unit: 32000 SEEDS/A
Emergence Date: 5/30/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abrutylon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: MINIMUM-TILL
Study Design: Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

Tillage included a field cultivation to prepare the seedbed for planting. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 25 to 30% at planting.

Soil Description

% OM: 4.1
pH: 6.6
Texture: CANISTEO/WEBSTER CLAY LOAM, CLARION LOAM
Soil Name: CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B
Application Date:	5/21/2008	
Application Method:	SPRAY	
Application Timing:	PRE	
Application Placement:	BROSOI	
Air Temperature, Unit:	66 F	
% Relative Humidity:	25	
Wind Velocity, Unit:	6 MPH	
Soil Temperature, Unit:	56 F	
% Cloud Cover:	5	

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W

Application Equipment

	A	B
Appl. Equipment:	ATV	
Operating Pressure, Unit:	30 PSI	
Nozzle Size:	11002	
Spray Volume, Unit:	20 GAL/AC	

Iowa State University

Postemergence applications of Halosulfuron applied, alone and in combination with Impact in corn, Ames, IA, 2008.

Trial ID: ACC 20
Location: Ames

Protocol ID: 2008-HC28
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Tri No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	205	303	
2	Dual II Magnum	7.64	EC	0.477	LB A/A	0.5	PT/A	PRE	A	102	204	306	
3	Dual II Magnum	7.64	EC	0.477	LB A/A	0.5	PT/A	PRE	A	103	206	302	
	Halosulfuron 75 DG	75	DF	0.0315	LB A/A	0.67	OZ WT/A	POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	POST	B				
	AMS	100	SG	3.0	LB/A	3.0	LB/A	POST	B				
4	Dual II Magnum	7.64	EC	0.477	LB A/A	0.5	PT/A	PRE	A	104	201	304	
	Permit	75	DF	0.0314	LB A/A	0.67	OZ WT/A	POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	POST	B				
	AMS	100	SG	3.0	LB/A	3.0	LB/A	POST	B				
5	Dual II Magnum	7.64	EC	0.477	LB A/A	0.5	PT/A	PRE	A	105	202	305	
	Halosulfuron 75 DG	75	DF	0.0315	LB A/A	0.67	OZ WT/A	POST	B				
	Impact	2.8	SC	0.0164	LB A/A	0.75	FL OZ/A	POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	POST	B				
	AMS	100	SG	3.0	LB/A	3.0	LB/A	POST	B				
6	Dual II Magnum	7.64	EC	0.477	LB A/A	0.5	PT/A	PRE	A	106	203	301	
	Permit	75	DF	0.0314	LB A/A	0.67	OZ WT/A	POST	B				
	Impact	2.8	SC	0.0164	LB A/A	0.75	FL OZ/A	POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	POST	B				
	AMS	100	SG	3.0	LB/A	3.0	LB/A	POST	B				

Sort Order: Replicate 1

Iowa State University

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	ZEAMD BCOR
Stage Scale Used:	DESC

Pest Stage At Each Application

	A
Pest 1 Code, Disc., Scale:	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W

Iowa State University

**Postemergence applications of Permit, GWN-3041, GWN-3124, Yukon, and Status
with Roundup PowerMAX in corn, Ames, IA, 2008.**

Trial ID: ACC 21
Location: Ames

Protocol ID: D-PER-08-11-1
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Plot No. 1	Plot No. 2	Plot No. 3	By Rep Notes
1	Untreated									101	206	303	
2	Permit	75	DF	0.0314	LB AI/A	0.67	OZ WT/A	EPOST A		102	204	307	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST A					
	NIS	100	SL	0.125	% V/V	0.125	% V/V	EPOST A					
	AMS	100	SG	3.0	LB/A	3.0	LB/A	EPOST A					
3	GWN-3041				LB AI/A	0.67	OZ WT/A	EPOST A		103	205	301	
	GWN-3124				LB AI/A	0.083	OZ WT/A	EPOST A					
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST A					
	NIS	100	SL	0.125	% V/V	0.125	% V/V	EPOST A					
	AMS	100	SG	3.0	LB/A	3.0	LB/A	EPOST A					
4	Yukon	67.5	SG	0.169	LB AI/A	4.0	OZ WT/A	EPOST A		104	202	306	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST A					
	NIS	100	SL	0.125	% V/V	0.125	% V/V	EPOST A					
	AMS	100	SG	3.0	LB/A	3.0	LB/A	EPOST A					
5	Yukon	67.5	SG	0.127	LB AI/A	3.0	OZ WT/A	EPOST A		105	207	304	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST A					
	NIS	100	SL	0.125	% V/V	0.125	% V/V	EPOST A					
	AMS	100	SG	3.0	LB/A	3.0	LB/A	EPOST A					
6	Status	56	WG	0.175	LB AI/A	5.0	OZ WT/A	EPOST A		106	201	302	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST A					
	NIS	100	SL	0.125	% V/V	0.125	% V/V	EPOST A					
	AMS	100	SG	3.0	LB/A	3.0	LB/A	EPOST A					
7	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST A		107	203	305	
	NIS	100	SL	0.125	% V/V	0.125	% V/V	EPOST A					
	AMS	100	SG	3.0	LB/A	3.0	LB/A	EPOST A					

Sort Order: Replicate 1

Iowa State University

Application Description

	A	B
Application Date:	5/21/2008	
Application Method:	SPRAY	
Application Timing:	PRE	
Application Placement:	BROSOI	
Air Temperature, Unit:	53 F	
% Relative Humidity:	46	
Wind Velocity, Unit:	6 MPH	
Soil Temperature, Unit:	50 F	
Soil Moisture:	ADEQUATE	
% Cloud Cover:	5	

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAME BCOR	ZEAME BCOR
Stage Scale Used:	DESC	DESC

Application Equipment

	A	B
Appl. Equipment:	ATV	
Operating Pressure, Unit:	30 PSI	
Nozzle Size:	11002	
Spray Volume, Unit:	20 GAL/AC	

Iowa State University

Postemergence applications of Callisto plus Atrazine, Laudis plus Atrazine, and Impact plus Atrazine to four popcorn hybrids, Ames, IA, 2008.

Trial ID: ACQ 1
Location: Ames

Protocol ID: IA Grain Quality
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Tri No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate	Other Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
											1	2	3	
1	Hybrid 1										101	211	316	
	Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A				
	Callisto	4	SC	0.094	LB A/A	3	FL OZ/A		POST	B				
	Atrazine	4	L	0.25	LB A/A	0.5	PT/A		POST	B				
	NIS	100	SL	0.25	% V/V	0.25	% V/V		POST	B				
2	Hybrid 1										102	209	313	
	Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A				
	Laudis	3.5	SC	0.082	LB A/A	3.0	FL OZ/A		POST	B				
	Atrazine	4	L	0.25	LB A/A	0.5	PT/A		POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V		POST	B				
	28 % UAN	100	SL	1.5	QT/A	1.5	QT/A		POST	B				
3	Hybrid 1										103	212	314	
	Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A				
	Impact	2.8	SC	0.0164	LB A/A	0.75	FL OZ/A		POST	B				
	Atrazine	4	L	0.25	LB A/A	0.5	PT/A		POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V		POST	B				
	28 % UAN	100	SL	1.25	% V/V	1.25	% V/V		POST	B				
4	Hybrid 1										104	210	315	
	Dual II Magnum Untreated	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A				
5	Hybrid 2										105	214	308	
	Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A				
	Callisto	4	SC	0.094	LB A/A	3	FL OZ/A		POST	B				
	Atrazine	4	L	0.25	LB A/A	0.5	PT/A		POST	B				
	NIS	100	SL	0.25	% V/V	0.25	% V/V		POST	B				
6	Hybrid 2										106	216	306	
	Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A				
	Laudis	3.5	SC	0.082	LB A/A	3.0	FL OZ/A		POST	B				
	Atrazine	4	L	0.25	LB A/A	0.5	PT/A		POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V		POST	B				
	28 % UAN	100	SL	1.5	QT/A	1.5	QT/A		POST	B				
7	Hybrid 2										107	213	307	
	Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A				
	Impact	2.8	SC	0.0164	LB A/A	0.75	FL OZ/A		POST	B				
	Atrazine	4	L	0.25	LB A/A	0.5	PT/A		POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V		POST	B				
	28 % UAN	100	SL	1.25	% V/V	1.25	% V/V		POST	B				
8	Hybrid 2										108	215	305	
	Dual II Magnum Untreated	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A				
9	Hybrid 3										109	208	301	
	Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A				
	Callisto	4	SC	0.094	LB A/A	3	FL OZ/A		POST	B				
	Atrazine	4	L	0.25	LB A/A	0.5	PT/A		POST	B				
	NIS	100	SL	0.25	% V/V	0.25	% V/V		POST	B				
10	Hybrid 3										110	205	303	
	Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A				
	Laudis	3.5	SC	0.082	LB A/A	3.0	FL OZ/A		POST	B				
	Atrazine	4	L	0.25	LB A/A	0.5	PT/A		POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V		POST	B				
	28 % UAN	100	SL	1.5	QT/A	1.5	QT/A		POST	B				

Iowa State University

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
11	Hybrid 3									111	206	304	
	Dual II Magnum	7.64	EC	1.91	LB AI/A	2.0	PT/A	PRE	A				
	Impact	2.8	SC	0.0164	LB AI/A	0.75	FL OZ/A	POST	B				
	Atrazine	4	L	0.25	LB AI/A	0.5	PT/A	POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	POST	B				
	28 % UAN	100	SL	1.25	% V/V	1.25	% V/V	POST	B				
12	Hybrid 3									112	207	302	
	Dual II Magnum	7.64	EC	1.91	LB AI/A	2.0	PT/A	PRE	A				
	Untreated												
13	Hybrid 4									113	201	312	
	Dual II Magnum	7.64	EC	1.91	LB AI/A	2.0	PT/A	PRE	A				
	Callisto	4	SC	0.094	LB AI/A	3	FL OZ/A	POST	B				
	Atrazine	4	L	0.25	LB AI/A	0.5	PT/A	POST	B				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	POST	B				
14	Hybrid 4									114	203	310	
	Dual II Magnum	7.64	EC	1.91	LB AI/A	2.0	PT/A	PRE	A				
	Laudis	3.5	SC	0.082	LB AI/A	3.0	FL OZ/A	POST	B				
	Atrazine	4	L	0.25	LB AI/A	0.5	PT/A	POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	POST	B				
	28 % UAN	100	SL	1.5	QT/A	1.5	QT/A	POST	B				
15	Hybrid 4									115	202	309	
	Dual II Magnum	7.64	EC	1.91	LB AI/A	2.0	PT/A	PRE	A				
	Impact	2.8	SC	0.0164	LB AI/A	0.75	FL OZ/A	POST	B				
	Atrazine	4	L	0.25	LB AI/A	0.5	PT/A	POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	POST	B				
	28 % UAN	100	SL	1.25	% V/V	1.25	% V/V	POST	B				
16	Hybrid 4									116	204	311	
	Dual II Magnum	7.64	EC	1.91	LB AI/A	2.0	PT/A	PRE	A				
	Untreated												

Sort Order: Replicate 1

Iowa State University

Postemergence applications of Callisto plus Atrazine, Laudis plus Atrazine, and Impact plus Atrazine to three sweet corn hybrids, Ames, IA, 2008.

Trial ID: ACQ 2
Location: Ames

Protocol ID: IA Grain Quality
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA
Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/20/2008

Objectives:

The purpose of this study was to evaluate several postemergence applied herbicides for crop phytotoxicity when applied to three sweet corn hybrids.

Crop Description

Crop 1: ZEAMS Zea mays saccharata Sweet corn
Variety: 3 sweet corn hybrids
BBCH Scale: BCOR
Planting Method: DIRECT DRILLED
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL
Planting Date: 5/21/2008
Rate, Unit: 26100 SEEDS/A

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: MINIMUM-TILL
Study Design: Split-Plot

	Previous Crops	Previous Pesticides	Year
1.	SOYBEAN	NONE	2007

Field Prep./Maintenance:

Tillage included a field cultivation to prepare the seedbed for planting. Fertilization included 121 lb/A actual N applied as urea. Crop residue on the soil surface was 20 to 25% at planting.

Soil Description

% OM: 4.2
pH: 6.3
Texture: WEBSTER CLAY LOAM, CLARION LOAM
Soil Name: CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B
Application Date:	5/21/2008	
Application Method:	SPRAY	
Application Timing:	PRE	
Application Placement:	BROSOI	
Air Temperature, Unit:	53 F	
% Relative Humidity:	46	
Wind Velocity, Unit:	6 MPH	
Soil Temperature, Unit:	50 F	
Soil Moisture:	ADEQUATE	
% Cloud Cover:	5	

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMS BCOR	ZEAMS BCOR
Stage Scale Used:	DESC	DESC

Application Equipment

	A	B
Appl. Equipment:	ATV	
Operating Pressure, Unit:	30 PSI	
Nozzle Size:	11002	
Spray Volume, Unit:	20 GAL/AC	

Iowa State University

**Postemergence applications of Callisto plus Atrazine, Laudis plus Atrazine,
and Impact plus Atrazine to three sweet corn hybrids, Ames, IA, 2008.**

Trial ID: ACQ 2

Protocol ID: IA Grain Quality

Location: Ames

Study Director: Owen/Lux/Franzenburg/Grossnickle

Investigator: Micheal D. K. Owen

Tri No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate	Other Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
											1	2	3	
1	Hybrid 1 Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A	101	206	308	
	Callisto	4	SC	0.094	LB A/A	3	FL OZ/A		POST	B				
	Atrazine	4	L	0.25	LB A/A	0.5	PT/A		POST	B				
	NIS	100	SL	0.25	% V/V	0.25	% V/V		POST	B				
2	Hybrid 1 Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A	102	207	305	
	Laudis	3.5	SC	0.082	LB A/A	3.0	FL OZ/A		POST	B				
	Atrazine	4	L	0.25	LB A/A	0.5	PT/A		POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V		POST	B				
	28 % UAN	100	SL	1.5	QT/A	1.5	QT/A		POST	B				
3	Hybrid 1 Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A	103	208	306	
	Impact	2.8	SC	0.0164	LB A/A	0.75	FL OZ/A		POST	B				
	Atrazine	4	L	0.25	LB A/A	0.5	PT/A		POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V		POST	B				
	28 % UAN	100	SL	1.25	% V/V	1.25	% V/V		POST	B				
4	Hybrid 1 Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A	104	205	307	
	Untreated													
5	Hybrid 2 Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A	105	201	310	
	Callisto	4	SC	0.094	LB A/A	3	FL OZ/A		POST	B				
	Atrazine	4	L	0.25	LB A/A	0.5	PT/A		POST	B				
	NIS	100	SL	0.25	% V/V	0.25	% V/V		POST	B				
6	Hybrid 2 Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A	106	204	309	
	Laudis	3.5	SC	0.082	LB A/A	3.0	FL OZ/A		POST	B				
	Atrazine	4	L	0.25	LB A/A	0.5	PT/A		POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V		POST	B				
	28 % UAN	100	SL	1.5	QT/A	1.5	QT/A		POST	B				
7	Hybrid 2 Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A	107	202	311	
	Impact	2.8	SC	0.0164	LB A/A	0.75	FL OZ/A		POST	B				
	Atrazine	4	L	0.25	LB A/A	0.5	PT/A		POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V		POST	B				
	28 % UAN	100	SL	1.25	% V/V	1.25	% V/V		POST	B				
8	Hybrid 2 Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A	108	203	312	
	Untreated													
9	Hybrid 3 Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A	109	211	302	
	Callisto	4	SC	0.094	LB A/A	3	FL OZ/A		POST	B				
	Atrazine	4	L	0.25	LB A/A	0.5	PT/A		POST	B				
	NIS	100	SL	0.25	% V/V	0.25	% V/V		POST	B				
10	Hybrid 3 Dual II Magnum	7.64	EC	1.91	LB A/A	2.0	PT/A		PRE	A	110	210	301	
	Laudis	3.5	SC	0.082	LB A/A	3.0	FL OZ/A		POST	B				
	Atrazine	4	L	0.25	LB A/A	0.5	PT/A		POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V		POST	B				
	28 % UAN	100	SL	1.5	QT/A	1.5	QT/A		POST	B				

Iowa State University

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. 1	By 2	Rep 3	Notes
11	Hybrid 3									111	212	304	
	Dual II Magnum	7.64	EC	1.91	LB AI/A	2.0	PT/A	PRE	A				
	Impact	2.8	SC	0.0164	LB AI/A	0.75	FL OZ/A	POST	B				
	Atrazine	4	L	0.25	LB AI/A	0.5	PT/A	POST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	POST	B				
	28 % UAN	100	SL	1.25	% V/V	1.25	% V/V	POST	B				
12	Hybrid 3									112	209	303	
	Dual II Magnum	7.64	EC	1.91	LB AI/A	2.0	PT/A	PRE	A				
	Untreated												

Sort Order: Replicate 1

Iowa State University

KIH-485 applied preplant in no-tillage soybean production, Ames, IA, 2008.

Trial ID: ASN 1
Location: Ames

Protocol ID: Soybean#2
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50011
Country: USA

Trial Status: ONE-YEAR/INTERIM
Initiation Date: 4/23/2008

Objectives:

The purpose of this study was to evaluate several rates of KIH-485 applied early preplant in no-tillage soybean production for crop phytotoxicity and weed control.

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: ASGROW AG2606
BBCH Scale: BSOY
Planting Method: DIRECT DRILLED **Rate, Unit:** 160000 SEEDS/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Previous Crops	Year
1.	CORN	2007

Field Prep./Maintenance:

The study area was left un-tilled from the 2007 corn cropping year and stalks were chopped following harvest. Crop residue was to 80 to 90% at planting.

Soil Description

% OM: 4.8 **Texture:** CANISTEO CLAY LOAM, CLARION LOAM
pH: 7.1 **Soil Name:** CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A
Application Date:	4/23/2008
Application Method:	SPRAY
Application Timing:	EPP
Application Placement:	BROSOI
Air Temperature, Unit:	60 F
% Relative Humidity:	54
Wind Velocity, Unit:	3 MPH
Soil Temperature, Unit:	50 F
Soil Moisture:	EXCESSIVE
% Cloud Cover:	0

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	GLXMA BSOY
Stage Scale Used:	DESC

Pest Stage At Each Application

	A
Pest 1 Code, Disc., Scale:	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W
Stage Majority, Percent:	COTYL
Stage Minimum, Percent:	COTYL
Stage Maximum, Percent:	COTYL
Height, Unit:	0.25 IN
Height Minimum, Maximum:	0.25 0.38
Density, Unit:	1 FT2

Application Equipment

	A
Appl. Equipment:	ATV
Operating Pressure, Unit:	30 PSI
Nozzle Size:	11002
Spray Volume, Unit:	20 GAL/AC

Iowa State University

KIH-485 applied preplant in no-tillage soybean production, Ames, IA, 2008.

Trial ID: ASN 1
Location: Ames

Protocol ID: Soybean#2
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trit No.	Treatment Name	Form		Rate	Other		Growth Stage	Appl Code	Plot No. By Rep			Notes			
		Conc	Type		Rate	Unit			Rate	Unit	1		2	3	
1	Untreated								101	206	303				
2	KIH-485	85	WG	0.19	LB	AI/A	3.58	OZ	WT/A	EPP	A	102	204	306	
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	EPP	A				
	AMS	100	SG	8.5	LB/100	GAL	8.5	LB/100	GAL	EPP	A				
3	KIH-485	85	WG	0.22	LB	AI/A	4.14	OZ	WT/A	EPP	A	103	201	304	
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	EPP	A				
	AMS	100	SG	8.5	LB/100	GAL	8.5	LB/100	GAL	EPP	A				
4	KIH-485	85	WG	0.27	LB	AI/A	5.1	OZ	WT/A	EPP	A	104	205	302	
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	EPP	A				
	AMS	100	SG	8.5	LB/100	GAL	8.5	LB/100	GAL	EPP	A				
5	KIH-485	85	WG	0.45	LB	AI/A	8.5	OZ	WT/A	EPP	A	105	207	305	
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	EPP	A				
	AMS	100	SG	8.5	LB/100	GAL	8.5	LB/100	GAL	EPP	A				
6	Dual II Magnum	7.64	EC	1.91	LB	AI/A	2.0	PT/A		EPP	A	106	203	307	
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	EPP	A				
	AMS	100	SG	8.5	LB/100	GAL	8.5	LB/100	GAL	EPP	A				
7	Outlook	6	EC	0.98	LB	AI/A	21.0	FL	OZ/A	EPP	A	107	202	301	
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	EPP	A				
	AMS	100	SG	8.5	LB/100	GAL	8.5	LB/100	GAL	EPP	A				

Sort Order: Replicate 1

Iowa State University

Preplant burndown applications of ET tank-mixtures in soybean, Ames, IA, 2008.

Trial ID: ASN 2
Location: Ames

Protocol ID: 08A48H2A01
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA
Trial Status: ONE-YEAR/INTERIM

Objectives:

The purpose of this study was to evaluate preplant burndown applications of ET in combination with glyphosate, Dual II Magnum, Valor, FirstRate or Pursuit for phytotoxicity and weed control in no-tillage soybean.

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: ASGROW AG2606
BBCH Scale: BSOY
Planting Method: DIRECT DRILLED **Rate, Unit:** 160000 SEEDS/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters
Pest 5 Type: W **Code:** ERICA **Erigeron canadensis**
Common Name: Canada horseweed

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: NO-TILL
Study Design: Randomized Complete Block

	Previous Crops	Year
1.	CORN	2007

Field Prep./Maintenance:

The study area was left un-tilled from the 2007 corn cropping year and stalks were chopped following harvest. Crop residue was to 80 to 90% at planting.

Iowa State University

Soil Description
% OM: 4.6 **Texture:** WEBSTER CLAY LOAM, NICOLLET LOAM
pH: 7.3 **Soil Name:** CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	GLXMA BSOY
Stage Scale Used:	DESC

Pest Stage At Each Application

	A
Pest 1 Code, Disc., Scale:	SETFA W
Pest 2 Code, Disc., Scale:	AMATA W
Pest 3 Code, Disc., Scale:	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W

Iowa State University

Preplant burndown applications of ET tank-mixtures in soybean, Ames, IA, 2008.

Trial ID: ASN 2
Location: Ames

Protocol ID: 08A48H2A01
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	205	302	
2	Roundup Original	3	SL	0.75	LB AE/A	32.0	FL OZ/A	EPP	A	102	203	304	
	Dual II Magnum	7.64	EC	1.27	LB AI/A	1.33	PT/A	EPP	A				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	EPP	A				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	EPP	A				
3	ET	0.21	EC	0.00164	LB AI/A	1.0	FL OZ/A	EPP	A	103	202	306	
	Roundup Original	3	SL	0.75	LB AE/A	32.0	FL OZ/A	EPP	A				
	Dual II Magnum	7.64	EC	1.27	LB AI/A	1.33	PT/A	EPP	A				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	EPP	A				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	EPP	A				
4	ET	0.21	EC	0.00164	LB AI/A	1.0	FL OZ/A	EPP	A	104	206	301	
	Roundup Original	3	SL	0.75	LB AE/A	32.0	FL OZ/A	EPP	A				
	Valor SX	51	WG	0.064	LB AI/A	2.0	OZ WT/A	EPP	A				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	EPP	A				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	EPP	A				
5	ET	0.21	EC	0.00164	LB AI/A	1.0	FL OZ/A	EPP	A	105	201	305	
	Roundup Original	3	SL	0.75	LB AE/A	32.0	FL OZ/A	EPP	A				
	FirstRate	84	WG	0.0158	LB AI/A	0.3	OZ WT/A	EPP	A				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	EPP	A				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	EPP	A				
6	ET	0.21	EC	0.00164	LB AI/A	1.0	FL OZ/A	EPP	A	106	204	303	
	Roundup Original	3	SL	0.75	LB AE/A	32.0	FL OZ/A	EPP	A				
	Pursuit	2	SL	0.0625	LB AI/A	4.0	FL OZ/A	EPP	A				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	EPP	A				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	EPP	A				

Sort Order: Replicate 1

Iowa State University

Early preplant and postemergence applied Tackle and Extreme in no-tillage soybean production, Ames, IA, 2008.

Trial ID: ASN 3
Location: Ames

Protocol ID: HGLXMATAC0805
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA

Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/13/2008

Objectives:

The purpose of this study was to evaluate early preplant and postemergence applications of Tackle and Extreme in no-tillage soybean production for crop phytotoxicity and weed control.

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: ASGROW AG2606
BBCH Scale: BSOY
Planting Method: DIRECT DRILLED **Rate, Unit:** 160000 SEEDS/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abrutylon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters
Pest 5 Type: W **Code:** ERICA **Erigeron canadensis**
Common Name: Canada horseweed
Pest 6 Type: W **Code:** POLPY **Polygonum pensylvanicum**
Common Name: Pennsylvania smartweed

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: NO-TILL
Study Design: Randomized Complete Block

	Previous Crops	Year
1.	CORN	2007

Field Prep./Maintenance:

The study area was left un-tilled from the 2007 corn cropping year and stalks were chopped following harvest. Crop residue was to 80 to 90% at planting.

Iowa State University

% OM:	4.8	Soil Description	
pH:	7.1	Texture:	CANISTEO CLAY LOAM, CLARION LOAM
		Soil Name:	CLARION, WEBSTER, NICOLLET
		Fert. Level:	EXCELLENT

Application Description

	A	B
Application Date:	5/13/2008	
Application Method:	SPRAY	
Application Timing:	EPP	
Application Placement:	BROSOI	
Air Temperature, Unit:	63 F	
% Relative Humidity:	61	
Wind Velocity, Unit:	10 MPH	
	F	
Soil Moisture:	EXCESSIVE	
% Cloud Cover:	100	

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC

Iowa State University

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W
Stage Majority, Percent:	1 LEAF	
Stage Minimum, Percent:	1 LEAF	
Stage Maximum, Percent:	2 LEAF	
Height, Unit:	0.5 IN	
Height Minimum, Maximum:	0.25 0.75	
Density, Unit:	20 FT2	
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W
Stage Majority, Percent:	COTYL	
Stage Minimum, Percent:	COTYL	
Stage Maximum, Percent:	COTYL	
Height, Unit:	0.25 IN	
Height Minimum, Maximum:	0.25 0.25	
Density, Unit:	0 FT2	
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W
Stage Majority, Percent:	COTYL	
Stage Minimum, Percent:	COTYL	
Stage Maximum, Percent:	COTYL	
Height, Unit:	0.25 IN	
Height Minimum, Maximum:	0.25 0.25	
Density, Unit:	0 FT2	
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W
Stage Majority, Percent:	6 LEAF	
Stage Minimum, Percent:	COTYL	
Stage Maximum, Percent:	10 LF	
Height, Unit:	0.5 IN	
Height Minimum, Maximum:	0.25 1.5	
Density, Unit:	2 FT2	
Pest 5 Code, Disc., Scale:	ERICA W	ERICA W
Stage Majority, Percent:	NUMERO	
Stage Minimum, Percent:	2 LEAF	
Stage Maximum, Percent:	NUMERO	
Height, Unit:	0.5 IN	
Height Minimum, Maximum:	0.5 0.5	
Density, Unit:	0 FT2	
Pest 6 Code, Disc., Scale:	POLPY W	POLPY W
Stage Majority, Percent:	COTYL	
Stage Minimum, Percent:	COTYL	
Stage Maximum, Percent:	1 LEAF	
Height, Unit:	0.25 IN	
Height Minimum, Maximum:	0.25 0.5	
Density, Unit:	0 FT2	

Iowa State University

Application Equipment

	A	B
Appl. Equipment:	HAND SPRAYER	
Operating Pressure, Unit:	35 PSI	
Nozzle Size:	11003	
Spray Volume, Unit:	20 GAL/AC	

Iowa State University

Early preplant and postemergence applied Tackle and Extreme in no-tillage soybean production, Ames, IA, 2008.

Trial ID: ASN 3
Location: Ames

Protocol ID: HGLXMATAC0805
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trit No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	205	309	
2	Tackle	4	SL	1.0	LB A/A	32.0	FL OZ/A	EPP	A	102	206	302	
3	Tackle AMS	4 100	SL SG	1.0 17.0	LB A/A LB/100 GAL	32.0 17.0	FL OZ/A LB/100 GAL	EPP EPP	A A	103	210	305	
4	Tackle AMS NIS	4 100 100	SL SG SL	1.0 17.0 0.125	LB A/A LB/100 GAL % V/V	32.0 17.0 0.125	FL OZ/A LB/100 GAL % V/V	EPP EPP EPP	A A A	104	201	306	
5	Extreme AMS NIS	2.17 100 100	SL SG SL	0.81 17.0 0.125	LB A/A LB/100 GAL % V/V	3.0 17.0 0.125	PT/A LB/100 GAL % V/V	EPP EPP EPP	A A A	105	207	308	
6	Tackle AMS Tackle AMS	4 100 4 100	SL SG SL SG	1.0 17.0 1.0 17.0	LB A/A LB/100 GAL LB A/A LB/100 GAL	32.0 17.0 32.0 17.0	FL OZ/A LB/100 GAL FL OZ/A LB/100 GAL	EPP EPP POST POST	A A B B	106	208	310	
7	Glyfos X-tra AMS Tackle	3 100 4	SL SG SL	0.75 17.0 1.0	LB AE/A LB/100 GAL LB A/A	32.0 17.0 32.0	FL OZ/A LB/100 GAL FL OZ/A	EPP EPP POST	A A B	107	202	307	
8	Glyfos X-tra AMS Tackle AMS	3 100 4 100	SL SG SL SG	0.75 17.0 1.0 17.0	LB AE/A LB/100 GAL LB A/A LB/100 GAL	32.0 17.0 32.0 17.0	FL OZ/A LB/100 GAL FL OZ/A LB/100 GAL	EPP EPP POST POST	A A B B	108	203	301	
9	Glyfos X-tra AMS Tackle AMS NIS	3 100 4 100 100	SL SG SL SG SL	0.75 17.0 1.0 17.0 0.125	LB AE/A LB/100 GAL LB A/A LB/100 GAL % V/V	32.0 17.0 32.0 17.0 0.125	FL OZ/A LB/100 GAL FL OZ/A LB/100 GAL % V/V	EPP EPP POST POST POST	A A B B B	109	204	303	
10	Glyfos X-tra AMS Extreme AMS NIS	3 100 2.17 100 100	SL SG SL SG SL	0.75 17.0 0.81 17.0 0.125	LB AE/A LB/100 GAL LB A/A LB/100 GAL % V/V	32.0 17.0 3.0 17.0 0.125	FL OZ/A LB/100 GAL PT/A LB/100 GAL % V/V	EPP EPP POST POST POST	A A B B B	110	209	304	

Sort Order: Replicate 1

Iowa State University

Field Prep./Maintenance:

The study area was left un-tilled from the 2007 corn cropping year and stalks were chopped following harvest. Crop residue was to 80 to 90% at planting.

Soil Description

% OM:	4.8	Texture:	CANISTEO CLAY LOAM, CLARION LOAM
pH:	7.1	Soil Name:	CLARION, WEBSTER, NICOLLET
		Fert. Level:	EXCELLENT

Application Description

	A	B	C
Application Date:	5/21/2008		
Application Method:	SPRAY		
Application Timing:	EPP		
Application Placement:	BROSOI		
Air Temperature, Unit:	66 F		
% Relative Humidity:	25		
Wind Velocity, Unit:	6 MPH		
Soil Temperature, Unit:	59 F		
% Cloud Cover:	5		

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC	DESC

Iowa State University

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Stage Majority, Percent:	1 LEAF		
Stage Minimum, Percent:	1 LEAF		
Stage Maximum, Percent:	2 LEAF		
Height, Unit:	0.5 IN		
Height Minimum, Maximum:	0.25 1		
Density, Unit:	10 FT2		
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W
Stage Majority, Percent:	3 LEAF		
Stage Minimum, Percent:	COTYL		
Stage Maximum, Percent:	5 LEAF		
Height, Unit:	1.0 IN		
Height Minimum, Maximum:	0.25 3		
Density, Unit:	2 FT2		
Pest 5 Code, Disc., Scale:	ERICA W	ERICA W	ERICA W
Stage Majority, Percent:	NUMERO		
Stage Minimum, Percent:	8 LEAF		
Stage Maximum, Percent:	NUMERO		
Height, Unit:	1.5 IN		
Height Minimum, Maximum:	0.75 3		
Density, Unit:	0 FT2		
Pest 6 Code, Disc., Scale:	POLPY W	POLPY W	POLPY W
Stage Majority, Percent:	4 LEAF		
Stage Minimum, Percent:	2 LEAF		
Stage Maximum, Percent:	6 LEAF		
Height, Unit:	1.5 IN		
Height Minimum, Maximum:	0.75 3		
Density, Unit:	0 FT2		
Pest 7 Code, Disc., Scale:	VERAR W	VERAR W	VERAR W
Stage Majority, Percent:	NUMERO		
Stage Minimum, Percent:	NUMERO		
Stage Maximum, Percent:	NUMERO		
Height, Unit:	4 IN		
Height Minimum, Maximum:	2 7		
Density, Unit:	0 FT2		

Application Equipment

	A	B	C
Appl. Equipment:	ATV		
Operating Pressure, Unit:	30 PSI		
Nozzle Size:	11002		
Spray Volume, Unit:	20 GAL/AC		

Iowa State University

Early preplant applied IntRRo followed by and tank-mixed with preemergence applications of Valor XLT or Gangster in no-tillage soybean, Ames, IA, 2008.

Trial ID: ASN 4

Protocol ID: MD64.13&05

Location: Ames

Study Director: Owen/Lux/Franzenburg/Grossnickle

Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	205	308	
2	Gangster FR	84	WG	0.0263	LB AI/A	0.5	OZ WT/A	PRE	B	102	207	303	
	Gangster V	51	WG	0.08	LB AI/A	2.5	OZ WT/A	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Select MAX	0.97	EC	0.106	LB AI/A	14.0	FL OZ/A	POST	C				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	POST	C				
	AMS	100	SG	2.5	LB/A	2.5	LB/A	POST	C				
3	IntRRo	4	EC	1.0	LB AI/A	1.0	QT/A	EPP	A	103	209	305	
	Gangster FR	84	WG	0.0263	LB AI/A	0.5	OZ WT/A	PRE	B				
	Gangster V	51	WG	0.08	LB AI/A	2.5	OZ WT/A	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Select MAX	0.97	EC	0.106	LB AI/A	14.0	FL OZ/A	POST	C				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	POST	C				
	AMS	100	SG	2.5	LB/A	2.5	LB/A	POST	C				
4	Gangster FR	84	WG	0.0263	LB AI/A	0.5	OZ WT/A	PRE	B	104	201	309	
	Gangster V	51	WG	0.08	LB AI/A	2.5	OZ WT/A	PRE	B				
	IntRRo	4	EC	1.0	LB AI/A	1.0	QT/A	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Select MAX	0.97	EC	0.106	LB AI/A	14.0	FL OZ/A	POST	C				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	POST	C				
	AMS	100	SG	2.5	LB/A	2.5	LB/A	POST	C				
5	Gangster FR	84	WG	0.0525	LB AI/A	1.0	OZ WT/A	PRE	B	105	210	307	
	Gangster V	51	WG	0.16	LB AI/A	5.0	OZ WT/A	PRE	B				
	IntRRo	4	EC	2.0	LB AI/A	2.0	QT/A	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Select MAX	0.97	EC	0.106	LB AI/A	14.0	FL OZ/A	POST	C				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	POST	C				
	AMS	100	SG	2.5	LB/A	2.5	LB/A	POST	C				
6	Gangster FR	84	WG	0.0263	LB AI/A	0.5	OZ WT/A	PRE	B	106	203	306	
	Gangster V	51	WG	0.08	LB AI/A	2.5	OZ WT/A	PRE	B				
	IntRRo	4	EC	0.5	LB AI/A	1.0	PT/A	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Select MAX	0.97	EC	0.106	LB AI/A	14.0	FL OZ/A	POST	C				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	POST	C				
	AMS	100	SG	2.5	LB/A	2.5	LB/A	POST	C				
7	Valor XLT	40	WG	0.1	LB AI/A	4.0	OZ WT/A	PRE	B	107	202	310	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Select MAX	0.97	EC	0.106	LB AI/A	14.0	FL OZ/A	POST	C				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	POST	C				
	AMS	100	SG	2.5	LB/A	2.5	LB/A	POST	C				

Iowa State University

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
8	IntRRo	4	EC	1.0	LB AI/A	1.0	QT/A	EPP	A	108	206	302	
	Valor XLT	40	WG	0.1	LB AI/A	4.0	OZ WT/A	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Select MAX	0.97	EC	0.106	LB AI/A	14.0	FL OZ/A	POST	C				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	POST	C				
	AMS	100	SG	2.5	LB/A	2.5	LB/A	POST	C				
9	Valor XLT	40	WG	0.1	LB AI/A	4.0	OZ WT/A	PRE	B	109	204	301	
	IntRRo	4	EC	1.0	LB AI/A	1.0	QT/A	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Select MAX	0.97	EC	0.106	LB AI/A	14.0	FL OZ/A	POST	C				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	POST	C				
	AMS	100	SG	2.5	LB/A	2.5	LB/A	POST	C				
10	Valor XLT	40	WG	0.1	LB AI/A	4.0	OZ WT/A	PRE	B	110	208	304	
	IntRRo	4	EC	0.5	LB AI/A	1.0	PT/A	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Select MAX	0.97	EC	0.106	LB AI/A	14.0	FL OZ/A	POST	C				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	POST	C				
	AMS	100	SG	2.5	LB/A	2.5	LB/A	POST	C				

Sort Order: Replicate 1

Iowa State University

Fall and spring applied Classic, Express, 2,4-D LV4, Harmony GT, Valor SX, and Authority MTZ in no-tillage soybean, Ames, IA, 2007 and 2008.

Trial ID: ASN 5
Location: Ames

Protocol ID: USA-08-120
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50011
Country: USA
Trial Status: ONE-YEAR/INTERIM
Initiation Date: 11/9/2007

Objectives:

The purpose of this study was to evaluate fall and spring applied Classic, Express, Harmony GT, Valor SX, and Authority MTZ with 2,4-D LV4 and followed by postemergence Roundup Original MAX for crop phytotoxicity, weed control and yield in no-tillage soybean production.

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: ASGROW AG2606
BBCH Scale: BSOY
Planting Method: DIRECT DRILLED **Rate, Unit:** 160000 SEEDS/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters
Pest 5 Type: W **Code:** ERICA **Erigeron canadensis**
Common Name: Canada horseweed
Pest 6 Type: W **Code:** POLPY **Polygonum pensylvanicum**
Common Name: Pennsylvania smartweed

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: NO-TILL
Study Design: Randomized Complete Block

	Previous Crops	Year
1.	CORN	2007

Iowa State University

Field Prep./Maintenance:

The study area was left un-tilled from the 2007 corn cropping year and stalks were chopped following harvest. Crop residue was to 80 to 90% at planting.

Soil Description

% OM:	4.8	Texture:	CANISTEO CLAY LOAM, CLARION LOAM
pH:	7.1	Soil Name:	CLARION, WEBSTER, NICOLLET
		Fert. Level:	EXCELLENT

Application Description

	A	B	C
Application Date:	11/9/2007	5/13/2008	
Application Method:	SPRAY	SPRAY	
Application Timing:	FALL	SPRING	
Application Placement:	BROSOI	BROSOI	
Air Temperature, Unit:	51 F	63 F	
% Relative Humidity:	42	61	
Wind Velocity, Unit:	7 MPH	10 MPH	
Soil Temperature, Unit:	48 F	F	
Soil Moisture:	ADEQUATE	EXCESSIVE	
% Cloud Cover:	20	100	

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC	DESC

Iowa State University

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Stage Majority, Percent:		1 LEAF	
Stage Minimum, Percent:		1 LEAF	
Stage Maximum, Percent:		2 LEAF	
Height, Unit:		0.5 IN	
Height Minimum, Maximum:		0.25 0.75	
Density, Unit:		20 FT2	
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Stage Majority, Percent:		COTYL	
Stage Minimum, Percent:		COTYL	
Stage Maximum, Percent:		COTYL	
Height, Unit:		0.25 IN	
Height Minimum, Maximum:		0.25 0.25	
Density, Unit:		0 FT2	
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Stage Majority, Percent:		COTYL	
Stage Minimum, Percent:		COTYL	
Stage Maximum, Percent:		COTYL	
Height, Unit:		0.25 IN	
Height Minimum, Maximum:		0.25 0.25	
Density, Unit:		0 FT2	
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W
Stage Majority, Percent:		4 LEAF	
Stage Minimum, Percent:		COTYL	
Stage Maximum, Percent:		8 LEAF	
Height, Unit:		0.25 IN	
Height Minimum, Maximum:		0.25 0.75	
Density, Unit:		1 FT2	
Pest 5 Code, Disc., Scale:	ERICA W	ERICA W	ERICA W
Stage Majority, Percent:		NUMERO	
Stage Minimum, Percent:		2 LEAF	
Stage Maximum, Percent:		NUMERO	
Height, Unit:		0.5 IN	
Height Minimum, Maximum:		0.5 0.5	
Density, Unit:		0 FT2	
Pest 6 Code, Disc., Scale:	POLPY W	POLPY W	POLPY W
Stage Majority, Percent:		1 LEAF	
Stage Minimum, Percent:		COTYL	
Stage Maximum, Percent:		2 LEAF	
Height, Unit:		0.38 IN	
Height Minimum, Maximum:		0.25 0.5	
Density, Unit:		1 FT2	

Iowa State University

Application Equipment

	A	B	C
Appl. Equipment:	HAND SPRAYER	ATV	
Operating Pressure, Unit:	35 PSI	30 PSI	
Nozzle Size:	11003	11002	
Spray Volume, Unit:	20 GAL/AC	20 GAL/AC	

Iowa State University

Fall and spring applied Classic, Express, 2,4-D LV4, Harmony GT, Valor SX, and Authority MTZ in no-tillage soybean, Ames, IA, 2007 and 2008.

Trial ID: ASN 5
Location: Ames

Protocol ID: USA-08-120
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	208	304	
2	Classic	25	WG	0.25	OZ AI/A	1.0	OZ WT/A	FALL	A	102	205	309	
	Express	75	DF	0.075	OZ AI/A	0.1	OZ WT/A	FALL	A				
	2,4-D LV4	4	SL	8.0	OZ AI/A	1.0	PT/A	FALL	A				
	Roundup Original MAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	C				
3	Classic	25	WG	0.23	OZ AI/A	0.92	OZ WT/A	FALL	A	103	207	303	
	Harmony GT	50	SG	0.0738	OZ AI/A	0.148	OZ WT/A	FALL	A				
	Valor SX	51	WG	0.72	OZ AI/A	1.41	OZ WT/A	FALL	A				
	2,4-D LV4	4	SL	8.0	OZ AI/A	1.0	PT/A	FALL	A				
	Roundup Original MAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	C				
4	Classic	25	WG	0.08	OZ AI/A	0.32	OZ WT/A	FALL	A	104	202	307	
	Harmony GT	50	SG	0.248	OZ AI/A	0.496	OZ WT/A	FALL	A				
	Valor SX	51	WG	1.02	OZ AI/A	2.0	OZ WT/A	FALL	A				
	2,4-D LV4	4	SL	8.0	OZ AI/A	1.0	PT/A	FALL	A				
	Synchrony XP	28.4	WG	0.1065	OZ AI/A	0.375	OZ WT/A	POST	C				
	Roundup Original MAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	C				
5	Authority MTZ	45	DF	6.3	OZ AI/A	14.0	OZ WT/A	FALL	A	105	209	302	
	2,4-D LV4	4	SL	8.0	OZ AI/A	1.0	PT/A	FALL	A				
	Roundup Original MAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	C				
6	Classic	25	WG	0.25	OZ AI/A	1.0	OZ WT/A	SPRING	B	106	201	308	
	Express	75	DF	0.075	OZ AI/A	0.1	OZ WT/A	SPRING	B				
	2,4-D LV4	4	SL	8.0	OZ AI/A	1.0	PT/A	SPRING	B				
	Roundup Original MAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	C				
7	Classic	25	WG	0.23	OZ AI/A	0.92	OZ WT/A	SPRING	B	107	210	305	
	Harmony GT	50	SG	0.0738	OZ AI/A	0.148	OZ WT/A	SPRING	B				
	Valor SX	51	WG	0.72	OZ AI/A	1.41	OZ WT/A	SPRING	B				
	2,4-D LV4	4	SL	8.0	OZ AI/A	1.0	PT/A	SPRING	B				
	Roundup Original MAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	C				
8	Classic	25	WG	0.08	OZ AI/A	0.32	OZ WT/A	SPRING	B	108	206	310	
	Harmony GT	50	SG	0.248	OZ AI/A	0.496	OZ WT/A	SPRING	B				
	Valor SX	51	WG	1.02	OZ AI/A	2.0	OZ WT/A	SPRING	B				
	2,4-D LV4	4	SL	8.0	OZ AI/A	1.0	PT/A	SPRING	B				
	Synchrony XP	28.4	WG	0.1065	OZ AI/A	0.375	OZ WT/A	POST	C				
	Roundup Original MAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	C				
9	Authority MTZ	45	DF	6.3	OZ AI/A	14.0	OZ WT/A	SPRING	B	109	204	306	
	2,4-D LV4	4	SL	8.0	OZ AI/A	1.0	PT/A	SPRING	B				
	Roundup Original MAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	C				
10	2,4-D LV4	4	SL	8.0	OZ AI/A	1.0	PT/A	SPRING	B	110	203	301	
	Roundup Original MAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	SPRING	B				
	Roundup Original MAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	C				

Iowa State University

Metribuzin applied preemergence in no-tillage soybean production, Ames, IA, 2008.

Trial ID: ASN 6
Location: Ames

Protocol ID: HGLXMAMET0803
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA
Trial Status: ONE-YEAR/INTERIM
Initiation Date: 6/2/2008

Objectives:

The purpose of this study was to determine if Metribuzin 75 DF provides commercially acceptable efficacy and selectivity when applied preemergence in soybean.

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: ASGROW AG2606
BBCH Scale: BSOY
Planting Method: DIRECT DRILLED **Rate, Unit:** 160000 SEEDS/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters
Pest 5 Type: W **Code:** ERICA **Erigeron canadensis**
Common Name: Canada horseweed
Pest 6 Type: W **Code:** POLPY **Polygonum pensylvanicum**
Common Name: Pennsylvania smartweed
Pest 7 Type: W **Code:** VERAR **Veronica arvensis**
Common Name: Corn speedwell

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: NO-TILL
Study Design: Randomized Complete Block

	Previous Crops	Year
1.	CORN	2007

Iowa State University

Field Prep./Maintenance:

The study area was left un-tilled from the 2007 corn cropping year and stalks were chopped following harvest. Crop residue was to 80 to 90% at planting.

Soil Description

% OM:	4.8	Texture:	CANISTEO CLAY LOAM, CLARION LOAM
pH:	7.1	Soil Name:	CLARION, WEBSTER, NICOLLET
		Fert. Level:	EXCELLENT

Application Description

	A	B
Application Date:	6/2/2008	
Application Method:	SPRAY	
Application Timing:	EPP	
Application Placement:	BROSIOI	
Air Temperature, Unit:	76 F	
% Relative Humidity:	70	
Wind Velocity, Unit:	4 MPH	
Soil Temperature, Unit:	75 F	
Soil Moisture:	EXCESSIVE	
% Cloud Cover:	45	

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W
Stage Majority, Percent:	4 LEAF	
Stage Minimum, Percent:	1 LEAF	
Stage Maximum, Percent:	4L, 2T	
Height, Unit:	2.5 IN	
Height Minimum, Maximum:	0.25 4	
Density, Unit:	3 FT2	
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W
Stage Majority, Percent:	3 LEAF	
Stage Minimum, Percent:	COTYL	
Stage Maximum, Percent:	5 LEAF	
Height, Unit:	1.0 IN	
Height Minimum, Maximum:	0.25 2	
Density, Unit:	1 FT2	
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W
Stage Majority, Percent:	6 LEAF	
Stage Minimum, Percent:	COTYL	
Stage Maximum, Percent:	9 LEAF	
Height, Unit:	0.5 IN	
Height Minimum, Maximum:	0.25 1	
Density, Unit:	0 FT2	
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W
Stage Majority, Percent:	NUMERO	
Stage Minimum, Percent:	COTYL	

Iowa State University

Stage Maximum, Percent:	NUMERO	
Height, Unit:	3 IN	
Height Minimum, Maximum:	0.25 5	
Density, Unit:	2 FT2	
Pest 5 Code, Disc., Scale:	ERICA W	ERICA W
Stage Majority, Percent:	NUMERO	
Stage Minimum, Percent:	6 LEAF	
Stage Maximum, Percent:	NUMERO	
Height, Unit:	7 IN	
Height Minimum, Maximum:	0.5 12	
Density, Unit:	1 FT2	
Pest 6 Code, Disc., Scale:	POLPY W	POLPY W
Stage Majority, Percent:	NUMERO	
Stage Minimum, Percent:	2 LEAF	
Stage Maximum, Percent:	NUMERO	
Height, Unit:	3.5 IN	
Height Minimum, Maximum:	0.5 6	
Density, Unit:	1 FT2	
Pest 7 Code, Disc., Scale:	VERAR W	VERAR W
Stage Majority, Percent:	NUMERO	
Stage Minimum, Percent:	NUMERO	
Stage Maximum, Percent:	NUMERO	
Height, Unit:	9 IN	
Height Minimum, Maximum:	2 13	
Density, Unit:	2 FT2	

Application Equipment

	A	B
Appl. Equipment:	ATV	
Operating Pressure, Unit:	30 PSI	
Nozzle Size:	11002	
Spray Volume, Unit:	20 GAL/AC	

Iowa State University

Metribuzin applied preemergence in no-tillage soybean production, Ames, IA, 2008.

Trial ID: ASN 6
Location: Ames

Protocol ID: HGLXMAMET0803
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trit No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	204	302	
2	Glyfos X-tra	4	SL	1.0	LB A/A	32.0	FL OZ/A	EPP	A	102	201	305	
	AmSol	100	SL	5.0	GAL/100 GAL	5.0	GAL/100 GAL	EPP	A				
	Metribuzin	75	DF	0.5	LB A/A	10.7	OZ WT/A	PRE	B				
3	Glyfos X-tra	4	SL	1.0	LB A/A	32.0	FL OZ/A	EPP	A	103	205	303	
	AmSol	100	SL	5.0	GAL/100 GAL	5.0	GAL/100 GAL	EPP	A				
	Metribuzin	75	DF	1.0	LB A/A	21.3	OZ WT/A	PRE	B				
4	Glyfos X-tra	4	SL	1.0	LB A/A	32.0	FL OZ/A	EPP	A	104	203	304	
	AmSol	100	SL	5.0	GAL/100 GAL	5.0	GAL/100 GAL	EPP	A				
	Metribuzin	75	DF	0.5	LB A/A	10.7	OZ WT/A	PRE	B				
	Prowl H2O	3.8	EC	1.07	LB A/A	36.0	FL OZ/A	PRE	B				
5	Glyfos X-tra	4	SL	1.0	LB A/A	32.0	FL OZ/A	EPP	A	105	202	301	
	AmSol	100	SL	5.0	GAL/100 GAL	5.0	GAL/100 GAL	EPP	A				
	Sencor	75	DF	0.5	LB A/A	10.7	OZ WT/A	PRE	B				

Sort Order: Replicate 1

Iowa State University

Early preplant applied Rage D-Tech, 2,4-D LV4, Roundup PowerMAX, Authority First, MTZ and Assist in no-tillage soybean production, Ames, IA, 2008.
 Trial ID: ASN 7 Protocol ID: Rage D-Tech
 Location: Ames Study Director: Owen/Lux/Franzenburg/Grossnickle
 Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames **Trial Status:** ONE-YEAR/INTERIM
State/Prov.: IA
Postal Code: 50011 **Initiation Date:** 6/2/2008
Country: USA

Objectives:

The purpose of this study was to evaluate early preplant applied Roundup PowerMAX with Rage D-Tech, 2, 4-D LV4, Authority First, Authority MTZ and Authority Assist for burndown weed control in no-tillage soybean production.

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: ASGROW AG2606
BBCH Scale: BSOY
Planting Method: DIRECT DRILLED **Rate, Unit:** 160000 SEEDS/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abrutylon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters
Pest 5 Type: W **Code:** ERICA **Erigeron canadensis**
Common Name: Canada horseweed
Pest 6 Type: W **Code:** POLPY **Polygonum pensylvanicum**
Common Name: Pennsylvania smartweed
Pest 7 Type: W **Code:** VERAR **Veronica arvensis**
Common Name: Corn speedwell

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Previous Crops	Year
1.	CORN	2007

Iowa State University

Field Prep./Maintenance:

The study area was left un-tilled from the 2007 corn cropping year and stalks were chopped following harvest. Crop residue was to 80 to 90% at planting.

Soil Description

% OM:	4.8	Texture:	CANISTEO CLAY LOAM, CLARION LOAM
pH:	7.1	Soil Name:	CLARION, WEBSTER, NICOLLET
		Fert. Level:	EXCELLENT

Application Description

	A	B
Application Date:	6/2/2008	
Application Method:	SPRAY	
Application Timing:	EPP	
Application Placement:	BROSIOI	
Air Temperature, Unit:	76 F	
% Relative Humidity:	70	
Wind Velocity, Unit:	4 MPH	
Soil Temperature, Unit:	75 F	
Soil Moisture:	EXCESSIVE	
% Cloud Cover:	45	

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W
Stage Majority, Percent:	4 LEAF	
Stage Minimum, Percent:	1 LEAF	
Stage Maximum, Percent:	4L, 2T	
Height, Unit:	2.5 IN	
Height Minimum, Maximum:	0.25 4	
Density, Unit:	3 FT2	
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W
Stage Majority, Percent:	3 LEAF	
Stage Minimum, Percent:	COTYL	
Stage Maximum, Percent:	5 LEAF	
Height, Unit:	1.0 IN	
Height Minimum, Maximum:	0.25 2	
Density, Unit:	1 FT2	
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W
Stage Majority, Percent:	6 LEAF	
Stage Minimum, Percent:	COTYL	
Stage Maximum, Percent:	9 LEAF	
Height, Unit:	0.5 IN	
Height Minimum, Maximum:	0.25 1	
Density, Unit:	0 FT2	
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W
Stage Majority, Percent:	NUMERO	
Stage Minimum, Percent:	COTYL	

Iowa State University

Stage Maximum, Percent:	NUMERO	
Height, Unit:	3 IN	
Height Minimum, Maximum:	0.25 5	
Density, Unit:	2 FT2	
Pest 5 Code, Disc., Scale:	ERICA W	ERICA W
Stage Majority, Percent:	NUMERO	
Stage Minimum, Percent:	6 LEAF	
Stage Maximum, Percent:	NUMERO	
Height, Unit:	7 IN	
Height Minimum, Maximum:	0.5 12	
Density, Unit:	1 FT2	
Pest 6 Code, Disc., Scale:	POLPY W	POLPY W
Stage Majority, Percent:	NUMERO	
Stage Minimum, Percent:	2 LEAF	
Stage Maximum, Percent:	NUMERO	
Height, Unit:	3.5 IN	
Height Minimum, Maximum:	0.5 6	
Density, Unit:	3 FT2	
Pest 7 Code, Disc., Scale:	VERAR W	VERAR W
Stage Majority, Percent:	NUMERO	
Stage Minimum, Percent:	NUMERO	
Stage Maximum, Percent:	NUMERO	
Height, Unit:	9 IN	
Height Minimum, Maximum:	2 13	
Density, Unit:	2 FT2	

Application Equipment

	A	B
Appl. Equipment:	ATV	
Operating Pressure, Unit:	30 PSI	
Nozzle Size:	11002	
Spray Volume, Unit:	20 GAL/AC	

Iowa State University

Various two-pass weed management programs in soybean, Ames, IA, 2008.

Trial ID: ASC 1
Location: Ames

Protocol ID: 2008-01-30-19
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA
Trial Status: ONE-YEAR/INTERIM

Objectives:

The purpose of this study was to evaluate crop phytotoxicity and weed control in soybean utilizing soil and postemergence applied herbicides programs.

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: ASGROW AG2606
BBCH Scale: BSOY
Planting Method: DIRECT DRILLED **Rate, Unit:** 160000 SEEDS/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT **Tillage Type:** MINIMUM-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Previous Crops	Year
1.	CORN	2007

Field Prep./Maintenance:

Tillage included chisel plowing in the fall 2007 and field cultivation in the spring 2008. Crop residue on the soil surface was to % at planting.

Soil Description

% OM: 4.0 **Texture:** CANISTEO CLAY LOAM, CLARION LOAM
pH: 6.4 **Soil Name:** CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W	CHEAL W

Iowa State University

Various two-pass weed management programs in soybean, Ames, IA, 2008.

Trial ID: ASC 1
Location: Ames

Protocol ID: 2008-01-30-19
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Plot No. 1	Plot No. 2	Plot No. 3	By Rep Notes
1	Untreated									101	215	306	
2	IntRRo Roundup PowerMAX AMS	4 4.5 100	EC SL SG	2.0 0.75 2.0	LB AI/A LB AE/A % W/W	2 21.3 2.0	QT/A FL OZ/A % W/W	PRE POST1 POST1	A B B	102	217	309	
3	IntRRo Valor SX Roundup PowerMAX AMS	4 51 4.5 100	EC WG SL SG	2.0 0.0421 0.75 2.0	LB AI/A LB AI/A LB AE/A % W/W	2 1.32 21.3 2.0	QT/A OZ WT/A FL OZ/A % W/W	PRE PRE POST1 POST1	A A B B	103	206	312	
4	IntRRo Valor XLT Roundup PowerMAX AMS	4 40.3 4.5 100	EC WG SL SG	2.0 0.05 0.75 2.0	LB AI/A LB AI/A LB AE/A % W/W	2 2.0 21.3 2.0	QT/A OZ WT/A FL OZ/A % W/W	PRE PRE POST1 POST1	A A B B	104	211	315	
5	IntRRo Gangster V Gangster FR Roundup PowerMAX AMS	4 51 84 4.5 100	EC WG WG SL SG	2.0 0.054 0.0158 0.75 2.0	LB AI/A LB AI/A LB AI/A LB AE/A % W/W	2 1.7 0.3 21.3 2.0	QT/A OZ WT/A OZ WT/A FL OZ/A % W/W	PRE PRE PRE POST1 POST1	A A A B B	105	213	307	
6	IntRRo Valor SX Classic Harmony GT Roundup PowerMAX AMS	4 51 25 50 4.5 100	EC WG WG SG SL SG	2.0 0.0425 0.0533 0.164 0.75 2.0	LB AI/A LB AI/A OZ AI/A OZ AI/A LB AE/A % W/W	2 1.33 0.213 0.328 21.3 2.0	QT/A OZ WT/A OZ WT/A OZ WT/A FL OZ/A % W/W	PRE PRE PRE PRE POST1 POST1	A A A A B B	106	210	303	
7	IntRRo Sencor DF Roundup PowerMAX AMS	4 75 4.5 100	EC DF SL SG	2.0 0.167 0.75 2.0	LB AI/A LB AI/A LB AE/A % W/W	2 3.56 21.3 2.0	QT/A OZ WT/A FL OZ/A % W/W	PRE PRE POST1 POST1	A A B B	107	207	317	
8	IntRRo Authority MTZ Roundup PowerMAX AMS	4 45 4.5 100	EC DF SL SG	2.0 0.207 0.75 2.0	LB AI/A LB AI/A LB AE/A % W/W	2 7.36 21.3 2.0	QT/A OZ WT/A FL OZ/A % W/W	PRE PRE POST1 POST1	A A B B	108	214	301	
9	IntRRo Sonic Roundup PowerMAX Ammonium Sulfate	4 70 4.5 100	EC DF SL SG	2.0 0.188 0.75 2.0	LB AI/A LB AI/A LB AE/A % W/W	2 4.3 21.3 2.0	QT/A OZ WT/A FL OZ/A % W/W	PRE PRE POST1 POST1	A A B B	109	216	311	
10	Valor SX Roundup PowerMAX AMS	51 4.5 100	WG SL SG	0.0638 0.75 2.0	LB AI/A LB AE/A % W/W	2 21.3 2.0	OZ WT/A FL OZ/A % W/W	PRE POST1 POST1	A B B	110	205	318	
11	Valor XLT Roundup PowerMAX AMS	40.3 4.5 100	WG SL SG	0.075 0.75 2.0	LB AI/A LB AE/A % W/W	3 21.3 2.0	OZ WT/A FL OZ/A % W/W	PRE POST1 POST1	A B B	111	204	313	
12	Gangster V Gangster FR Roundup PowerMAX AMS	51 84 4.5 100	WG WG SL SG	0.08 0.0263 0.75 2.0	LB AI/A LB AI/A LB AE/A % W/W	2.5 0.5 21.3 2.0	OZ WT/A OZ WT/A FL OZ/A % W/W	PRE PRE POST1 POST1	A A B B	112	218	308	
13	Valor SX Classic Harmony GT Roundup PowerMAX AMS	51 25 50 4.5 100	WG WG SG SL SG	0.0638 0.08 0.246 0.75 2.0	LB AI/A OZ AI/A OZ AI/A LB AE/A % W/W	2 0.32 0.49 21.3 2.0	OZ WT/A OZ WT/A OZ WT/A FL OZ/A % W/W	PRE PRE PRE POST1 POST1	A A A B B	113	208	302	

Iowa State University

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
14	Authority MTZ	45	DF	0.31	LB AI/A	11.0	OZ WT/A	PRE	A	114	202	310	
	Roundup PowerMAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	POST1	B				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	POST1	B				
15	Sonic	70	DF	0.282	LB AI/A	6.45	OZ WT/A	PRE	A	115	212	304	
	Roundup PowerMAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	POST1	B				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	POST1	B				
16	Prowl H2O	3.8	EC	0.95	LB AI/A	2.0	PT/A	PRE	A	116	201	316	
	Roundup PowerMAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	POST1	B				
	AMS	100	SG	2.0	% W/W	2.0	% W/W	POST1	B				
17	Roundup PowerMAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	POST1	B	117	209	305	
	AMS	100	SG	2.0	% W/W	2.0	% W/W	POST1	B				
	Roundup PowerMAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	POST3	D				
18	Roundup PowerMAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	POST2	C	118	203	314	
	AMS	100	SG	2.0	% W/W	2.0	% W/W	POST2	C				

Sort Order: Replicate 1

Iowa State University

Preemergence applied Prowl H2O, Sonic, Authority Assist, and Prefix and post-emergence applied Durango DMA and Touchdown Total in soybean, Ames, IA, 2008.
 Trial ID: ASC 2 Protocol ID: HPID01B4/BASF/DowAgro
 Location: Ames Study Director: Owen/Lux/Franzenburg/Grossnickle
 Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames **Trial Status:** ONE-YEAR/INTERIM
State/Prov.: IA
Postal Code: 50014
Country: USA

Objectives:

The purpose of this study was to evaluate various preemergence and postemergence applied herbicides in soybean for crop phytotoxicity, weed control, and yield.

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: ASGROW AG2606
BBCH Scale: BSOY
Planting Method: DIRECT DRILLED **Rate, Unit:** 160000 SEEDS/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT **Tillage Type:** MINIMUM-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Previous Crops	Year
1.	CORN	2007

Field Prep./Maintenance:

Tillage included chisel plowing in the fall 2007 and field cultivation in the spring 2008. Crop residue on the soil surface was to % at planting.

Soil Description

% OM: 4.0 **Texture:** CANISTEO CLAY LOAM, CLARION LOAM
pH: 6.4 **Soil Name:** CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W	CHEAL W

Iowa State University

Preemergence applications of Valor, IntRRo, Prefix and Boundary followed by postemergence applied Roundup PowerMAX in soybean, Ames, IA, 2008.

Trial ID: ASC 3 Protocol ID: MD64.14
Location: Ames Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames Trial Status: ONE-YEAR/INTERIM
State/Prov.: IA
Postal Code: 50014
Country: USA

Objectives:

The purpose of this study was to evaluate preemergence applied Valor in tank-mixture with IntRRo for increased consistency of common waterhemp, common lambsquarters, and annual grass control in soybean.

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: ASGROW AG2606
BBCH Scale: BSOY
Planting Method: DIRECT DRILLED Rate, Unit: 160000 SEEDS/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL

Pest Description

Pest 1 Type: W Code: SETFA Setaria faberi
Common Name: Faber's foxtail
Pest 2 Type: W Code: ABUTH Abutilon theophrasti
Common Name: Velvetleaf
Pest 3 Type: W Code: AMATA Amaranthus tamariscinus
Common Name: Common waterhemp
Pest 4 Type: W Code: CHEAL Chenopodium album
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT Tillage Type: MINIMUM-TILL
Replications: 3 Study Design: Randomized Complete Block

	Previous Crops	Year
1.	CORN	2007

Field Prep./Maintenance:

Tillage included chisel plowing in the fall 2007 and field cultivation in the spring 2008. Crop residue on the soil surface was to % at planting.

Soil Description

% OM: 4.0 Texture: CANISTEO CLAY LOAM, CLARION LOAM
pH: 6.4 Soil Name: CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W

Iowa State University

Preemergence applications of Valor, IntRRo, Prefix and Boundary followed by postemergence applied Roundup PowerMAX in soybean, Ames, IA, 2008.

Trial ID: ASC 3
Location: Ames

Protocol ID: MD64.14
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Tri No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit	Other Rate	Other Rate	Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes	
											1	2	3		
1	Untreated										101	207	304		
2	Valor SX	51	WG	0.048	LB	AI/A	1.5	OZ	WT/A	PRE	A	102	204	308	
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	POST	B				
	AMS	100	SG	2.5	LB/A		2.5	LB/A		POST	B				
3	Valor SX	51	WG	0.064	LB	AI/A	2.0	OZ	WT/A	PRE	A	103	206	301	
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	POST	B				
	AMS	100	SG	2.5	LB/A		2.5	LB/A		POST	B				
4	Valor SX	51	WG	0.064	LB	AI/A	2.0	OZ	WT/A	PRE	A	104	202	302	
	IntRRo	4	EC	0.5	LB	AI/A	1.0	PT/A		PRE	A				
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	POST	B				
	AMS	100	SG	2.5	LB/A		2.5	LB/A		POST	B				
5	Valor SX	51	WG	0.048	LB	AI/A	1.5	OZ	WT/A	PRE	A	105	201	307	
	IntRRo	4	EC	0.75	LB	AI/A	1.5	PT/A		PRE	A				
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	POST	B				
	AMS	100	SG	2.5	LB/A		2.5	LB/A		POST	B				
6	Valor SX	51	WG	0.096	LB	AI/A	3.0	OZ	WT/A	PRE	A	106	208	305	
	IntRRo	4	EC	1.5	LB	AI/A	3.0	PT/A		PRE	A				
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	POST	B				
	AMS	100	SG	2.5	LB/A		2.5	LB/A		POST	B				
7	Prefix	5.29	EW	1.32	LB	AI/A	2.0	PT/A		PRE	A	107	203	306	
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	POST	B				
	AMS	100	SG	2.5	LB/A		2.5	LB/A		POST	B				
8	Boundary	6.5	EC	1.22	LB	AI/A	1.5	PT/A		PRE	A	108	205	303	
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	POST	B				
	AMS	100	SG	2.5	LB/A		2.5	LB/A		POST	B				

Sort Order: Replicate 1

Iowa State University

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W	CHEAL W

Iowa State University

**Preemergence applied Valor, Valor XLT, Gangster and Authority followed by
postemergence applied Roundup PowerMAX in soybean, Ames, IA, 2008.**

Trial ID: ASC 4
Location: Ames

Protocol ID: MD64.04
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form		Rate	Unit	Other		Growth Stage	Appl Code	Plot No. By Rep			Notes		
		Conc	Type			Rate	Rate			Unit	1	2		3	
1	Untreated									101	209	304			
2	Valor XLT	40	WG	0.0625	LB	AI/A	2.5	OZ	WT/A	PRE	A	102	206	301	
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	POST	C				
	AMS	100	SG	2.5	LB/A		2.5	LB/A		POST	C				
3	Valor XLT	40	WG	0.075	LB	AI/A	3.0	OZ	WT/A	PRE	A	103	208	305	
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	POST	C				
	AMS	100	SG	2.5	LB/A		2.5	LB/A		POST	C				
4	Gangster FR	84	WG	0.021	LB	AI/A	0.4	OZ	WT/A	PRE	A	104	202	307	
	Gangster V	51	WG	0.064	LB	AI/A	2.0	OZ	WT/A	PRE	A				
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	POST	C				
	AMS	100	SG	2.5	LB/A		2.5	LB/A		POST	C				
5	Gangster FR	84	WG	0.0158	LB	AI/A	0.3	OZ	WT/A	PRE	A	105	210	303	
	Gangster V	51	WG	0.048	LB	AI/A	1.5	OZ	WT/A	PRE	A				
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	POST	C				
	AMS	100	SG	2.5	LB/A		2.5	LB/A		POST	C				
6	Authority Pursuit	75	WG	0.129	LB	AI/A	2.75	OZ	WT/A	PRE	A	106	204	309	
		2	SL	0.0263	LB	AI/A	1.68	FL	OZ/A	PRE	A				
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	POST	C				
	AMS	100	SG	2.5	LB/A		2.5	LB/A		POST	C				
7	Authority First DF	70	DF	0.131	LB	AI/A	3.0	OZ	WT/A	PRE	A	107	201	306	
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	POST	C				
	AMS	100	SG	2.5	LB/A		2.5	LB/A		POST	C				
8	Authority MTZ	45	DF	0.338	LB	AI/A	12.0	OZ	WT/A	PRE	A	108	205	310	
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	POST	C				
	AMS	100	SG	2.5	LB/A		2.5	LB/A		POST	C				
9	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	POST	C	109	207	302	
	AMS	100	SG	2.5	LB/A		2.5	LB/A		POST	C				
10	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	EPOST	B	110	203	308	
	AMS	100	SG	2.5	LB/A		2.5	LB/A		EPOST	B				
	Roundup PowerMAX	4.5	SL	0.77	LB	AE/A	22.0	FL	OZ/A	SPOST	D				
	AMS	100	SG	2.5	LB/A		2.5	LB/A		SPOST	D				

Sort Order: Replicate 1

Iowa State University

Postemergence applied Targa, Select, Select Max, Assure, and Fusilade DX with glyphosate for glyphosate-resistant corn control in soybean, Ames, IA, 2008.
 Trial ID: ASC 5 Protocol ID: D-TRG-08-18-1
 Location: Ames Study Director: Owen/Lux/Franzenburg/Grossnickle
 Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames **Trial Status:** ONE-YEAR/INTERIM
State/Prov.: IA
Postal Code: 50014
Country: USA

Objectives:

The purpose of this study was to evaluate glyphosate-resistant corn and weed control in soybean with postemergence applications of Targa, Select, Select Max, Assure II and Fusilade DX in combination with glyphosate.

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: ASGROW AG2606
BBCH Scale: BSOY
Planting Method: DIRECT DRILLED **Rate, Unit:** 160000 SEEDS/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL

Pest Description

Pest 1 Type: W **Code:** ZEAMD **Zea mays indentata**
Common Name: Dent corn
Pest 2 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 3 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 4 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 5 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT **Tillage Type:** MINIMUM-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Previous Crops	Year
1.	CORN	2007

Field Prep./Maintenance:

Tillage included chisel plowing in the fall 2007 and field cultivation in the spring 2008. Crop residue on the soil surface was to % at planting. "Dekalb variety DKC 52-40" corn was planted on in 30 inch row spacing perpendicular to the soybean rows.

Iowa State University

Soil Description
% OM: 4.0 **Texture:** CANISTEO CLAY LOAM, CLARION LOAM
pH: 6.4 **Soil Name:** CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	GLXMA BSOY

Pest Stage At Each Application

	A
Pest 1 Code, Disc., Scale:	ZEAMD W
Pest 2 Code, Disc., Scale:	SETFA W
Pest 3 Code, Disc., Scale:	ABUTH W
Pest 4 Code, Disc., Scale:	AMATA W
Pest 5 Code, Disc., Scale:	CHEAL W

Iowa State University

Postemergence applied Targa, Select, Select Max, Assure, and Fusilade DX with glyphosate for glyphosate-resistant corn control in soybean, Ames, IA, 2008.

Trial ID: ASC 5

Protocol ID: D-TRG-08-18-1

Location: Ames

Study Director: Owen/Lux/Franzenburg/Grossnickle

Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	205	302	
2	Targa	0.88	EC	0.0344	LB AI/A	5.0	FL OZ/A	POST	A	102	201	303	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	A				
	NIS	100	SL	0.125	% V/V	0.125	% V/V	POST	A				
	AMS	100	SG	2.5	LB/A	2.5	LB/A	POST	A				
3	Select	2	EC	0.0625	LB AI/A	4.0	FL OZ/A	POST	A	103	206	306	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	A				
	NIS	100	SL	0.125	% V/V	0.125	% V/V	POST	A				
	AMS	100	SG	2.5	LB/A	2.5	LB/A	POST	A				
4	Select MAX	0.97	EC	0.0455	LB AI/A	6.0	FL OZ/A	POST	A	104	203	304	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	A				
	NIS	100	SL	0.125	% V/V	0.125	% V/V	POST	A				
	AMS	100	SG	2.5	LB/A	2.5	LB/A	POST	A				
5	Assure II	0.88	EC	0.0344	LB AI/A	5.0	FL OZ/A	POST	A	105	204	301	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	A				
	NIS	100	SL	0.125	% V/V	0.125	% V/V	POST	A				
	AMS	100	SG	2.5	LB/A	2.5	LB/A	POST	A				
6	Fusilade DX	2	EC	0.0625	LB AI/A	4.0	FL OZ/A	POST	A	106	202	305	
	Touchdown Total	4.17	SL	0.78	LB AE/A	24.0	FL OZ/A	POST	A				
	COC	100	SL	0.5	% V/V	0.5	% V/V	POST	A				
	AMS	100	SG	2.5	LB/A	2.5	LB/A	POST	A				

Sort Order: Replicate 1

Iowa State University

Postemergence applications of Cadet, Resource and Roundup PowerMAX in soybean, Ames, IA, 2008.

Trial ID: FMCSoyCadet
Location: Ames

Protocol ID: G037
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA
Trial Status: ONE-YEAR/INTERIM

Objectives:

The purpose of this study was to evaluate Cadet, Resource and Roundup PowerMAX applied postemergence for crop phytotoxicity and weed control in soybean.

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: ASGROW AG2606
BBCH Scale: BSOY
Planting Method: DIRECT DRILLED **Rate, Unit:** 160000 SEEDS/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT **Tillage Type:** MINIMUM-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Previous Crops	Year
1.	CORN	2007

Field Prep./Maintenance:

Tillage included chisel plowing in the fall 2007 and field cultivation in the spring 2008. Crop residue on the soil surface was to % at planting.

Soil Description

% OM: 4.0 **Texture:** CANISTEO CLAY LOAM, CLARION LOAM
pH: 6.4 **Soil Name:** CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W

Iowa State University

Postemergence applications of Cadet, Resource and Roundup PowerMAX in soybean, Ames, IA, 2008.

Trial ID: FMCSoyCadet
Location: Ames

Protocol ID: G037
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Dual II Magnum	7.64	EC	0.955	LB AI/A	1.0	PT/A	PRE	A	101	203	302	
2	Dual II Magnum	7.64	EC	0.955	LB AI/A	1.0	PT/A	PRE	A	102	201	303	
	Cadet	0.91	EC	0.00284	LB AI/A	0.4	FL OZ/A	POST	B				
	Roundup PowerMAX	4.5	SL	0.56	LB AE/A	16.0	FL OZ/A	POST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	B				
3	Dual II Magnum	7.64	EC	0.955	LB AI/A	1.0	PT/A	PRE	A	103	204	301	
	Resource	0.86	EC	0.0202	LB AI/A	3.0	FL OZ/A	POST	B				
	Roundup PowerMAX	4.5	SL	0.56	LB AE/A	16.0	FL OZ/A	POST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	B				
4	Dual II Magnum	7.64	EC	0.955	LB AI/A	1.0	PT/A	PRE	A	104	202	304	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	POST	B				

Sort Order: Replicate 1

Iowa State University

Preemergence applied Authority First, Authority MTZ, Authority Assist, Sencor and Valor XLT followed by Roundup PowerMAX in soybean, Ames, IA, 2008.
 Trial ID: ASC 7 Protocol ID: Authority First, MTZ
 Location: Ames Study Director: Owen/Lux/Franzenburg/Grossnickle
 Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames **Trial Status:** ONE-YEAR/INTERIM
State/Prov.: IA
Postal Code: 50011
Country: USA

Objectives:

The purpose of this study was to evaluate preemergence Authorityd Authority First, Authority MTZ, Authority First, Sencor and Valor XLT followed by postemergence applied Roundup PowerMAX for crop phytotoxicity and weed control in soybean.

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: ASGROW AG2606
BBCH Scale: BSOY
Planting Method: DIRECT DRILLED **Rate, Unit:** 160000 SEEDS/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abrutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT **Tillage Type:** MINIMUM-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Previous Crops	Year
1.	CORN	2007

Field Prep./Maintenance:

Tillage included chisel plowing in the fall 2007 and field cultivation in the spring 2008. Crop residue on the soil surface was to % at planting.

Soil Description

% OM: 4.0 **Texture:** CANISTEO CLAY LOAM, CLARION LOAM
pH: 6.4 **Soil Name:** CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W	CHEAL W

Iowa State University

Comparison of weed management tactics in glufosinate, glyphosate, and conventional soybean varieties, Ames, IA, 2008.

Trial ID: ALB 1
Location: Ames

Protocol ID: HP08NARJNB
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Ames
State/Prov.: IA
Postal Code: 50014
Country: USA
Trial Status: ONE-YEAR/INTERIM

Objectives:

The purpose of this study was to evaluate the affect on stand, phytotoxicity and weed control on three soybean varieties from postemergence applications of either Ignite 280, Roundup PowerMAX, Basagran, Ultra Blazer or Poast Plus.

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: 3 Varieties
BBCH Scale: BSOY
Planting Method: DIRECT DRILLED **Rate, Unit:** 150000 SEEDS/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 4
Tillage Type: MINIMUM-TILL
Study Design: Randomized Complete Block

	Previous Crops	Year
1.	CORN	2007

Field Prep./Maintenance:

Tillage included chisel plowing in the fall 2007 and field cultivation in the spring 2008. Crop residue on the soil surface was to % at planting. Soybean varieties included a glufosinate resistant variety, glyphosate resistant variety, and a conventional variety.

Soil Description

% OM: 4
pH: 6.4
Texture: CANISTEO CLAY LOAM, CLARION LOAM
Soil Name: CLARION, WEBSTER, NICOLLET
Fert. Level: EXCELLENT

Iowa State University

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W	CHEAL W

Iowa State University

Comparison of weed management tactics in glufosinate, glyphosate, and conventional soybean varieties, Ames, IA, 2008.

Trial ID: ALB 1
Location: Ames

Protocol ID: HP08NARJNB
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep				Notes
										1	2	3	4	
11	Conv Soybean Variety									101	206	311	410	
	Prowl H20	3.8	EC	0.95	LB AI/A	2.0	PT/A	PRE	A					
	Ultra Blazer	2	EC	0.168	LB AI/A	0.67	PT/A	EPOST	B					
	Basagran	4	SL	0.75	LB AI/A	1.5	PT/A	EPOST	B					
	Poast Plus	1	EC	0.187	LB AI/A	1.5	PT/A	EPOST	B					
	COC	100	SL	2.0	PT/A	2.0	PT/A	EPOST	B					
1	LL Soybean Variety									102	209	304	403	
	Prowl H20	3.8	EC	0.95	LB AI/A	2.0	PT/A	PRE	A					
	Ignite 280	2.34	SL	0.4	LB AI/A	22.0	FL OZ/A	MPOST	C					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	MPOST	C					
5	LL Soybean Variety									103	205	301	406	
	Ignite 280	2.34	SL	0.4	LB AI/A	22.0	FL OZ/A	EPOST	B					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B					
6	RR Soybean Variety									104	213	310	408	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B					
4	RR Soybean Variety									105	207	309	413	
	Prowl H20	3.8	EC	0.95	LB AI/A	2.0	PT/A	PRE	A					
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B					
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	LPOST	D					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	LPOST	D					
7	LL Soybean Variety									106	211	307	411	
	Ignite 280	2.34	SL	0.4	LB AI/A	22.0	FL OZ/A	MPOST	C					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	MPOST	C					
2	RR Soybean Variety									107	203	313	409	
	Prowl H20	3.8	EC	0.95	LB AI/A	2.0	PT/A	PRE	A					
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	MPOST	C					
14	Conv Soybean Variety									108	201	308	405	
	Untreated													
8	RR Soybean Variety									109	214	302	407	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	MPOST	C					
13	RR Soybean Variety									110	204	314	404	
	Untreated													
9	LL Soybean Variety									111	210	312	402	
	Ignite 280	2.34	SL	0.4	LB AI/A	22.0	FL OZ/A	EPOST	B					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B					
	Ignite 280	2.34	SL	0.4	LB AI/A	22.0	FL OZ/A	LPOST	D					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	LPOST	D					
10	RR Soybean Variety									112	208	305	414	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B					
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	LPOST	D					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	LPOST	D					

Iowa State University

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. 1	Plot No. 2	Plot No. 3	Plot No. 4	By Rep	Notes
3	LL Soybean Variety									113	212	303	412		
	Prowl H20	3.8	EC	0.95	LB AI/A	2.0	PT/A	PRE	A						
	Ignite 280	2.34	SL	0.4	LB AI/A	22.0	FL OZ/A	EPOST	B						
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B						
	Ignite 280	2.34	SL	0.4	LB AI/A	22.0	FL OZ/A	LPOST	D						
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	LPOST	D						
12	LL Soybean Variety									114	202	306	401		
	Untreated														

Sort Order: Replicate 1

Iowa State University

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W

Iowa State University

Preemergence applied Valor, Gangster, Sencor and Prowl H2O followed by post-emergence applied Ignite in soybean, Ames, IA, 2008.

Trial ID: ALB 4
Location: Ames

Protocol ID: HP08NARMRC
Study Director: Owen/Lux/Franzeburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep						Notes
										1	2	3	4	5	6	
1	Untreated									101	205	302	405	502	604	
2	Valor SX	51	WG	0.064	LB AI/A	2.0	OZ WT/A	PRE	A	102	204	305	401	504	602	
	Ignite 280	2.34	SL	0.402	LB AI/A	22.0	FL OZ/A	EPOST	B							
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B							
	Ignite 280	2.34	SL	0.402	LB AI/A	22.0	FL OZ/A	MPOST	C							
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	MPOST	C							
3	Gangster FR	84	WG	0.0158	LB AI/A	0.3	OZ WT/A	PRE	A	103	201	303	402	506	603	
	Gangster V	51	WG	0.048	LB AI/A	1.5	OZ WT/A	PRE	A							
	Ignite 280	2.34	SL	0.402	LB AI/A	22.0	FL OZ/A	EPOST	B							
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B							
	Ignite 280	2.34	SL	0.402	LB AI/A	22.0	FL OZ/A	MPOST	C							
AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	MPOST	C								
4	Valor SX	51	WG	0.064	LB AI/A	2.0	OZ WT/A	PRE	A	104	206	301	403	503	606	
	Sencor	75	DF	0.216	LB AI/A	4.6	OZ WT/A	PRE	A							
	Ignite 280	2.34	SL	0.402	LB AI/A	22.0	FL OZ/A	EPOST	B							
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B							
	Ignite 280	2.34	SL	0.402	LB AI/A	22.0	FL OZ/A	MPOST	C							
AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	MPOST	C								
5	Prowl H2O	3.8	EC	1.19	LB AI/A	2.5	PT/A	PRE	A	105	203	306	404	505	601	
	Ignite 280	2.34	SL	0.402	LB AI/A	22.0	FL OZ/A	EPOST	B							
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B							
	Ignite 280	2.34	SL	0.402	LB AI/A	22.0	FL OZ/A	MPOST	C							
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	MPOST	C							
6	Ignite 280	2.34	SL	0.402	LB AI/A	22.0	FL OZ/A	EPOST	B	106	202	304	406	501	605	
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B							
	Ignite 280	2.34	SL	0.402	LB AI/A	22.0	FL OZ/A	MPOST	C							
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	MPOST	C							

Sort Order: Replicate 1

Iowa State University

Field Prep./Maintenance:

The study area was left un-tilled from the 2007 corn cropping year. Fertilization included 160 lb/A actual N applied as urea. Crop residue on the soil surface was 40 to 50% at planting.

Soil Description

% OM:	5	Texture:	EDINA SILT LOAM
pH:	6.2	Soil Name:	GRUNDY, HAIG, SHELBY
		Fert. Level:	EXCELLENT

Application Description

	A	B	C
Application Date:	4/29/2008	5/19/2008	
Application Method:	SPRAY	SPRAY	
Application Timing:	EPP	PRE	
Application Placement:	BROSOI	BROSOI	
Air Temperature, Unit:	50 F	71 F	
% Relative Humidity:	42	40	
Wind Velocity, Unit:	0 MPH	2 MPH	
Soil Temperature, Unit:	59 F	69 F	
% Cloud Cover:	90	60	

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC

Iowa State University

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Stage Majority, Percent:		1 LEAF	
Stage Minimum, Percent:		1 LEAF	
Stage Maximum, Percent:		2 LEAF	
Height, Unit:		0.25 IN	
Height Minimum, Maximum:		0.25 0.25	
Density, Unit:		1 FT2	
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Stage Majority, Percent:	COTYL	2 LEAF	
Stage Minimum, Percent:	COTYL	COTYL	
Stage Maximum, Percent:	COTYL	4 LEAF	
Height, Unit:	0.25 IN	0.38 IN	
Height Minimum, Maximum:	0.25 0.25	0.25 0.5	
Density, Unit:	0 FT2	1 FT2	
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W
Stage Majority, Percent:	COTYL	8 LEAF	
Stage Minimum, Percent:	COTYL	COTYL	
Stage Maximum, Percent:	COTYL	NUMERO	
Height, Unit:	0.25 IN	1.0 IN	
Height Minimum, Maximum:	0.25 0.25	0.25 3	
Density, Unit:	3 FT2	1 FT2	
Pest 5 Code, Disc., Scale:	TAROF W	TAROF W	TAROF W
Stage Majority, Percent:	NUMERO	NUMERO	
Stage Minimum, Percent:	NUMERO	NUMERO	
Stage Maximum, Percent:	NUMERO	NUMERO	
Height, Unit:	0.75 IN	3 IN	
Height Minimum, Maximum:	0.5 1	1 4	
Density, Unit:	0 FT2	1 FT2	
Pest 6 Code, Disc., Scale:	VERAR W	VERAR W	VERAR W
Stage Majority, Percent:	2 LEAF	NUMERO	
Stage Minimum, Percent:	1 LEAF	2 LEAF	
Stage Maximum, Percent:	4 LEAF	NUMERO	
Height, Unit:	0.5 IN	2 IN	
Height Minimum, Maximum:	0.25 1	0.25 7	
Density, Unit:	0 FT2	2 FT2	

Application Equipment

	A	B	C
Appl. Equipment:	HAND SPRAYER	HAND SPRAYER	
Operating Pressure, Unit:	35 PSI	35 PSI	
Nozzle Size:	11003	11003	
Spray Volume, Unit:	20 GAL/AC	20 GAL/AC	

Date
6/3/2008

By

Notes

Plot 307 was not sprayed due to malfunction of hand boom equipment.

Iowa State University

Early preplant and preemergence BAS 78102H and preemergence BAS 80004H in one and two-pass weed control programs in no-tillage corn, Chariton, IA, 2008.

Trial ID: MCN 1

Protocol ID: 2008-US-C9F-C-02.0

Location: Chariton

Study Director: Owen/Lux/Franzenburg/Grossnickle

Investigator: Micheal D. K. Owen

Trit No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	208	303	
2	BAS 78102H	5.57	EC	1.09	LB AI/A	25.0	FL OZ/A	PRE	B	102	204	305	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
3	BAS 80004H	2.85	SC	0.089	LB AI/A	4.0	FL OZ/A	PRE	B	103	209	302	
	Guardsman Max	5	SC	2.85	LB AI/A	73.0	FL OZ/A	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
4	Lumax	3.95	SE	2.96	LB AI/A	96.0	FL OZ/A	PRE	B	104	201	307	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
5	BAS 78102H	5.57	EC	0.74	LB AI/A	17.0	FL OZ/A	PRE	B	105	207	301	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	MPOST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	MPOST	C				
6	BAS 80004H	2.85	SC	0.067	LB AI/A	3.0	FL OZ/A	PRE	B	106	202	306	
	Guardsman Max	5	SC	1.56	LB AI/A	40.0	FL OZ/A	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	MPOST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	MPOST	C				
7	Harness Xtra	6	SE	1.8	LB AI/A	38.4	FL OZ/A	PRE	B	107	206	309	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	MPOST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	MPOST	C				
8	BAS 78102H	5.57	EC	1.09	LB AI/A	25.0	FL OZ/A	EPP	A	108	203	304	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPP	A				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	EPP	A				
9	BAS 78102H	5.57	EC	0.74	LB AI/A	17.0	FL OZ/A	PRE	B	109	205	308	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	Status	56	WG	0.0875	LB AI/A	2.5	OZ WT/A	MPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	MPOST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	MPOST	C				

Sort Order: Replicate 1

Iowa State University

Application Description

	A	B	C
Application Date:	4/22/2008	5/8/2008	
Application Method:	SPRAY	SPRAY	
Application Timing:	EPP	PRE	
Application Placement:	BROSOI	BROSOI	
Air Temperature, Unit:	67 F	67 F	
% Relative Humidity:	32	36	
Wind Velocity, Unit:	5 MPH	5 MPH	
Soil Temperature, Unit:	57 F	65 F	
Soil Moisture:	ADEQUATE	ADEQUATE	
% Cloud Cover:	0	60	

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	ERBVI W	ERBVI W	ERBVI W
Stage Majority, Percent:		1 LEAF	
Stage Minimum, Percent:		1 LEAF	
Stage Maximum, Percent:		2 LEAF	
Height, Unit:		0.25 IN	
Height Minimum, Maximum:		0.25 0.25	
Density, Unit:		1 FT2	
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Stage Majority, Percent:		COTYL	
Stage Minimum, Percent:		COTYL	
Stage Maximum, Percent:		COTYL	
Height, Unit:		0.25 IN	
Height Minimum, Maximum:		0.25 0.25	
Density, Unit:		1 FT2	
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W
Stage Majority, Percent:	COTYL	6 LEAF	
Stage Minimum, Percent:	COTYL	COTYL	
Stage Maximum, Percent:	COTYL	8 LEAF	
Height, Unit:	0.25 IN	0.75 IN	
Height Minimum, Maximum:	0.25 0.38	0.25 1.5	
Density, Unit:	20 FT2	20 FT2	

Application Equipment

	A	B	C
Appl. Equipment:	HAND SPRAYER	ATV	
Operating Pressure, Unit:	35 PSI	30 PSI	
Nozzle Size:	11003	11002	
Spray Volume, Unit:	20 GAL/AC	20 GAL/AC	

Iowa State University

Early preplant and preemergence BAS 78102H and preemergence BAS 80004H in one and two-pass weed control programs in no-tillage corn, Lewis, IA, 2008.

Trial ID: LCN 1
Location: Lewis

Protocol ID: 2008-US-C9F-C-02.0
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	204	307	
2	BAS 78102H	5.57	EC	1.09	LB AI/A	25.0	FL OZ/A	PRE	B	102	208	305	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
3	BAS 80004H	2.85	SC	0.089	LB AI/A	4.0	FL OZ/A	PRE	B	103	206	309	
	Guardsman Max	5	SC	2.85	LB AI/A	73.0	FL OZ/A	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
4	Lumax	3.95	SE	2.96	LB AI/A	96.0	FL OZ/A	PRE	B	104	209	302	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
5	BAS 78102H	5.57	EC	0.74	LB AI/A	17.0	FL OZ/A	PRE	B	105	202	308	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	MPOST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	MPOST	C				
6	BAS 80004H	2.85	SC	0.067	LB AI/A	3.0	FL OZ/A	PRE	B	106	203	303	
	Guardsman Max	5	SC	1.56	LB AI/A	40.0	FL OZ/A	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	MPOST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	MPOST	C				
7	Harness Xtra	6	SE	1.8	LB AI/A	38.4	FL OZ/A	PRE	B	107	205	301	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	MPOST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	MPOST	C				
8	BAS 78102H	5.57	EC	1.09	LB AI/A	25.0	FL OZ/A	EPP	A	108	201	306	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPP	A				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	EPP	A				
9	BAS 78102H	5.57	EC	0.74	LB AI/A	17.0	FL OZ/A	PRE	B	109	207	304	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	Status	56	WG	0.0875	LB AI/A	2.5	OZ WT/A	MPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	MPOST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	MPOST	C				

Sort Order: Replicate 1

Iowa State University

Preemergence applied Rimsulfuron, Isoxaflutole, Atrazine, and Harness Xtra and postemergence applied Roundup PowerMAX in corn, Lewis, IA, 2008.

Trial ID: LCC 1
Location: Lewis

Protocol ID: USA-08-001&003
Study Director: Owen/Lux/Franzenbur/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenbur/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Lewis
State/Prov.: IA
Postal Code: 51544
Country: USA
Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/8/2008

Objectives:

The purpose of this study was to evaluate the performance of Rimsulfuron, Isoxaflutole and Atrazine applied preemergence and followed by postemergence applied Roundup PowerMAX for crop phytotoxicity and weed control in corn.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: Pioneer 34R67
BBCH Scale: BCOR
Planting Method: DIRECT DRILLED
Depth, Unit: 2.0 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: SLIGHTLY WET
Planting Date: 5/8/2008
Rate, Unit: 32000 SEEDS/A
Emergence Date: 5/17/2008

Pest Description

Pest 1 Type: W **Code:** ERBVI **Eriochloa villosa**
Common Name: Woolly cupgrass
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: MINIMUM-TILL
Study Design: Randomized Complete Block

	Previous Crops	Year
1.	SOYBEAN	2007

Field Prep./Maintenance:

Tillage included a spring field cultivation. Fertilization included 130 lbs/A actual N applied as urea. Crop residue on the soil surface was 25% at planting.

Soil Description

% OM: 4.4
pH: 6.4
Texture: SILTY CLAY LOAM
Soil Name: MARSHALL, EXIRA
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B	C
Application Date:	5/8/2008	6/4/2008	
Application Method:	SPRAY	SPRAY	
Application Timing:	PRE	EPOST	
Application Placement:	BROSOI	BROFOL	
Air Temperature, Unit:	67 F	70 F	
% Relative Humidity:	36	97	
Wind Velocity, Unit:	5 MPH	7 MPH	
Soil Temperature, Unit:	65 F	68 F	
Soil Moisture:	ADEQUATE	ADEQUATE	
% Cloud Cover:	60	100	

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC
Stage Majority, Percent:		V3	
Stage Minimum, Percent:		V2	
Stage Maximum, Percent:		V3	
Height, Unit:		4 IN	
Height Minimum, Maximum:		3 5	

Iowa State University

Pest Stage At Each Application

	A		B		C	
Pest 1 Code, Disc., Scale:	ERBVI	W	ERBVI	W	ERBVI	W
Stage Majority, Percent:			3	LEAF		
Stage Minimum, Percent:			1			
Stage Maximum, Percent:			4L,	2T		
Height, Unit:			1.5	IN		
Height Minimum, Maximum:			0.25	2		
Density, Unit:			3	FT2		
Pest 2 Code, Disc., Scale:	ABUTH	W	ABUTH	W	ABUTH	W
Stage Majority, Percent:			3	LEAF		
Stage Minimum, Percent:			COTYL			
Stage Maximum, Percent:			4	LEAF		
Height, Unit:			1.0	IN		
Height Minimum, Maximum:			0.25	2		
Density, Unit:			10	FT2		
Pest 3 Code, Disc., Scale:	AMATA	W	AMATA	W	AMATA	W
Stage Majority, Percent:			6	LEAF		
Stage Minimum, Percent:			COTYL			
Stage Maximum, Percent:			9	LEAF		
Height, Unit:			0.38	IN		
Height Minimum, Maximum:			0.25	0.5		
Density, Unit:			1	FT2		
Pest 4 Code, Disc., Scale:	CHEAL	W	CHEAL	W	CHEAL	W
Stage Majority, Percent:			NUMERO			
Stage Minimum, Percent:			COTYL			
Stage Maximum, Percent:			NUMERO			
Height, Unit:			2	IN		
Height Minimum, Maximum:			0.25	3		
Density, Unit:			5	FT2		

Application Equipment

	A		B		C
Appl. Equipment:	ATV		HAND SPRAYER		
Operating Pressure, Unit:	30	PSI	35	PSI	
Nozzle Size:	11002		11003		
Spray Volume, Unit:	20	GAL/AC	20	GAL/AC	

Iowa State University

**Preemergence applied Rimsulfuron, Isoxaflutole, Atrazine, and Harness Xtra and
postemergence applied Roundup PowerMAX in corn, Lewis, IA, 2008.**

Trial ID: LCC 1
Location: Lewis

Protocol ID: USA-08-001&003
Study Director: Owen/Lux/Franzenbur/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	209	304	
2	Rimsulfuron	25	SG	0.125	OZ AI/A	0.5	OZ WT/A	PRE	A	102	207	310	
	Isoxaflutole	75	WG	0.25	OZ AI/A	0.333	OZ WT/A	PRE	A				
	Atrazine	90	WG	16.0	OZ AI/A	17.8	OZ WT/A	PRE	A				
3	Rimsulfuron	25	SG	0.25	OZ AI/A	1.0	OZ WT/A	PRE	A	103	211	303	
	Isoxaflutole	75	WG	0.5	OZ AI/A	0.67	OZ WT/A	PRE	A				
	Atrazine	90	WG	16.0	OZ AI/A	17.8	OZ WT/A	PRE	A				
4	Rimsulfuron	25	SG	0.375	OZ AI/A	1.5	OZ WT/A	PRE	A	104	202	306	
	Isoxaflutole	75	WG	0.75	OZ AI/A	1.0	OZ WT/A	PRE	A				
	Atrazine	90	WG	16.0	OZ AI/A	17.8	OZ WT/A	PRE	A				
5	Rimsulfuron	25	SG	0.125	OZ AI/A	0.5	OZ WT/A	PRE	A	105	208	308	
	Isoxaflutole	75	WG	0.25	OZ AI/A	0.333	OZ WT/A	PRE	A				
	Atrazine	90	WG	16.0	OZ AI/A	17.8	OZ WT/A	PRE	A				
	Roundup WeatherMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	MPOST	C				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	MPOST	C				
6	Rimsulfuron	25	SG	0.25	OZ AI/A	1.0	OZ WT/A	PRE	A	106	210	302	
	Isoxaflutole	75	WG	0.5	OZ AI/A	0.67	OZ WT/A	PRE	A				
	Atrazine	90	WG	16.0	OZ AI/A	17.8	OZ WT/A	PRE	A				
	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	MPOST	C				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	MPOST	C				
7	Rimsulfuron	25	SG	0.375	OZ AI/A	1.5	OZ WT/A	PRE	A	107	204	311	
	Isoxaflutole	75	WG	0.75	OZ AI/A	1.0	OZ WT/A	PRE	A				
	Atrazine	90	WG	16.0	OZ AI/A	17.8	OZ WT/A	PRE	A				
	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	MPOST	C				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	MPOST	C				
8	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	EPOST	B	108	205	301	
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	EPOST	B				
9	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	EPOST	B	109	203	305	
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	EPOST	B				
	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	MPOST	C				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	MPOST	C				
10	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	MPOST	C	110	201	307	
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	MPOST	C				
11	Harness Xtra	5.6	SE	33.6	OZ AI/A	1.5	QT/A	PRE	A	111	206	309	
	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	MPOST	C				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	MPOST	C				

Sort Order: Replicate 1

Iowa State University

Preemergence Corvus, Balance Flexx, Atrazine. Postemergence Ignite, Laudis, Capreno and Roundup PowerMAX in corn, Lewis, IA, 2008.

Trial ID: LCC 2
Location: Lewis

Protocol ID: Numerous
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Lewis
State/Prov.: IA
Postal Code: 51544
Country: USA
Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/8/2008

Objectives:

The purpose of this study was to evaluate various herbicide combinations applied in two-pass and one-pass programs for phytotoxicity and weed control in corn.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: Pioneer 34R67
BBCH Scale: BCOR
Planting Method: DIRECT DRILLED
Depth, Unit: 2.0 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: SLIGHTLY WET
Planting Date: 5/8/2008
Rate, Unit: 32000 SEEDS/A
Emergence Date: 5/17/2008

Pest Description

Pest 1 Type: W **Code:** ERBVI **Eriochloa villosa**
Common Name: Woolly cupgrass
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: MINIMUM-TILL
Study Design: Randomized Complete Block

	Previous Crops	Year
1.	SOYBEAN	2007

Field Prep./Maintenance:

Tillage included a spring field cultivation. Fertilization included 130 lbs/A actual N applied as urea. Crop residue on the soil surface was 25% at planting.

Soil Description

% OM: 4.4
pH: 6.4
Texture: SILTY CLAY LOAM
Soil Name: MARSHALL, EXIRA
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B	C	D
Application Date:	5/8/2008	5/27/2008	6/4/2008	
Application Method:	SPRAY	SPRAY	SPRAY	
Application Timing:	PRE	VEPOST	EPOST	
Application Placement:	BROSOI	BROFOL	BROFOL	
Air Temperature, Unit:	67 F	50 F	70 F	
% Relative Humidity:	36	98	97	
Wind Velocity, Unit:	5 MPH	10 MPH	7 MPH	
Soil Temperature, Unit:	65 F	57 F	68 F	
Soil Moisture:	ADEQUATE	ADEQUATE	ADEQUATE	
% Cloud Cover:	60	100	100	

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC	DESC
Stage Majority, Percent:		V1	V3	
Stage Minimum, Percent:		V1	V2	
Stage Maximum, Percent:		V1	V3	
Height, Unit:		1.5 IN	4 IN	
Height Minimum, Maximum:		1 1.5	3 5	

Iowa State University

Pest Stage At Each Application

	A		B		C		D	
Pest 1 Code, Disc., Scale:	ERBVI	W	ERBVI	W	ERBVI	W	ERBVI	W
Stage Majority, Percent:			2 LEAF		3 LEAF			
Stage Minimum, Percent:			1 LEAF		1			
Stage Maximum, Percent:			2 LEAF		4L, 2T			
Height, Unit:			0.38	IN	1.0	IN		
Height Minimum, Maximum:			0.25	0.5	0.25	3		
Density, Unit:			0	FT2	1	FT2		
Pest 2 Code, Disc., Scale:	ABUTH	W	ABUTH	W	ABUTH	W	ABUTH	W
Stage Majority, Percent:			1 LEAF		3 LEAF			
Stage Minimum, Percent:			COTYL		COTYL			
Stage Maximum, Percent:			2 LEAF		4 LEAF			
Height, Unit:			0.5	IN	0.75	IN		
Height Minimum, Maximum:			0.25	0.75	0.25	1.5		
Density, Unit:			15	FT2	10	FT2		
Pest 3 Code, Disc., Scale:	AMATA	W	AMATA	W	AMATA	W	AMATA	W
Stage Majority, Percent:			2 LEAF		6 LEAF			
Stage Minimum, Percent:			COTYL		COTYL			
Stage Maximum, Percent:			4 LEAF		9 LEAF			
Height, Unit:			0.25	IN	0.38	IN		
Height Minimum, Maximum:			0.25	0.5	0.25	0.5		
Density, Unit:			1	FT2	1	FT2		
Pest 4 Code, Disc., Scale:	CHEAL	W	CHEAL	W	CHEAL	W	CHEAL	W
Stage Majority, Percent:			1 LEAF		NUMERO			
Stage Minimum, Percent:			COTYL		COTYL			
Stage Maximum, Percent:			2 LEAF		NUMERO			
Height, Unit:			0.25	IN	0.38	IN		
Height Minimum, Maximum:			0.25	0.38	0.25	0.5		
Density, Unit:			0	FT2	0	FT2		

Application Equipment

	A		B		C		D
Appl. Equipment:	ATV		HAND SPRAYER		HAND SPRAYER		
Operating Pressure, Unit:	30	PSI	35	PSI	35	PSI	
Nozzle Size:	11002		11003		11003		
Spray Volume, Unit:	20	GAL/AC	20	GAL/AC	20	GAL/AC	

Iowa State University

Preemergence Corvus, Balance Flexx, Atrazine. Postemergence Ignite, Laudis, Capreno and Roundup PowerMAX in corn, Lewis, IA, 2008.

Trial ID: LCC 2
Location: Lewis

Protocol ID: Numerous
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	209	303	
2	Corvus Atrazine	3.88	SC	0.17	LB AI/A	5.6	FL OZ/A	PRE	A	102	210	305	
		4	L	1.0	LB AI/A	2.0	PT/A	PRE	A				
3	Corvus Atrazine NIS	3.88	SC	0.17	LB AI/A	5.6	FL OZ/A	VEPOST	B	103	202	310	
		4	L	1.0	LB AI/A	2.0	PT/A	VEPOST	B				
		100	SL	0.25	% V/V	0.25	% V/V	VEPOST	B				
4	Corvus Ignite 280	3.88	SC	0.091	LB AI/A	3.0	FL OZ/A	PRE	A	104	207	311	
		2.34	SL	0.402	LB AI/A	22.0	FL OZ/A	POST	D				
		3.5	SC	0.0547	LB AI/A	2.0	FL OZ/A	POST	D				
		100	SG	1.5	LB/A	1.5	LB/A	POST	D				
5	Corvus Roundup PowerMAX	3.88	SC	0.091	LB AI/A	3.0	FL OZ/A	PRE	A	105	208	304	
		4.5	SL	0.77	LB AI/A	22.0	FL OZ/A	POST	D				
		3.5	SC	0.082	LB AI/A	3.0	FL OZ/A	POST	D				
		100	SG	1.5	LB/A	1.5	LB/A	POST	D				
6	Capreno COC	3.45	SC	0.082	LB AI/A	3.0	FL OZ/A	POST	D	106	204	306	
		100	L	1.0	QT/A	1.0	QT/A	POST	D				
		100	SG	1.5	LB/A	1.5	LB/A	POST	D				
7	Balance Flexx Atrazine	4	SC	0.094	LB AI/A	3.0	FL OZ/A	PRE	A	107	201	309	
		4	SC	1.0	LB AI/A	2.0	PT/A	PRE	A				
		2.34	SL	0.402	LB AI/A	22.0	FL OZ/A	POST	D				
		3.5	SC	0.0547	LB AI/A	2.0	FL OZ/A	POST	D				
		100	SG	1.5	LB/A	1.5	LB/A	POST	D				
8	Capreno Atrazine	3.45	SC	0.081	LB AI/A	3.0	FL OZ/A	POST	D	108	211	302	
		4	SC	1.0	LB AI/A	1.0	QT/A	POST	D				
		100	SL	1.0	QT/A	1.0	QT/A	POST	D				
		100	SG	1.5	LB/A	1.5	LB/A	POST	D				
9	Ignite 280	2.34	SL	0.402	LB AI/A	22.0	FL OZ/A	EPOST	C	109	205	307	
		3.5	SC	0.082	LB AI/A	3.0	FL OZ/A	EPOST	C				
		4	SC	1.0	LB AI/A	2.0	PT/A	EPOST	C				
		100	SG	1.5	LB/A	1.5	LB/A	EPOST	C				
10	Ignite 280	2.34	SL	0.402	LB AI/A	22.0	FL OZ/A	EPOST	C	110	206	308	
		3.45	SC	0.081	LB AI/A	3.0	FL OZ/A	EPOST	C				
		100	SG	1.5	LB/A	1.5	LB/A	EPOST	C				
11	Halex GT	4.38	CS	1.97	LB AI/A	3.6	PT/A	POST	D	111	203	301	
		4	L	0.5	LB AI/A	1.0	PT/A	POST	D				
		100	SL	0.418	LB AI/A	0.25	% V/V	POST	D				
		100	SG	1.0	% W/V	1.0	% W/V	POST	D				

Sort Order: Replicate 1

Iowa State University

Comparison of weed management tactics in glufosinate, glyphosate, and conventional soybean varieties, Lewis, IA, 2008.

Trial ID: LLB 1
Location: Lewis

Protocol ID: HP08NARJNB
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Lewis
State/Prov.: IA
Postal Code: 51544
Country: USA
Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/8/2008

Objectives:

The purpose of this study was to evaluate the affect on stand, phytotoxicity and weed control on three soybean varieties from postemergence applications of either Ignite 280, Roundup PowerMAX, Basagran, Ultra Blazer or Poast Plus.

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: 3 Varieties
BBCH Scale: BSOY
Planting Method: DIRECT DRILLED
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: SLIGHTLY WET
Planting Date: 5/8/2008
Rate, Unit: 150000 SEEDS/A
Emergence Date: 5/16/2008

Pest Description

Pest 1 Type: W **Code:** ERBVI **Eriochloa villosa**
Common Name: Woolly cupgrass
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 4
Tillage Type: MINIMUM-TILL
Study Design: Randomized Complete Block

	Previous Crops	Year
1.	SOYBEAN	2007

Field Prep./Maintenance:

Tillage included a fall chisel plowing and a spring field cultivation. Crop residue on the soil surface was 40 to 45% at planting. Soybean varieties included a glufosinate resistant variety, glyphosate resistant variety, and a conventional variety.

Soil Description

% OM: 4.4
pH: 6.4
Texture: SILTY CLAY LOAM
Soil Name: MARSHALL, EXIRA
Fert. Level: EXCELLENT

Iowa State University

Application Description

	A	B	C	D
Application Date:	5/8/2008			
Application Method:	SPRAY			
Application Timing:	PRE			
Application Placement:	BROSOI			
Air Temperature, Unit:	67 F			
% Relative Humidity:	36			
Wind Velocity, Unit:	5 MPH			
Soil Temperature, Unit:	65 F			
Soil Moisture:	ADEQUATE			
% Cloud Cover:	60			

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Disc., Scale:	ERBVI W	ERBVI W	ERBVI W	ERBVI W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W	CHEAL W

Application Equipment

	A	B	C	D
Appl. Equipment:	ATV			
Operating Pressure, Unit:	30 PSI			
Nozzle Size:	11002			
Spray Volume, Unit:	10 GAL/AC			

Iowa State University

Comparison of weed management tactics in glufosinate, glyphosate, and conventional soybean varieties, Lewis, IA, 2008.

Trial ID: LLB 1
Location: Lewis

Protocol ID: HP08NARJNB
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Plot No. By Rep				Notes
										1	2	3	4	
13	RR Soybean Variety Untreated									101	213	311	401	
1	LL Soybean Variety Prowl H20	3.8	EC	0.95	LB AI/A	2.0	PT/A	PRE	A	102	203	309	413	
	Ignite 280	2.34	SL	0.4	LB AI/A	22.0	FL OZ/A	MPOST	C					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	MPOST	C					
9	LL Soybean Variety Ignite 280	2.34	SL	0.4	LB AI/A	22.0	FL OZ/A	EPOST	B	103	206	302	412	
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B					
	Ignite 280	2.34	SL	0.4	LB AI/A	22.0	FL OZ/A	LPOST	D					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	LPOST	D					
3	LL Soybean Variety Prowl H20	3.8	EC	0.95	LB AI/A	2.0	PT/A	PRE	A	104	209	306	402	
	Ignite 280	2.34	SL	0.4	LB AI/A	22.0	FL OZ/A	EPOST	B					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B					
	Ignite 280	2.34	SL	0.4	LB AI/A	22.0	FL OZ/A	LPOST	D					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	LPOST	D					
2	RR Soybean Variety Prowl H20	3.8	EC	0.95	LB AI/A	2.0	PT/A	PRE	A	105	204	304	406	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	MPOST	C					
4	RR Soybean Variety Prowl H20	3.8	EC	0.95	LB AI/A	2.0	PT/A	PRE	A	106	214	314	403	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B					
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	LPOST	D					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	LPOST	D					
7	LL Soybean Variety Ignite 280	2.34	SL	0.4	LB AI/A	22.0	FL OZ/A	MPOST	C	107	202	305	410	
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	MPOST	C					
14	Conv Soybean Variety Untreated									108	201	313	404	
5	LL Soybean Variety Ignite 280	2.34	SL	0.4	LB AI/A	22.0	FL OZ/A	EPOST	B	109	211	301	411	
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B					
12	LL Soybean Variety Untreated									110	205	308	405	
11	Conv Soybean Variety Prowl H20	3.8	EC	0.95	LB AI/A	2.0	PT/A	PRE	A	111	208	310	407	
	Ultra Blazer	2	EC	0.168	LB AI/A	0.67	PT/A	EPOST	B					
	Basagran	4	SL	0.75	LB AI/A	1.5	PT/A	EPOST	B					
	Poast Plus	1	EC	0.187	LB AI/A	1.5	PT/A	EPOST	B					
	COC	100	SL	2.0	PT/A	2.0	PT/A	EPOST	B					
10	RR Soybean Variety Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B	112	207	303	414	
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B					
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	LPOST	D					
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	LPOST	D					

Iowa State University

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. 1	Plot No. 2	Plot No. 3	Plot No. 4	By Rep	Notes
6	RR Soybean Variety Roundup PowerMAX AMS	4.5	SL 100 SG	0.77	LB AE/A 8.5 LB/100 GAL	22.0	FL OZ/A 8.5 LB/100 GAL	EPOST B EPOST B		113	210	312	409		
8	RR Soybean Variety Roundup PowerMAX AMS	4.5	SL 100 SG	0.77	LB AE/A 8.5 LB/100 GAL	22.0	FL OZ/A 8.5 LB/100 GAL	MPOST C MPOST C		114	212	307	408		

Sort Order: Replicate 1

Iowa State University

% OM:	3.6	Soil Description	
pH:	6.5	Texture:	LOAM
		Soil Name:	FLOYD, KENYON, CLYDE
		Fert. Level:	EXCELLENT

Application Description

	A	B	C
Application Date:	4/23/2008	5/9/2008	
Application Method:	SPRAY	SPRAY	
Application Timing:	EPP	PRE	
Application Placement:	BROSOI	BROSOI	
Air Temperature, Unit:	71 F	59 F	
% Relative Humidity:	27	67	
Wind Velocity, Unit:	6 MPH	3 MPH	
Soil Temperature, Unit:	56 F	59 F	
Soil Moisture:	ADEQUATE	ADEQUATE	
% Cloud Cover:	0	100	

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC

Iowa State University

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Stage Majority, Percent:		1 LEAF	
Stage Minimum, Percent:		1 LEAF	
Stage Maximum, Percent:		1 LEAF	
Height, Unit:		0.25 IN	
Height Minimum, Maximum:		0.25 0.25	
Density, Unit:		5 FT2	
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Stage Majority, Percent:		COTYL	
Stage Minimum, Percent:		COTYL	
Stage Maximum, Percent:		COTYL	
Height, Unit:		0.25 IN	
Height Minimum, Maximum:		0.25 0.25	
Density, Unit:		0 FT2	
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Stage Majority, Percent:		COTYL	
Stage Minimum, Percent:		COTYL	
Stage Maximum, Percent:		COTYL	
Height, Unit:		0.25 IN	
Height Minimum, Maximum:		0.25 0.25	
Density, Unit:		0 FT2	
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W
Stage Majority, Percent:	COTYL	3 LEAF	
Stage Minimum, Percent:	COTYL	COTYL	
Stage Maximum, Percent:	COTYL	5 LEAF	
Height, Unit:	0.25 IN	0.25 IN	
Height Minimum, Maximum:	0.25 0.38	0.5 1	
Density, Unit:	5 FT2	2 FT2	
Pest 5 Code, Disc., Scale:	POLPY W	POLPY W	POLPY W
Stage Majority, Percent:		COTYL	
Stage Minimum, Percent:		COTYL	
Stage Maximum, Percent:		COTYL	
Height, Unit:		0.25 IN	
Height Minimum, Maximum:		0.25 0.25	
Density, Unit:		0 FT2	

Application Equipment

	A	B	C
Appl. Equipment:	HAND SPRAYER	ATV	
Operating Pressure, Unit:	35 PSI	30 PSI	
Nozzle Size:	11003	11002	
Spray Volume, Unit:	20 GAL/AC	20 GAL/AC	

Iowa State University

Early preplant and preemergence BAS 78102H and preemergence BAS 80004H in one and two-pass weed control programs in no-tillage corn, Nashua, IA, 2008.

Trial ID: NCN 1
Location: Nashua

Protocol ID: 2008-US-C9F-C-02.0
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trit No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	207	303	
2	BAS 78102H	5.57	EC	1.09	LB AI/A	25.0	FL OZ/A	PRE	B	102	209	306	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
3	BAS 80004H	2.85	SC	0.089	LB AI/A	4.0	FL OZ/A	PRE	B	103	206	301	
	Guardsman Max	5	SC	2.85	LB AI/A	73.0	FL OZ/A	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
4	Lumax	3.95	SE	2.96	LB AI/A	96.0	FL OZ/A	PRE	B	104	208	304	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
5	BAS 78102H	5.57	EC	0.74	LB AI/A	17.0	FL OZ/A	PRE	B	105	202	309	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	MPOST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	MPOST	C				
6	BAS 80004H	2.85	SC	0.067	LB AI/A	3.0	FL OZ/A	PRE	B	106	204	307	
	Guardsman Max	5	SC	1.56	LB AI/A	40.0	FL OZ/A	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	MPOST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	MPOST	C				
7	Harness Xtra	6	SE	1.8	LB AI/A	38.4	FL OZ/A	PRE	B	107	205	302	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	MPOST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	MPOST	C				
8	BAS 78102H	5.57	EC	1.09	LB AI/A	25.0	FL OZ/A	EPP	A	108	203	308	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPP	A				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	EPP	A				
9	BAS 78102H	5.57	EC	0.74	LB AI/A	17.0	FL OZ/A	PRE	B	109	201	305	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	PRE	B				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	PRE	B				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	MPOST	C				
	Status	56	WG	0.0875	LB AI/A	2.5	OZ WT/A	MPOST	C				
	X-77	100	SL	0.25	% V/V	0.25	% V/V	MPOST	C				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	MPOST	C				

Sort Order: Replicate 1

Iowa State University

Soil Description
% OM: 3.6 **Texture:** LOAM
pH: 6.5 **Soil Name:** FLOYD, KENYON, CLYDE
Fert. Level: EXCELLENT

Application Description

	A	B	C	D
Application Date:	5/9/2008			
Application Method:	SPRAY			
Application Timing:	PRE			
Application Placement:	BROSIOI			
Air Temperature, Unit:	59 F			
% Relative Humidity:	67			
Wind Velocity, Unit:	3 MPH			
Soil Temperature, Unit:	59 F			
Soil Moisture:	ADEQUATE			
% Cloud Cover:	100			

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W	CHEAL W
Pest 5 Code, Disc., Scale:	POLPY W	POLPY W	POLPY W	POLPY W

Application Equipment

	A	B	C	D
Appl. Equipment:	ATV			
Operating Pressure, Unit:	30 PSI			
Nozzle Size:	11002			
Spray Volume, Unit:	20 GAL/AC			

Iowa State University

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep				Notes
										1	2	3	4	
16	Lexar	3.7	SE	2.08	LB AI/A	2.25	QT/A	PRE	A	116	204	312	404	
	Touchdown Total	4.17	SL	0.78	LB AE/A	24.0	FL OZ/A	POST	C					
	AMS	100	SG	1.0	% W/V	1.0	% W/V	POST	C					
17	Lexar	3.7	SE	1.62	LB AI/A	1.75	QT/A	PRE	A	117	206	301	407	
	Halex GT	4.38	CS	1.97	LB AI/A	3.6	PT/A	POST	C					
	NIS	100	SL	0.25	% V/V	0.25	% V/V	POST	C					
	AMS	100	SG	1.0	% W/V	1.0	% W/V	POST	C					

Sort Order: Replicate 1

Iowa State University

Preemergence SureStart, Corvus, Balance Flexx. Postemergence Durango DMA, Permit, Rimsulfuron, Ignite, Laudis, Roundup PowerMAX in corn, Nashua, ia, 2008.
 Trial ID: NCC 2 Protocol ID: Numerous
 Location: Nashua Study Director: Owen/Lux/Franzenburg/Grossnickle
 Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Nashua **Trial Status:** ONE-YEAR/INTERIM
State/Prov.: IA
Postal Code: 50658-9270 **Initiation Date:** 5/9/2008
Country: USA

Objectives:

The purpose of this study was to evaluate various herbicide combinations applied in two-pass and one-pass programs for phytotoxicity and weed control in corn.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: Pioneer 34A20
BBCH Scale: BCOR **Planting Date:** 5/9/2008
Planting Method: DIRECT DRILLED **Rate, Unit:** 35077 SEEDS/A
Depth, Unit: 2.0 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL **Emergence Date:** 5/20/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters
Pest 5 Type: W **Code:** POLPY **Polygonum pensylvanicum**
Common Name: Pennsylvania smartweed

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT **Tillage Type:** MINIMUM-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Previous Crops	Year
1.	SOYBEAN	2007

Field Prep./Maintenance:

Tillage included a spring field cultivation. Fertilization included 140 lb/A actual N applied as anhydrous ammonia. Crop residue on the soil surface was 25% at planting.

Iowa State University

Soil Description

% OM:	3.6	Texture:	LOAM
pH:	6.5	Soil Name:	FLOYD, KENYON, CLYDE
		Fert. Level:	EXCELLENT

Application Description

	A	B	C	D	E
Application Date:	5/9/2008	5/28/2008	6/5/2008		
Application Method:	SPRAY	SPRAY	SPRAY		
Application Timing:	PRE	VEPOST	EPOST		
Application Placement:	BROSOI	BROFOL	BROFOL		
Air Temperature, Unit:	59 F	63 F	76 F		
% Relative Humidity:	67	38	87		
Wind Velocity, Unit:	3 MPH	6 MPH	4 MPH		
Soil Temperature, Unit:	59 F	63 F	70 F		
Soil Moisture:	ADEQUATE	ADEQUATE	ADEQUATE		
% Cloud Cover:	100	10	95		

Crop Stage At Each Application

	A	B	C	D	E
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC	DESC	DESC
Stage Majority, Percent:		V1	V2		
Stage Minimum, Percent:		V1	V2		
Stage Maximum, Percent:		V1	V2		
Height, Unit:		1.5 IN	2.5 IN		
Height Minimum, Maximum:		1 1.5	2 3		

Iowa State University

Pest Stage At Each Application

	A	B	C	D	E
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W	SETFA W	SETFA W
Stage Majority, Percent:		2 LEAF	3 LEAF		
Stage Minimum, Percent:		1 LEAF	1 LEAF		
Stage Maximum, Percent:		4 LEAF	4 LEAF		
Height, Unit:		0.5 IN	0.75 IN		
Height Minimum, Maximum:		0.25 0.75	0.25 1		
Density, Unit:		15 FT2	5 FT2		
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W	ABUTH W	ABUTH W
Stage Majority, Percent:		1 LEAF	2 LEAF		
Stage Minimum, Percent:		COTYL	COTYL		
Stage Maximum, Percent:		2 LEAF	3 LEAF		
Height, Unit:		0.5 IN	0.75 IN		
Height Minimum, Maximum:		0.25 0.75	0.25 1		
Density, Unit:		1 FT2	2 FT2		
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W	AMATA W	AMATA W
Stage Majority, Percent:		1 LEAF	2 LEAF		
Stage Minimum, Percent:		COTYL	COTYL		
Stage Maximum, Percent:		2 LEAF	4 LEAF		
Height, Unit:		0.25 IN	0.38 IN		
Height Minimum, Maximum:		0.25 0.38	0.25 0.5		
Density, Unit:		0 FT2	0 FT2		
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W	CHEAL W	CHEAL W
Stage Majority, Percent:		4 LEAF	6 LEAF		
Stage Minimum, Percent:		COTYL	COTYL		
Stage Maximum, Percent:		6 LEAF	8 LEAF		
Height, Unit:		0.5 IN	0.75 IN		
Height Minimum, Maximum:		0.25 1	0.25 1		
Density, Unit:		2 FT2	1 FT2		
Pest 5 Code, Disc., Scale:	POLPY W	POLPY W	POLPY W	POLPY W	POLPY W
Stage Majority, Percent:		4 LEAF	6 LEAF		
Stage Minimum, Percent:		2 LEAF	2 LEAF		
Stage Maximum, Percent:		6 LEAF	8 LEAF		
Height, Unit:		0.5 IN	0.75 IN		
Height Minimum, Maximum:		0.5 1	0.5 1.5		
Density, Unit:		0 FT2	0 FT2		

Application Equipment

	A	B	C	D	E
Appl. Equipment:	ATV	HAND SPRAYER	HAND SPRAYER		
Operating Pressure, Unit:	30 PSI	35 PSI	35 PSI		
Nozzle Size:	11002	11003	11003		
Spray Volume, Unit:	20 GAL/AC	20 GAL/AC	20 GAL/AC		

Iowa State University

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
13	Rimsulfuron	25	SG	0.375	OZ AI/A	1.5	OZ WT/A	PRE	A	113	204	308	
	Isoxaflutole	75	WG	0.75	OZ AI/A	1.0	OZ WT/A	PRE	A				
	Rimsulfuron	25	SG	0.25	OZ AI/A	1.0	OZ WT/A	POST	D				
	Dicamba	70	WG	1.925	OZ AI/A	2.75	OZ WT/A	POST	D				
	Isoxadifen-ethyl	50	WG	0.125	OZ AI/A	0.25	OZ WT/A	POST	D				
	Atrazine	90	DF	8.0	OZ AI/A	0.556	LB/A	POST	D				
	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	D				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	D				
14	Rimsulfuron	25	SG	0.25	OZ AI/A	1.0	OZ WT/A	PRE	A	114	206	302	
	Isoxaflutole	75	WG	0.5	OZ AI/A	0.67	OZ WT/A	PRE	A				
	Atrazine	90	DF	16.0	OZ AI/A	1.11	LB/A	PRE	A				
	Roundup PowerMAX	4.5	SL	12.4	OZ AE/A	22.0	FL OZ/A	POST	D				
	AMS	100	SG	32.0	OZ WT/A	2.0	LB/A	POST	D				
15	Degree Xtra	4.04	CS	2.02	LB AI/A	2.0	QT/A	PRE	A	115	202	312	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	LPOST	E				
	AMS	100	SG	17.0	LB/100 GAL	17.0	LB/100 GAL	LPOST	E				

Sort Order: Replicate 1

Iowa State University

Postemergence applied Impact in various tank-mixtures in corn, Nashua, IA, 2008.

Trial ID: NCC 3
Location: Nashua

Protocol ID: 08-TPZ-H-100
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Nashua
State/Prov.: IA
Postal Code: 50658-9270
Country: USA
Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/9/2008

Objectives:

The purpose of this study was to evaluate the performance in corn of Impact in sequential weed control programs and in tank-mixtures with Roundup PowerMAX.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: Pioneer 34A20
BBCH Scale: BCOR
Planting Method: DIRECT DRILLED
Depth, Unit: 2.0 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL
Planting Date: 5/9/2008
Rate, Unit: 35077 SEEDS/A
Emergence Date: 5/20/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters
Pest 5 Type: W **Code:** POLPY **Polygonum pensylvanicum**
Common Name: Pennsylvania smartweed

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: MINIMUM-TILL
Study Design: Randomized Complete Block

	Previous Crops	Year
1.	SOYBEAN	2007

Field Prep./Maintenance:

Tillage included a spring field cultivation. Fertilization included 140 lb/A actual N applied as anhydrous ammonia. Crop residue on the soil surface was 25% at planting.

Iowa State University

Soil Description
% OM: 3.6 **Texture:** LOAM
pH: 6.5 **Soil Name:** FLOYD, KENYON, CLYDE
Fert. Level: EXCELLENT

Application Description

	A	B	C
Application Date:	5/9/2008		
Application Method:	SPRAY		
Application Timing:	PRE		
Application Placement:	BROSIOI		
Air Temperature, Unit:	59 F		
% Relative Humidity:	67		
Wind Velocity, Unit:	3 MPH		
Soil Temperature, Unit:	59 F		
Soil Moisture:	ADEQUATE		
% Cloud Cover:	100		

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W
Pest 5 Code, Disc., Scale:	POLPY W	POLPY W	POLPY W

Application Equipment

	A	B	C
Appl. Equipment:	ATV		
Operating Pressure, Unit:	30 PSI		
Nozzle Size:	11002		
Spray Volume, Unit:	20 GAL/AC		

Iowa State University

Postemergence applied Impact in various tank-mixtures in corn, Nashua, IA, 2008.

Trial ID: NCC 3
Location: Nashua

Protocol ID: 08-TPZ-H-100
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	204	306	
2	Dual II Magnum	7.64	EC	0.955	LB AI/A	1.0	PT/A	PRE	A	102	205	308	
3	Dual II Magnum	7.64	EC	0.955	LB AI/A	1.0	PT/A	PRE	A	103	206	304	
	Impact	2.8	SC	0.016	LB AI/A	0.73	FL OZ/A	EPOST	B				
	Atrazine	4	L	0.5	LB AI/A	1.0	PT/A	EPOST	B				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
	28 % UAN	100	SL	2.5	% V/V	2.5	% V/V	EPOST	B				
4	Dual II Magnum	7.64	EC	0.955	LB AI/A	1	PT/A	PRE	A	104	208	302	
	Laudis	3.5	SC	0.082	LB AI/A	3.0	FL OZ/A	EPOST	B				
	Atrazine	4	L	0.5	LB AI/A	1.0	PT/A	EPOST	B				
	COC	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
	28 % UAN	100	SL	2.5	% V/V	2.5	% V/V	EPOST	B				
5	Harness	7	EC	0.875	LB AI/A	1.0	PT/A	PRE	A	105	201	305	
	Impact	2.8	SC	0.011	LB AI/A	0.503	FL OZ/A	EPOST	B				
	Atrazine	4	L	0.5	LB AI/A	1.0	PT/A	EPOST	B				
	MSO	100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
	28 % UAN	100	SL	2.5	% V/V	2.5	% V/V	EPOST	B				
6	Harness	7	EC	0.875	LB AI/A	1.0	PT/A	PRE	A	106	202	303	
	Impact	2.8	SC	0.011	LB AI/A	0.503	FL OZ/A	POST	C				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	C				
7	Harness	7	EC	0.875	LB AI/A	1.0	PT/A	PRE	A	107	207	301	
	Impact	2.8	SC	0.011	LB AI/A	0.503	FL OZ/A	POST	C				
	Atrazine	4	L	0.5	LB AI/A	1.0	PT/A	POST	C				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	C				
8	Harness	7	EC	0.875	LB AI/A	1.0	PT/A	PRE	A	108	203	307	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
	AMS	100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	C				

Sort Order: Replicate 1

Iowa State University

Soil Description
% OM: 3.6 **Texture:** LOAM
pH: 6.5 **Soil Name:** FLOYD, KENYON, CLYDE
Fert. Level: EXCELLENT

Application Description

	A	B	C
Application Date:	5/9/2008		
Application Method:	SPRAY		
Application Timing:	PRE		
Application Placement:	BROSIOI		
Air Temperature, Unit:	59 F		
% Relative Humidity:	67		
Wind Velocity, Unit:	3 MPH		
Soil Temperature, Unit:	59 F		
Soil Moisture:	ADEQUATE		
% Cloud Cover:	100		

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W
Pest 5 Code, Disc., Scale:	POLPY W	POLPY W	POLPY W

Application Equipment

	A	B	C
Appl. Equipment:	ATV		
Operating Pressure, Unit:	30 PSI		
Nozzle Size:	11002		
Spray Volume, Unit:	20 GAL/AC		

Iowa State University

Two and one-pass weed management systems in corn utilizing various preemergence and postemergence applied herbicides, Nashua, IA, 2008.

Trial ID: NCC 4
Location: Nashua

Protocol ID: BASF
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
1	Untreated									101	208	304	
2	Roundup WeatherMAX AMS	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B	102	207	310	
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B				
3	Roundup WeatherMAX Status AMS	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B	103	205	301	
		56	WG	0.0875	LB AI/A	2.5	OZ WT/A	EPOST	B				
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B				
4	Roundup WeatherMAX Status AMS	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B	104	203	309	
		56	WG	0.175	LB AI/A	5.0	OZ WT/A	EPOST	B				
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B				
5	Outlook Roundup WeatherMAX AMS	6	EC	0.56	LB AI/A	12.0	FL OZ/A	PRE	A	105	210	307	
		4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	C				
6	Outlook Roundup WeatherMAX Status AMS	6	EC	0.56	LB AI/A	12.0	FL OZ/A	PRE	A	106	204	302	
		4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
		56	WG	0.0875	LB AI/A	2.5	OZ WT/A	POST	C				
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	C				
7	Roundup WeatherMAX AMS	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C	107	209	303	
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	C				
8	Outlook Roundup WeatherMAX Status AMS	6	EC	0.56	LB AI/A	12.0	FL OZ/A	PRE	A	108	206	308	
		4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	C				
		56	WG	0.175	LB AI/A	5.0	OZ WT/A	POST	C				
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	POST	C				
9	Roundup WeatherMAX Callisto AMS	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	EPOST	B	109	202	306	
		4	SC	0.047	LB AI/A	1.5	FL OZ/A	EPOST	B				
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B				
10	Laudis Atrazine COC AMS	3.5	SC	0.082	LB AI/A	3.0	FL OZ/A	EPOST	B	110	201	305	
		4	L	0.5	LB AI/A	1.0	PT/A	EPOST	B				
		100	SL	1.0	% V/V	1.0	% V/V	EPOST	B				
		100	SG	8.5	LB/100 GAL	8.5	LB/100 GAL	EPOST	B				

Sort Order: Replicate 1

Iowa State University

Preplant burndown applications of BAS 80004H, Roundup Original, 2, 4-D ester, BAS 80400H and Prowl H20 in no-tillage soybean production, Nashua, IA, 2008.
 Trial ID: NSN 1 Protocol ID: 2008-US-D91-A-02.0
 Location: Nashua Study Director: Owen/Lux/Franzenburg/Grossnickle
 Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Nashua **Trial Status:** ONE-YEAR/INTERIM
State/Prov.: IA
Postal Code: 50658-9270 **Initiation Date:** 5/14/2008
Country: USA

Objectives:

The purpose of this study was to evaluate preplant applications of BAS 80004H and BAS 80400H for crop phytotoxicity and weed control in no-tillage soybean production.

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: Stine 1932-4
BBCH Scale: BSOY **Planting Date:** 5/22/2008
Planting Method: DIRECT DRILLED **Rate, Unit:** 190000 SEEDS/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters
Pest 5 Type: W **Code:** ERICA **Erigeron canadensis**
Common Name: Canada horseweed
Pest 6 Type: W **Code:** POLPY **Polygonum pensylvanicum**
Common Name: Pennsylvania smartweed
Pest 7 Type: W **Code:** TAROF **Taraxacum officinale**
Common Name: Common dandelion

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Previous Crops	Year
1.	CORN	2007

Iowa State University

Field Prep./Maintenance:

The study area was left un-tilled from the 2007 corn cropping year. The stalks were not chopped. Crop residue on the soil surface was 75 to 85% at planting.

Soil Description

% OM:	3.6	Texture:	LOAM
pH:	6.5	Soil Name:	FLOYD, KENYON, CLYDE
		Fert. Level:	EXCELLENT

Application Description

	A	B
Application Date:	5/14/2008	
Application Method:	SPRAY	
Application Timing:	EPP	
Application Placement:	BROSIOI	
Air Temperature, Unit:	59 F	
% Relative Humidity:	47	
Wind Velocity, Unit:	4 MPH	
Soil Temperature, Unit:	56 F	
Soil Moisture:	ADEQUATE	
% Cloud Cover:	0	

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W
Stage Majority, Percent:	1 LEAF	
Stage Minimum, Percent:	1 LEAF	
Stage Maximum, Percent:	2 LEAF	
Height, Unit:	0.25 IN	
Height Minimum, Maximum:	0.25 0.25	
Density, Unit:	2 FT2	
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W
Stage Majority, Percent:	COTYL	
Stage Minimum, Percent:	COTYL	
Stage Maximum, Percent:	COTYL	
Height, Unit:	0.25 IN	
Height Minimum, Maximum:	0.25 0.25	
Density, Unit:	1 FT2	
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W
Stage Majority, Percent:	COTYL	
Stage Minimum, Percent:	COTYL	
Stage Maximum, Percent:	COTYL	
Height, Unit:	0.25 IN	
Height Minimum, Maximum:	0.25 0.25	
Density, Unit:	1 FT2	
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W
Stage Majority, Percent:	4 LEAF	
Stage Minimum, Percent:	COTYL	

Iowa State University

Stage Maximum, Percent:	8 LEAF	
Height, Unit:	0.5 IN	
Height Minimum, Maximum:	0.25 1	
Density, Unit:	1 FT2	
Pest 5 Code, Disc., Scale:	ERICA W	ERICA W
Stage Majority, Percent:	NUMERO	
Stage Minimum, Percent:	NUMERO	
Stage Maximum, Percent:	NUMERO	
Height, Unit:	1.5 IN	
Height Minimum, Maximum:	0.5 2.5	
Density, Unit:	0 FT2	
Pest 6 Code, Disc., Scale:	POLPY W	POLPY W
Stage Majority, Percent:	2 LEAF	
Stage Minimum, Percent:	COTYL	
Stage Maximum, Percent:	4 LEAF	
Height, Unit:	0.5 IN	
Height Minimum, Maximum:	0.25 1	
Density, Unit:	3 FT2	
Pest 7 Code, Disc., Scale:	TAROF W	TAROF W
Stage Majority, Percent:	NUMERO	
Stage Minimum, Percent:	NUMERO	
Stage Maximum, Percent:	NUMERO	
Height, Unit:	1.5 IN	
Height Minimum, Maximum:	0.5 3.0	
Density, Unit:	0 FT2	

Application Equipment

	A	B
Appl. Equipment:	HAND SPRAYER	
Operating Pressure, Unit:	35 PSI	
Nozzle Size:	11003	
Spray Volume, Unit:	20 GAL/AC	

Iowa State University

Two and one-pass weed management programs in soybean, Nashua, IA, 2008.

Trial ID: NSC 1
Location: Nashua

Protocol ID: Numerous
Study Director: Owen/Lux/Franzenburg/Grossnickle
Investigator: Micheal D. K. Owen

General Trial Information

Study Director: Owen/Lux/Franzenburg/Grossnickle
Affiliation: Iowa State University
Postal Code: 50011
Investigator: Micheal D. K. Owen
Affiliation: Iowa State University
Postal Code: 50011

Trial Location

City: Nashua
State/Prov.: IA
Postal Code: 50658-9270
Country: USA
Trial Status: ONE-YEAR/INTERIM
Initiation Date: 5/16/2008

Objectives:

The purpose of this study was to evaluate preplant incorporated, preemergence and postemergence applied herbicides in soybean for crop phytotoxicity, weed control, and yield.

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: Northrup King S21-N6
BBCH Scale: BSOY
Planting Method: DIRECT DRILLED
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: FINE/TRASHY
Soil Moisture: ABOVE NORMAL
Planting Date: 5/16/2008
Rate, Unit: 190000 SEEDS/A
Emergence Date: 5/27/2008

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Faber's foxtail
Pest 2 Type: W **Code:** ABUTH **Abrutylon theophrasti**
Common Name: Velvetleaf
Pest 3 Type: W **Code:** AMATA **Amaranthus tamariscinus**
Common Name: Common waterhemp
Pest 4 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters
Pest 5 Type: W **Code:** POLPY **Polygonum pensylvanicum**
Common Name: Pennsylvania smartweed

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 25 FT
Replications: 3
Tillage Type: MINIMUM-TILL
Study Design: Randomized Complete Block

	Previous Crops	Year
1.	CORN	2007

Field Prep./Maintenance:

Tillage included a tandem disking in the spring to prepare the seedbed following the 2007 corn crop. Preplant treatments (PPI) were incorporated with a tandem disk operating 2 to 3 inches deep. Crop residue on the soil surface was 45 to 50% at planting.

Iowa State University

Soil Description
% OM: 3.6 **Texture:** LOAM
pH: 6.5 **Soil Name:** FLOYD, KENYON, CLYDE
Fert. Level: EXCELLENT

Application Description

	A	B	C	D	E	F
Application Date:	5/16/2008					
Application Method:	SPRAY					
Application Timing:	PPI, PRE					
Application Placement:	BROSOI					
Air Temperature, Unit:	75 F					
% Relative Humidity:	31					
Wind Velocity, Unit:	7 MPH					
Soil Temperature, Unit:	66 F					
Soil Moisture:	ADEQUATE					
% Cloud Cover:	0					

Crop Stage At Each Application

	A	B	C	D	E	F
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC	DESC	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C	D	E	F
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W	CHEAL W	CHEAL W	CHEAL W
Pest 5 Code, Disc., Scale:	POLPY W	POLPY W	POLPY W	POLPY W	POLPY W	POLPY W

Application Equipment

	A	B	C	D	E	F
Appl. Equipment:	HAND SPRAYER					
Operating Pressure, Unit:	35 PSI					
Nozzle Size:	11003					
Spray Volume, Unit:	20 GAL/AC					

Iowa State University

Two and one-pass weed management programs in soybean, Nashua, IA, 2008.

Trial ID: NSC 1
 Location: Nashua

Protocol ID: Numerous
 Study Director: Owen/Lux/Franzenburg/Grossnickle
 Investigator: Micheal D. K. Owen

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. 1	Plot No. 2	Plot No. 3	By Rep Notes
1	Untreated									101	213	305	
2	Prowl H2O	3.8	EC	1.19	LB AI/A	2.5	PT/A	PPI	A	102	211	306	
	Touchdown Total	4.17	SL	0.78	LB AE/A	24.0	FL OZ/A	POST	D				
	AMS	100	SG	2.0	% W/V	2.0	% W/V	POST	D				
3	Prowl H2O	3.8	EC	1.19	LB AI/A	2.5	PT/A	PPI	A	103	214	313	
	Touchdown Total	4.17	SL	0.78	LB AE/A	24.0	FL OZ/A	POST	D				
	AMS	100	SG	2.0	% W/V	2.0	% W/V	POST	D				
	Headline	2.09	L	0.098	LB AI/A	6.0	FL OZ/A	R 3	F				
	NIS	100	SL	0.25	% V/V	0.25	% V/V	R 3	F				
4	Sonic	70	DF	0.131	LB AI/A	3.0	OZ WT/A	PRE	B	104	215	303	
	Durango DMA	4	SL	0.75	LB AE/A	24.0	FL OZ/A	POST	D				
	AMS	100	SG	2.0	% W/V	2.0	% W/V	POST	D				
5	Sonic	70	DF	0.197	LB AI/A	4.5	OZ WT/A	PRE	B	105	203	314	
	Durango DMA	4	SL	0.75	LB AE/A	24.0	FL OZ/A	POST	D				
	AMS	100	SG	2.0	% W/V	2.0	% W/V	POST	D				
6	Durango DMA	4	SL	0.75	LB AE/A	24.0	FL OZ/A	EPOST	C	106	216	311	
	FirstRate	84	WG	0.0158	LB AI/A	0.3	OZ WT/A	EPOST	C				
	AMS	100	SG	2.0	% W/V	2.0	% W/V	EPOST	C				
	Durango DMA	4	SL	0.75	LB AE/A	24.0	FL OZ/A	SPOST	E				
	AMS	100	SG	2.0	% W/V	2.0	% W/V	SPOST	E				
7	Enlite	47.86	DG	1.34	OZ AI/A	2.8	OZ WT/A	PRE	B	107	208	315	
	Synchrony XP	28.4	WG	0.107	OZ AI/A	0.375	OZ WT/A	POST	D				
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	D				
	AMS	100	SG	2.0	LB/A	2.0	LB/A	POST	D				
8	Authority Assist	4	SC	0.188	LB AI/A	6.0	FL OZ/A	PRE	B	108	210	302	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	D				
	AMS	100	SG	2.0	% W/V	2.0	% W/V	POST	D				
9	Authority MTZ	45	DF	0.31	LB AI/A	11.0	OZ WT/A	PRE	B	109	212	312	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	D				
	AMS	100	SG	2.0	% W/V	2.0	% W/V	POST	D				
10	IntRro	4	EC	2.0	LB AI/A	2.0	QT/A	PRE	B	110	201	308	
	Roundup PowerMAX	4.5	SL	0.77	LB AE/A	22.0	FL OZ/A	POST	D				
	AMS	100	SG	2.0	% W/V	2.0	% W/V	POST	D				
11	Prefix	5.29	EW	0.99	LB AI/A	1.5	PT/A	PRE	B	111	209	301	
	Touchdown Total	4.17	SL	0.78	LB AI/A	24.0	FL OZ/A	POST	D				
	AMS	100	SG	2.0	% W/V	2.0	% W/V	POST	D				
12	Boundary	6.5	EC	1.22	LB AI/A	1.5	PT/A	PRE	B	112	205	316	
	Touchdown Total	4.17	SL	0.78	LB AI/A	24.0	FL OZ/A	POST	D				
	AMS	100	SG	2.0	% W/V	2.0	% W/V	POST	D				
13	Valor SX	51	WG	0.064	LB AI/A	2.0	OZ WT/A	PRE	B	113	206	304	
	Touchdown Total	4.17	SL	0.78	LB AI/A	24.0	FL OZ/A	POST	D				
	AMS	100	SG	2.0	% W/V	2.0	% W/V	POST	D				
14	Valor XLT	40.3	WG	0.0756	LB AI/A	3.0	OZ WT/A	PRE	B	114	207	307	
	Touchdown Total	4.17	SL	0.78	LB AI/A	24.0	FL OZ/A	POST	D				
	AMS	100	SG	2.0	% W/V	2.0	% W/V	POST	D				
15	Touchdown Total	4.17	SL	0.78	LB AI/A	24.0	FL OZ/A	EPOST	C	115	204	310	
	AMS	100	SG	2.0	% W/V	2.0	% W/V	EPOST	C				

Iowa State University

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. By Rep			Notes
										1	2	3	
16	Touchdown Total	4.17	SL	0.78	LB AI/A	24.0	FL OZ/A	EPOST	C	116	202	309	
	AMS	100	SG	2.0	% W/V	2.0	% W/V	EPOST	C				
	Touchdown Total	4.17	SL	0.78	LB AI/A	24.0	FL OZ/A	SPOST	E				
	AMS	100	SG	2.0	% W/V	2.0	% W/V	SPOST	E				

Sort Order: Replicate 1

Iowa State University

Application Description

	A	B	C	D
Application Date:	5/22/2008			
Application Method:	SPRAY			
Application Timing:	PRE			
Application Placement:	BROSOI			
Air Temperature, Unit:	66 F			
% Relative Humidity:	39			
Wind Velocity, Unit:	7 MPH			
Soil Temperature, Unit:	59 F			
% Cloud Cover:	100			

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC	DESC	DESC

Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Disc., Scale:	SETFA W	SETFA W	SETFA W	SETFA W
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W	ABUTH W
Pest 3 Code, Disc., Scale:	AMATA W	AMATA W	AMATA W	AMATA W
Pest 4 Code, Disc., Scale:	CHEAL W	CHEAL W	CHEAL W	CHEAL W

Application Equipment

	A	B	C	D
Appl. Equipment:	ATV			
Operating Pressure, Unit:	30 PSI			
Nozzle Size:	11002			
Spray Volume, Unit:	20 GAL/AC			

Iowa State University

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit	Other Rate	Other Rate	Unit	Growth Stage	Appl Code	Plot No. 1	Plot No. 2	By Rep 3	By Rep 4	Notes
14	Conv Soybean Variety Untreated										113	208	308	404	
12	LL Soybean Variety Untreated										114	203	312	408	

Sort Order: Replicate 1