Sugarbeet herbicides, Milan, 2007. (Dexter) 'Beta RZ02RR07' sugarbeet was seeded 1.25 inches deep in 22-inch rows April 27. Counter 15G insecticide at 12 pounds product per acre was applied modified in-furrow at planting. Preemerge ethofumesate was applied April 27 after planting. Postemergence treatments were applied May 8, May 15, May 29, and June 1. All treatments were applied in 17 gpa water at 40 psi through 8002 nozzles to the center four rows of six-row by 30-foot long plots. Sugarbeet injury and tear-thumb, velvet leaf, and waterhemp control were evaluated June 11 and June 19. Tear-thumb (Teth) is a smartweed with thorns on the stems.

Date of Application	April 27	May 8	May 15	May 22	June 1
Time of Day	1:00 PM	11:30 AM	12:15 PM	10:30 AM	1:30 PM
Air Temperature (°F)	71	67	60	74	63
Relative Humidity (%)	32	46	29	47	60
Soil Temp. (°F at 6")	54	57	63	66	62
Wind Velocity (mph)	13	4	13	20	5
Cloud Cover (%)	10	10	50	100	100
Soil Moisture	Good	Good	Good	Good	Good
Sugarbeet	preemerge	Cot	Cot-V1.5	V2.1-4.1	V4.8-5.8
Velvetleaf		Cot	Cot-2 lf	1-3 lf	2-4lf(1-4")
Tear-thumb (Smartweed)		Cot	2-4 lf	3-6 lf	2-5"
Redroot Pigweed		Cot	Cot-2 lf	2-4 lf	2-81f(1/2-4'')

Date of Treatment* Application Rate (1b/A) De&Ph&Et+Tfsu+Clpy+CletM+MSO	inj	Velf		Wahe	Sgbt	Velf	Teth	Wahe
(1b/A) De&Ph&Et+Tfsu+Clpy+CletM+MSO								mana
De&Ph&Et+Tfsu+Clpy+CletM+MSO		cntl	cntl	cntl	inj	cntl	cntl	cntl
	ę	oło	olo	010	olo	oło	q	8
(May 8, 15, 22, June 1)								
0.08+0.004+0.03+0.03+1.5%	18	92	91	83	10	89	86	64
De&Ph&Et+Tfsu+Clpy+CletM+MSO (May 8,15)								
0.12+0.004+0.03+0.03+1.5%								
De&Ph&Et+Tfsu+Clpy+CletM+MSO(May 22)								
0.16+0.004+0.03+0.03+1.5								
De&Ph&Et+Tfsu+Clpy+CletM+MSO(June 1) 0.22+0.004+0.03+0.03+1.5%	23	92	92	91	14	89	89	76
De&Ph&Et+Tfsu+Clpy+CletM (May 8)			52	<u> </u>				/0
0.25+0.008+0.06+0.03								
De&Ph&Et+Tfsu+Clpy+CletM (May 15, 22)								
0.33+0.008+0.06+0.03								
De&Ph&Et+Tfsu+Clpy+CletM (June 1)								
0.5+0.008+0.06+0.03	29	87	95	99	23	81	92	99
De&Ph&Et+Tfsu+Clpy+CletM+MSO+Etho	1							-
(May 8, 15, 22, June 1)								
0.08+.004+.03+.03+1.5%+.094	13	94	93	88	9	90	90	73
Ethofumesate(Pre) (April 27) 3.75								
Desm&Phen&Etho (May 8) 0.25								
Desm&Phen&Etho (May 15, 22) 0.33								
Desm&Phen&Etho (June 1) 0.5	11	48	94	99	0	46	97	99
Glyt+Premier90+AMS (May 15, June 1)	_							
1+0.25%+1.7	0	94	94	98	0	90	94	94
Glyt+Premier90+AMS(May 8,15,22, June 1)	-							<u>.</u>
1+0.25%+1.7	0	97	98	98	0	93	96	94
Glyt+Premier90+AMS (May 8) 1+0.25%+1.7	0	5	5	0	0	0	0	0
Glyt+Premier90+AMS (May 15) 1+0.25%+1.7	0	69	74	95	0	60	54	85
Glyt+Premier90+AMS (May 22) 1+0.25%+1.7	0	93	92	97	0	90	89	89
	0	64	35	91	0			

### Sugarbeet Herbicides, Milan, 2007. (continued)

			•					
		Jun	e 11			June	e 19	
Date of	Sgbt	Velf	Teth	Wahe	Sgbt	Velf	Teth	Wahe
Treatment* Application Rate	inj	cntl	cntl	cntl	inj	cntl	cntl	cntl
(1b/A)	olo	<del>o</del> o	8	8	00	8	90	00
Glyt+Premier90+AMS+Tfsu (May 15, June 1)								
1+0.25%+1.7+0.008	1	97	95	99	0	95	95	97
Glyt+P90+AMS+Tfsu (May 15, June 1)			······		1.111		- 15. - 15.	-
1+0.25%+1.7+0.032	3	97	95	99	3	96	96	99
Glyt+Premier90+AMS+Flumiclorac (May 15)		N	······································	· · ·				· · · · ·
1+0.25%+1.7+0.015								
Glyt+Premier90+AMS (June 1)								
1+0.25%+1.7	91	94	93	97	79	92	90	94
Glyt+Premier90+AMS+Clpy (May 22)					an a			
1+0.25%+1.7+0.03								
Glyt+Premier90+AMS (June 1)								
1+0.25%+1.7	4	94	95	98	0	92	96	93
Glyt+Premier90+AMS+Clpy (May 22)				· · · · ·			New York	-
1+0.25%+1.7+0.06								
Glyt+Premier90+AMS (June 1)								
1+0.25%+1.7	4	95	93	98	0	. 93	98	95
Glyt+Premier90+AMS+CletM (May 15)					1997 - 19			
1+0.25%+1.7+0.09								
Glyt+Premier90+AMS (June 1)								
1+0.25%+1.7	0	91	89	97	0	88	76	91
Glyt+Premier90+AMS+Etho (May 8)		· · ·						
1+0.25%+1.7+3.75								
Glyt+Premier90+AMS (June 1)								
1+0.25%+1.7	4	83	80	74	0	83	70	51
Ethofumesate (Pre) (April 27) 3.75			······				- -	·.
Glyt+Premier90+AMS (May 15, June 1)								
1+0.25%+1.7	1	89	93	99	0	88	92	99
EXP MEAN	11	83	84	89	7	81	82	83
C.V. %	30	7	7	4	62	8	11	- 8
LSD 5%	5	9	9	4	6	9	13	9
LSD 1%	6	12	11	6	8	12	18	12
# OF REPS	4	4	4	4	4	4	4	4
* Premier 90=non-ionic surfactant from Wes	t Con	tral.	MSO	methyl	atod e	and o	il fr	<u></u>

\* Premier 90=non-ionic surfactant from West Central; MSO=methylated seed oil from Loveland; AMS=Am-Stik liquid ammonium sulfate from West Central.

### Combined Evaluations

	Date of			Sgbt	Velf	Teth	Wahe
Treatment*	Application	Rate		inj	cntl	cntl	cntl
		(lb/A)		0j0	8	olo	-90
De&Ph&Et+Tfsu+(	Clpy+CletM+MSO						
	(May 8, 15, 22, June 1)						
	0.08+0.004+	0.03+0.03+1.5%		14	91	89	73
De&Ph&Et+Tfsu+(	Clpy+CletM+MSO (May 8,15)				er segure	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - N	
	0.12+0.004+	0.03+0.03+1.5%					
De&Ph&Et+Tfs	u+Clpy+CletM+MSO (May 22)						
	0.16+0.004+	0.03+0.03+1.5%					
De&Ph&Et+Tfsı	1+Clpy+CletM+MSO (June 1)						
	0.22+0.004+	0.03+0.03+1.5%		18	91	90	83
		· · · · · ·	1. I. I. I.				

### Sugarbeet Herbicides, Milan, 2007. (continued)

		e of		2			Wahe
Treatment*	Appli	.cation	Rate	inj			cntl
			(lb/A)	olo	olo	୧୨	olo
De&Ph&Et+Tfsu+Clpy+Clet			.25+0.008+0.06+0.03				
De&Ph&Et+Tfsu+Clpy+Cl	· · · · ·				<u>.</u>	~ ~ ~	
De&Ph&Et+Tfsu+Clpy+Cl			0.5+0.008+0.06+0.03	26	84	94	99
De&Ph&Et+Tfsu+Clpy+Clet						-	
(May 8,	15, 22,		4	1 1	0.0	0.0	0.0
			4+.03+.03+1.5%+.094	11	92	92	80
Ethofumesate(Pre)	(Ap	oril 27)	3.75				
Desm&Phen&Etho Desm&Phen&Etho	(Most	(May 8)	0.25	•			
Desm&Phen&Etho	-	15, 22) (June 1)	0.33 0.5	6	47	96	99
			1+0.25%+1.7	0	92	94	.96
Glyt+Premier90+AMS	(May 15,						
Glyt+Premier90+AMS(May	8,15,22,		1+0.25%+1.7	0	95	97	96
Glyt+Premier90+AMS	·	(May 8)	1+0.25%+1.7	0	3	3	
Glyt+Premier90+AMS		(May 15)	1+0.25%+1.7	0	64	64	90
Glyt+Premier90+AMS		(May 22)	1+0.25%+1.7	0	91	91	93
Glyt+Premier90+AMS		(June 1)	1+0.25%+1.7	0	72	50	92
Glyt+Premier90+AMS+Tfsu	(May 15,	June 1)	1+0.25%+1.7+0.008	1	96	95	98
	(May 15,		1+0.25%+1.7+0.032	3	96	96	99
Glyt+Premier90+AMS+Flum	iclorac (	(May 15)	1+0.25%+1.7+0.015				
		(June 1)	1+0.25%+1.7	85	93	91	95
Glyt+Premier90+AMS+Clpy	ł	(May 22)	1+0.25%+1.7+0.03				·····
Glyt+Premier90+AMS	1	(June 1)	1+0.25%+1.7	2	93	95	95
Glyt+Premier90+AMS+Clpy		(May 22)	1+0.25%+1.7+0.06				1
Glyt+Premier90+AMS		(June 1)	1+0.25%+1.7	2	94	95	96
Glyt+Premier90+AMS+Clet	M	(May 15)	1+0.25%+1.7+0.09				
Glyt+Premier90+AMS		(June 1)	1+0.25%+1.7	0	89	83	94
Glyt+Premier90+AMS+Etho		(May 8)	1+0.25%+1.7+3.75				
Glyt+Premier90+AMS		(June 1)	1+0.25%+1.7	2	83	75	63
Ethofumesate (Pre)	(Ap	oril 27)	3.75				
Glyt+Premier90+AMS	(May 15,	June 1)	1+0.25%+1.7	1	88	92	99
EXP MEAN				9	82	83	86
C.V. %				48	6	11	
LSD 5%				4	6		
LSD 1%				6	8	12	
# OF REPS				8	8	8	8

\* Premier 90=non-ionic surfactant from West Central; MSO=methylated seed oil from Loveland; AMS=Am-Stik liquid ammonium sulfate from West Central.

SUMMARY: Weed control with glyphosate was generally less at Milan than at other locations. Triflusulfuron added to glyphosate tended to improve weed control compared to glyphosate used alone. Weed control with glyphosate applied once on June 1 was poor compared to glyphosate applied once on May 22. Rainfall started during the last few treatments on June 1, and rain shortly after application probably washed off some of the glyphosate. Velvetleaf and tear-thumb control was affected more than waterhemp control. Glyphosate caused less sugarbeet injury than conventional treatments. Flumiclorac caused severe sugarbeet injury. The micro-rate and mid-rate treatments which included MSO gave better velvetleaf control than the conventional rate without MSO. The conventional rate gave better control of waterhemp than the micro-rate or mid-rate. PRE ethofumesate followed by POST desm&phen&etho gave poor velvetleaf control but good control of tear-thumb and waterhemp. <u>Sugarbeet herbicides, Kindred, 2007</u>. (Dexter) 'Beta RZ02RR07' sugarbeet was seeded 1.25 inches deep in 22-inch rows April 30. Counter 15G insecticide at 12 pounds product per acre was applied modified in-furrow at planting. Preemerge ethofumesate was applied April 30 after planting. Postemergence treatments were applied May 17, May 25, June 5, and June 25. All treatments were applied in 17 gpa water at 40 psi through 8002 nozzles to the center four rows of six-row by 30-foot long plots. Sugarbeet injury and common lambsquarters and redroot pigweed control were evaluated July 5 and July 13.

Date of Application	April 30	May 17	May 25	June 5	June 25
Time of Day	3:00 PM	11:30 AM	11:45 AM	1:00 PM	8:30 AM
Air Temperature (°F)	75	67	56	69	75
Relative Humidity (%)	18	17	41	22	52
Soil Temp. (°Fat 6")	54	53	51	60	70
Wind Velocity (mph)	6	16	4	2	8
Cloud Cover (%)	70	100	100	5	50
Soil Moisture	Good	Good	Good	Good	Good
Sugarbeet	preemerge	Cot	V1.1-2.0	V5.5-6.2	V9.5-12.2
Common Lambsquarters		Cot	Cot-21f	4-81f(2-5")	6-12"
Redroot Pigweed		Cot	Cot-11f	3-61f	6-12"

				July 5	)		July 1	_3
	Date of		Sgbt	Rrpw	Colq	Sgbt	Rrpw	Colq
Treatment*	Application	Rate	inj	cntl	cntl	inj	cntl	cntl
	<u></u>	(1b/A)	용	ę	8	90	8	8
De&Ph&Et+Tfsu+	Clpy+CletM+MSO							
(Ma	y 17, 25, June 5,							
	0.08+0.004	+0.03+0.03+1.5%	0	93	97	0	85	98
De&Ph&Et+Tfsu+	Clpy+CletM+MSO (Ma	ay 17, 25)		an Anna an Anna Anna an Anna			n an an an Ara An Anna an Anna An	
		+0.03+0.03+1.5%						
De&Ph&Et+Tfs	su+Clpy+CletM+MSO							
· · · ·		+0.03+0.03+1.5%						
De&Ph&Et+Tfs	su+Clpy+CletM+MSO							
		+0.03+0.03+1.5%	0	92	99	0	90	97
De&Ph&Et+Tfsu+	Clpy+CletM (May 1							
		0.008+0.06+0.03						
De&Ph&Et+Tfs	su+Clpy+CletM (May	-						
		0.008+0.06+0.03						
De&Ph&Et+Tfs	su+Clpy+CletM (June							
		0.008+0.06+0.03	0	98	99	0	98	99
	-Clpy+CletM+MSO+Et							
( M	May 17, 25, June 5,					-		
·		3+.03+1.5%+.094	0	94	99	0	93	98
Ethofumesate(E		3.75						
Desm&Phen&Et	(7 /	0.25						
Desm&Phen&Et					~ ~			
Desm&Phen&Et	····· ( · ····· · · · · /	0.5	0	99	99	0	99	99
Glyt+Premier90	)+AMS (May 25, Jun							
· · · ·		1+0.25%+1.7	0	99	99	0	99	99
Glyt+Premier90	)+AMS (May 17, 25,							
14. 1.		1+0.25%+1.7	0	99	99	0	99	99
Glyt+Premier90	)+AMS (May 17)	1+0.25%+1.7	0	55	58	0	38	43
Glyt+Premier90	)+AMS (May 25)	1+0.25%+1.7	Ó	58	87	0	43	79
Glyt+Premier90	)+AMS (June 5)	1+0.25%+1.7	0	99	99	0	99	99
Glyt+Premier90	· _ · · · · · · · · · · · · · · · · · ·	1+0.25%+1.7	0	99	96	0	99	90

Table continued on next page.

4

# Sugarbeet Herbicides, Kindred, 2007. (continued)

				July 5			July 1	.3
	Date of		Sgbt	Rrpw	Colq	Sgbt	Rrpw	Colq
Treatment*	Application	Rate	inj	cntl	cntl	inj	cntl	cntl
		(lb/A)	olo	8	ę	00 D	0jo	olo
Glyt+Premier90+	AMS+Tfsu (May 25, Ju							
	1+0.25	8+1.7+0.008	0	99	99	0	99	99
Glyt+P90+AMS+Tf	su (May 25, June 25)							
	1+0.25	8+1.7+0.032	. 0	99	99	0	99	99
Glyt+Premier90+	AMS+Flumiclorac (May	25)						
	1+0.25	8+1.7+0.015						
Glyt+Premier9	0+AMS (June 25)	1+0.25%+1.7	64	99	99	58	99	98
Glyt+Premier90+	AMS+Clpy (May 25)							
-	1+0.2	5%+1.7+0.03						
Glyt+Premier9	0+AMS (June 25)	1+0.25%+1.7	0	99	99	0	99	99
Glyt+Premier90+	AMS+Clpy (May 25)							
-	1+0.2	5%+1.7+0.06						
Glyt+Premier9	0+AMS (June 25)	1+0.25%+1.7	0	99	99	0	99	99
Glyt+Premier90+	AMS+CletM (May 25)							
	1+0.2	5%+1.7+0.09						
Glyt+Premier9	0+AMS (June 25)	1+0.25%+1.7	0	99	99	0	99	99
Glyt+Premier90+	AMS+Etho (May 17)	····						
	1+0.2	5%+1.7+3.75						
Glyt+Premier9	0+AMS (June 25)	1+0.25%+1.7	0	99	99	0	99	99
Ethofumesate (P	re) (April 30)	3.75						
Glyt+Premier9	0+AMS (May 25, June	25)						
		1+0.25%+1.7	0	99	99	0	99	99
EXP MEAN			3	93	96	3	91	94
C.V. %			123	5	4	95	4	4
LSD 5%			6	7	6	4	5	5
LSD 1%			8	10	7	5	7	7
# OF REPS			4	4	4	4	4	4

\* Premier 90=non-ionic surfactant from West Central; MSO=methylated seed oil from Loveland; AMS=Am-Stik liquid ammonium sulfate from West Central.

### Combined Evaluations

	Date of				Colq
Treatment*	Application	Rate	inj	cntl	cntl
		(lb/A)		olo	0jo
De&Ph&Et+Tfsu+Clpy+Cle	etM+MSO				
(May	17, 25, June 5, 25)				
	0.08+0.004+0	.03+0.03+1.5%	0	89	98
De&Ph&Et+Tfsu+Clpy+Cle	etM+MSO (May 17,25)				
	0.12+0.004+0	.03+0.03+1.5%			
De&Ph&Et+Tfsu+Clpy+	CletM+MSO (June 5)				
	0.16+0.004+0	0.03+0.03+1.5%			
De&Ph&Et+Tfsu+Clpy+	CletM+MSO (June 25)	·			
	0.22+0.004+0	0.03+0.03+1.5%	0	91	98

### Sugarbeet Herbicides, Kindred, 2007. (continued)

		Date						Rrpw	-
Treatment*	· · · · ·	Applica	tion	1 - 5 <sup>-</sup>	Rate	<u></u>	inj	cntl	cntl
					(lb/A)		8	90 10	90
De&Ph&Et+Tfsu+Cl					.008+0.06+0.03				
De&Ph&Et+Tfsu+									
De&Ph&Et+Tfsu+	and the state of the		25)	0.5+0.	.008+0.06+0.03	3	0	98	99
De&Ph&Et+Tfsu+Cl			051						
	(May 17	, 25, June 5		0041 001			0	0.2	0.0
				.004+.034	+.03+1.5%+.094		0	93	99
Ethofumesate (Pre		(April	•		3.75				
Desm&Phen&Etho Desm&Phen&Etho		(May (May 25, Jun			0.25				
Desm&Phen&Eth		(May 25, Juli (June			0.53		0	99	99
Glyt+Premier90+A		May 25, June			1+0.25%+1.7		0	99	99
Glyt+Premier90+A		17,25,June 5			1+0.25%+1.7		0	99	99
Glyt+Premier90+A		(May			1+0.25%+1.7		0	46	50
Glyt+Premier90+A		(May			1+0.25%+1.7		0	50	83
Glyt+Premier90+A	MS	(Jun	e 5)	and the second	1+0.25%+1.7	1	0	99	99
Glyt+Premier90+A	MS	(June	25)		1+0.25%+1.7	1	0	99	93
Glyt+Premier90+A	MS+Tfsu	(May 25, June	25)	1+0.	.25%+1.7+0.008	}	0	99	99
Glyt+P90+AMS+Tfs	su	(May 25, June	25)	1+0.	.25%+1.7+0.032	2	0	99	99
Glyt+Premier90+A	MS+Flumi	clorac (May	25)	1+0.	.25%+1.7+0.015	5			
Glyt+Premier90	)+AMS	(June	25)		1+0.25%+1.7	7	61	99	99
Glyt+Premier90+A	AMS+Clpy	(May	25)	1+(	0.25%+1.7+0.03	3		• .	1
Glyt+Premier90	)+AMS	(June	25)		1+0.25%+1.7	7	0	99	99
Glyt+Premier90+A	AMS+Clpy	(May	25)	1+(	0.25%+1.7+0.06	5	***************************************		
Glyt+Premier90	)+AMS	(June	25)		1+0.25%+1.7	7	0	99	99
Glyt+Premier90+A	AMS+CletM	(May	25)	1+(	).25%+1.7+0.09	)		1	
Glyt+Premier90		(June			1+0.25%+1.7	7	0	99	99
Glyt+Premier90+A		(May		1+(	).25%+1.7+3.75				
Glyt+Premier90	)+AMS	(June	25)	1.545.5	1+0.25%+1.7	7	0	99	99
Ethofumesate (Pr		(April			3.75				
Glyt+Premier90	)+AMS (	May 25, June	25)		1+0.25%+1.7	7	0	99	99
and a second									
EXP MEAN							3	92	95
C.V. %							106	5	4
LSD 5%							3	5	4
LSD 1%							4	7	5
# OF REPS				last Canta	male MCO-mathe		8	8	8

\* Premier 90=non-ionic surfactant from West Central; MSO=methylated seed oil from Loveland; AMS=Am-Stik liquid ammonium sulfate from West Central.

**SUMMARY:** Glyphosate applied once on May 17 or May 25 gave less weed control than when applied on June 5 or June 25 because many weeds emerged after May 25. Two glyphosate applications gave nearly total weed control. Registered herbicide treatments at all rates gave 98 to 99% control of common lambsquarters but the micro-rate and mid-rate treatments gave less redroot pigweed control than the conventional-rate treatments. Conventional-rate treatments gave weed control similar to glyphosate. Flumiclorac caused severe sugarbeet injury.

Sugarbeet herbicides, Prosper, 2007. (Dexter) 'Beta RZ02RR07' sugarbeet was seeded 1.25 inches deep in 22-inch rows May 3. Counter 15G insecticide at 12 pounds product per acre was applied modified in-furrow at planting. 'Plainsman' amaranth, 'Interstate Hyola 420' canola at 14 lb/A, quinoa (*Chenopodium quinoa*), 'Golden German' millet at 34 lb/A, 'Maida' oat at 26 lb/A, and yellow-seeded flax at 12 lb/A were seeded in 4 foot strips across herbicide plots May 3, prior to sugarbeet seeding. Preemerge ethofumesate was applied May 2 after planting. Postemergence treatments were applied May 21, May 28, June 5, and June 21. All treatments were applied in 17 gpa water at 40 psi through 8002 nozzles to the center four rows of six-row by 30-foot long plots. The entire experiment was sprayed with Headline at 9 fl oz/A July 31. Redroot pigweed and amaranth, common lambsquarters and quinoa, canola, flax, millet, and oat, control were evaluated June 29 and July 9. Sugarbeet from the center 2 rows was counted and harvested September 11.

Date of Application	May 3	May 21	May 28	June 5	June 21
Time of Day	10:00 AM	1:00 PM	12:30 PM	10:45 AM	12:00 PM
Air Temperature (°F)	61	71	80	62	79
Relative Humidity (%)	31	64	46	20	33
Soil Temp. (°F at 6")	50	55	58	61	70
Wind Velocity (mph)	18	17	18	5	9
Cloud Cover (%)	10	90	65	5	30
Soil Moisture	Good	Good	Good	Good	Good
Sugarbeet		V1.0-1.5	V2.1-2.7	V4.2-5.9	V10.9-13.9
Redroot Pigweed		1-21f	2-31f	3-61f	8-10"
Amaranth		Cot-11f	2-31f	3-41f	8-12"
Quinoa		Cot-21f	4-61f(2")	(3-6")	12-20"
Canola		Cot-21f	3-41f(2-3")	5-61f(6")	28-32"
Flax		Cot-21f	(1/2-2")	(3-6")	8-14"
Millet		1.9-2.5lf	3-4lf(1-3")	4-5lf(3-6")	10-14"
Oats		1.9-2.11f	3-41f(4-5")	4-51f(6-8")	28-32"
Com.Lambsquarters		Cot-21f	2-41f	6-81f(2-4")	10-14"

#### June 29 Evaluation

					Colq	Rrpw			
ι.	Date of		Sgbt	Cano	Quin	Amar	Flax	Oats	Mill
Treatment*	Application	Rate	inj	cntl	cntl	cntl	cntl	cntl	cntl
<u>, , , , , , , , , , , , , , , , , , , </u>		(lb/A)	olo	90	olo	00	00	99	99 99
De&Ph&Et+Tfsu+C	Clpy+CletM+MSO								
(May	/ 21, 28, June 5, 21	)							
	0.08+0.004+0.03+	0.03+1.5%	8	87	98	76	70	99	99
De&Ph&Et+Tfsu+C	Clpy+CletM+MSO								
	(May 21, 28)								
	0.12+0.004+0.03+	0.03+1.5%							
De&Ph&Et+Tfsu	u+Clpy+CletM+MSO (Ju	ne 5)							
	0.16+0.004+0.03+	0.03+1.5%							
De&Ph&Et+Tfsu	u+Clpy+CletM+MSO (Ju	ne 21)							
	0.22+0.004+0.03+	0.03+1.5%	13	90	99	95	85	99	99
De&Ph&Et+Tfsu+(	Clpy+CletM (May 21)								
	0.25+0.008+	0.06+0.03							
De&Ph&Et+Tfsı	u+Clpy+CletM (May 28	, June 5)							
	0.33+0.008+	0.06+0.03							
De&Ph&Et+Tfsı	u+Clpy+CletM (June 2	1)							
	0.5+0.008+	0.06+0.03	29	96	99	99	97	99	99
De&Ph&Et+Tfsu+C	Clpy+CletM+MSO+Etho								
( Ma	ay 21, 28, June 5, 2	:1)							
0.0	08+0.004+0.03+0.03+1	.5%+0.094	11	88	99	94	71	99	99

### June 29 Evaluation

					Colq	Rrpw			
	Date of		Sgbt	Cano	Quin	Amar	Flax	Oats	Mill
Treatment*	Application	·····	inj	cntl	cntl	cntl	cntl	cntl	cntl
		(1b/A)	90 00	00	olo	olo	00	O <sub>2</sub> O	olo
Ethofumesate(Pre)		3.75							
Desm&Phen&Etho	(May 21)	0.25							
Desm&Phen&Etho Desm&Phen&Etho	(May 28, Julie (June 21)	5) 0.33 0.5	16	96	99	99	99	99	99
Glyt+Premier90+AN			<u> </u>						
Stycritchicit 50.m	15 (114 <i>y</i> 20 <b>)</b> 04	1+0.25%+1.7	0	98	99	99	.99	99	99
Glyt+Premier90+AN	1S (May 21, 28	, June 5, 21)							
		1+0.25%+1.7	0	99	99	99	99	99	99
Glyt+Premier90+AN	1S (May 21)	1+0.25%+1.7	0	94	48	73	85	94	55
Glyt+Premier90+AN	1S (May 28)	1+0.25%+1.7	0	98	87	89	99	97	97
Glyt+Premier90+AN	AS (June 5)	1+0.25%+1.7	0	98	97	98	98	98	99
Glyt+Premier90+AN	4S (June 21)	1+0.25%+1.7	0	30	96	96	91	97	97
Glyt+Premier90+AN	AS+Tfsu (May 2	8, June 5)		N. CAN	a de la com	e te se di la			
한 말을 못하는 것을 주요?	1+0.	25%+1.7+0.008	0	99	99	99	99	99	99
Glyt+P90+AMS+Tfsı	ı (May 28, Jun	e 21)			· ·-	1.1			
1		25%+1.7+0.032	0	99	99	99	99	99	99
Glyt+Premier90+AN									
		25%+1.7+0.015		0.0				~~	
Glyt+Premier90		1+0.25%+1.7	58	99	99	99	99	99	99
Glyt+Premier90+AN		8)							
Glyt+Premier90+		1+0.25%+1.7	0	99	99	99	99	99	99
Glyt+Premier90+AN									
		.25%+1.7+0.06							
Glyt+Premier90+		1+0.25%+1.7	0	98	99	99	99	99	99
Glyt+Premier90+AN	AS+CletM (May	28)							
		.25%+1.7+0.09							
Glyt+Premier90+		1+0.25%+1.7	0	99	99	99	99	99	99
Glyt+Premier90+AM	ang sa sang sa 🖷 sa sa s								
		.25%+1.7+3.75	0	0.0	99	0.0	0.0	0.0	:
Glyt+Premier90+		1+0.25%+1.7	0	99	99	99	99	99	99
Ethofumesate (Pre Glyt+Premier90+		3.75							
Grychitemiter 304	MAD (May 20,	1+0.25%+1.7	1	99	99	99	99	99	99
								55	<u> </u>
EXP MEAN			7	93	95	95	94	98	96
C.V. %			34	3	8	6	4	1	6
LSD 5%			3	3	11	8	5	1	8
LSD 1%			5	5	15	10	7	1	10
# OF REPS			4	4	4	4	4	- 4	4

Loveland; AMS=Am-Stik liquid ammonium sulfate from West Central.

Experiment continued on next page.

July 9 Evaluation

Treatment*	Date of Application	Rate	Sgbt inj	Cano cntl	Colq Quin cntl	Rrpw Amar cntl	Flax cntl	Oats cntl	Mill cntl
	<u>-</u>	(1b/A)	<u>)</u> %		8	8	8	8	
De&Ph&Et+Tfsu+C	lpy+CletM+MSO								
(May	21, 28, June 5, 21								
	0.08+0.004+0.03+	0.03+1.5%	5	81	91	70	48	99	99
De&Ph&Et+Tfsu+C	lpy+CletM+MSO								
	(May 21, 28)								
	0.12+0.004+0.03+								
De&Ph&Et+Tfsu	+Clpy+CletM+MSO (Ju								
DecDbcEtl@fau	0.16+0.004+0.03+								
De&Ph&Et+TISu	+Clpy+CletM+MSO (Ju 0.22+0.004+0.03+		10	86	98	91	50	99	99
Do(Db(F++Tfau+C))	lpy+CletM (May 21)	0.03+1.5%		00	90	91		33	
Dearmantituto	0.25+0.008+	0 06+0 03							
De&Ph&Et+Tfsu	+Clpy+CletM (May 28								
Dournuberrebu	0.33+0.008+								
De&Ph&Et+Tfsu	+Clpy+CletM (June 2								
	0.5+0.008+	0.06+0.03	18	96	99	99	98	99	99
De&Ph&Et+Tfsu+C	lpy+CletM+MSO+Etho	·····							
(Ma	y 21, 28, June 5, 2	1)							
0.0	8+0.004+0.03+0.03+1	.5%+0.094	8	80	96	92	53	99	99
Ethofumesate(Pr		3.75							
Desm&Phen&Eth		0.25							
	o(May 28, June 5)	0.33	<i>c</i>	0.0			0.0	• •	
Desm&Phen&Eth		0.5	6	96	99	99	99	99	99
Glyt+Premier90+	AMS (May 28, June 2		0	0.0	0.0	0.0	0.0	0.0	0.0
		0.25%+1.7	0	99	99	99	99	99	99
Giyt+Premier90+.	AMS (May 21, 28, Ju		0	99	0.0	0.0	99	0.0	0.0
		0.25%+1.7			99	99		99	99
Glyt+Premier90+		0.25%+1.7	0	93	28	45	90	97	48
Glyt+Premier90+		0.25%+1.7	0	98	65	79	99	99	99
Glyt+Premier90+		0.25%+1.7	0	98	91	97	99	99	99
Glyt+Premier90+	AMS (June 21) 1+	0.25%+1.7	0	94	99	99	99	99	99
Glyt+Premier90+	AMS+Tfsu (May 28, J	une 5)							
<u></u>		1.7+0.008	0	99	99	99	99	99	99
Glyt+P90+AMS+Tf	su (May 28, June 21								
		1.7+0.032	0	99	99	99	99	99	99
Glyt+Premier90+	AMS+Flumiclorac (Ma								
		1.7+0.015	~~	0.0	~~~	0.0		0.0	0.0
	0+AMS (June 21) 1+	U.25%+⊥./	33	99	99	99	99	99	99
GLYt+Premier90+.	AMS+Clpy (May 28)	1 7 0 02							
GluttBrowtorg		+1.7+0.03	0	99	99	99	99	99	99
	AMS+Clpy (May 28)	U.2JOTI./	U	23	27	22		27	
GTAC+LLewfelane.a0+	1 . 1	+1.7+0.06							
Glyt+Premier9		0.258+1.7	0	99	99	99	99	99	99
		0.20011.1	U						

### July 9 Evaluation

				·	Colq	Rrpw			
Da	te of		Sgbt	Cano	Quin	Amar	Flax	Oats	Mill
Treatment* Appl	ication	Rate	inj	cntl	cntl	cntl	cntl	cntl	cntl
		(lb/A)	olo	8	8	8	<u>8</u>	용	8
Glyt+Premier90+AMS+Clet	:M (May 28)								
	1+0.258	\$+1.7+0.09							
Glyt+Premier90+AMS (J	June 21) 1+	-0.25%+1.7	0	99	99	99	99	99	99
Glyt+Premier90+AMS+Ethc	) (May 21)		· . ·	1999 - A.					-
	1+0.25%	\$+1.7+3.75							
Glyt+Premier90+AMS (J	June 21) 1+	-0.25%+1.7	0	99	99	99	99	99	99
Ethofumesate (Pre) (Ma	iy 3)	3.75							
Glyt+Premier90+AMS (M	lay 28, June	e 21)							
	1+	-0.25%+1.7	0	99	99	99	99	99	99
EXP MEAN			4	95	92	93	91	99	96
C.V. %			68	4	8	8	6	0	- 5
LSD 5%			4	5	10	11	8	1	7
LSD 1%			5	6	13	15	10	1	10
# OF REPS			4	4	4	4	4	4	4

\* Premier 90=non-ionic surfactant from West Central; MSO=methylated seed oil from Loveland; AMS=Am-Stik liquid ammonium sulfate from West Central.

### Combined Evaluations

	**********				Colq	Rrpw	·		
	Date of		Sqbt	Cano	Ouin	Amar	Flax	Oats	Mill
Treatment*	Application	Rate	inj	cntl	cntl	cntl	cntl	cntl	cntl
		(lb/A)		0jo	8	8	8	8	90
De&Ph&Et+Tfsu+C	lpy+CletM+MSO								
(May	21, 28, June 5, 2	:1)							
	0.08+0.004+0.03	\$+0.03+1.5%	6	84	94	73	59	99	99
De&Ph&Et+Tfsu+C	lpy+CletM+MSO								
	(May 21, 28)								
	0.12+0.004+0.03	8+0.03+1.5%							
De&Ph&Et+Tfsu	+Clpy+CletM+MSO (J	June 5)							
	0.16+0.004+0.03	8+0.03+1.5%							
De&Ph&Et+Tfsu	+Clpy+CletM+MSO (J								
	0.22+0.004+0.03	3+0.03+1.5%	12	88	99	93	68	99	99
De&Ph&Et+Tfsu+C	lpy+CletM (May 21)								
		8+0.06+0.03							
De&Ph&Et+Tfsu	+Clpy+CletM (May 2								
		8+0.06+0.03							
De&Ph&Et+Tfsu	+Clpy+CletM (June								
	0.5+0.008	8+0.06+0.03	23	96	99	99	97	99	99
	lpy+CletM+MSO+Etho								
	y 21, 28, June 5,								
0.0	8+0.004+0.03+0.03+	-1.5%+0.094	9	84	97	93	62	99	99
Ethofumesate(Pr	e) (May 3)	3.75							the parts
Desm&Phen&Eth		0.25							
	o(May 28, June 5)	0.33							
Desm&Phen&Eth	o (June 21)	0.5	11	96	99	99	99	99	99
Glyt+Premier90+	AMS (May 28, June	21)							
		L+0.25%+1.7	0	99	99	99	99	99	99
Glyt+Premier90+	AMS (May 21, 28, 3	June 5, 21)				1.1	1.		
	-	L+0.25%+1.7	0	99	99	99	99	99	99
								A ALL LA	

### Combined Evaluations

			Colq	Rrpw			
Date of	Sgbt	Cano	Quin	Amar	Flax	Oats	Mill
Treatment* Application Rate	inj	cntl	cntl	cntl	cntl	cntl	cntl
(lb/A)	olo	olo	olo	olo	do	olo	olo
Glyt+Premier90+AMS (May 21) 1+0.25%+1.7	0	93	38	59	88	95	51
Glyt+Premier90+AMS (May 28) 1+0.25%+1.7	0	98	76	84	99	98	98
Glyt+Premier90+AMS (June 5) 1+0.25%+1.7	0	98	94	97	99	99	99
Glyt+Premier90+AMS (June 21) 1+0.25%+1.7	0	62	97	97	95	98	98
Glyt+Premier90+AMS+Tfsu (May 28, June 5) 1+0.25%+1.7+0.008	0	99	99		99	99	99
Glyt+P90+AMS+Tfsu (May 28, June 21)							
1+0.25%+1.7+0.032	0	99	99	99	99	99	99
Glyt+Premier90+AMS+Flumiclorac (May 28) 1+0.25%+1.7+0.015							
Glyt+Premier90+AMS (June 21) 1+0.25%+1.7	45	99	99	99	99	99	99
Glyt+Premier90+AMS+Clpy (May 28)							
1+0.25%+1.7+0.03							
Glyt+Premier90+AMS (June 21) 1+0.25%+1.7	0	99	99	99	99	99	99
Glyt+Premier90+AMS+Clpy (May 28) 1+0.25%+1.7+0.06							
Glyt+Premier90+AMS (June 21) 1+0.25%+1.7	0	98	99	99	99	99	99
Glyt+Premier90+AMS+CletM (May 28)							
1+0.25%+1.7+0.09							
Glyt+Premier90+AMS (June 21) 1+0.25%+1.7	0	99	99	99	99	99	99
Glyt+Premier90+AMS+Etho (May 21)							
1+0.25%+1.7+3.75							
Glyt+Premier90+AMS (June 21) 1+0.25%+1.7	0	99	99	99	99	99	99
Ethofumesate (Pre) (May 3) 3.75							
Glyt+Premier90+AMS (May 28, June 21)							
1+0.25%+1.7	1	99	99	99	99	99	99
EXP MEAN	6	94	94	94	92	99	96
C.V. %	74	9	8	8	8	1	5
LSD 5%	4	8	8	7	7	1	5
LSD 1%	5	11	10	9	9	1	7
# OF REPS	8	8	8	8	8	8	8

\* Premier 90=non-ionic surfactant from West Central; MSO=methylated seed oil from Loveland; AMS=Am-Stik liquid ammonium sulfate from West Central.

### Yield Data

	Date of		Sgbt		Root	Impur	Extr
Treatment*	Application	Rate	Popl	Sucr	Yield	Index	Sucr
		(1b/A)	#/60 <b>′</b>	<u>0</u>	ton/A		lb/A
De&Ph&Et+Tfsu+	Clpy+CletM+MSO						
( M	ay 11, 18, 31, June 12)						
	0.08+0.004+0.03+	0.03+1.5%	81	15.8	25.6	665	7300
De&Ph&Et+Tfsu+	Clpy+CletM+MSO (May 11,1	.8)					
	0.12+0.004+0.03+	0.03+1.5%					
De&Ph&Et+Tfs	u+Clpy+CletM+MSO (May 31	.)					
	0.16+0.004+0.03+	0.03+1.5%					
De&Ph&Et+Tfs	u+Clpy+CletM+MSO (June 1	.2)					
	0.22+0.004+0.03+	0.03+1.5%	88	15.5	26.3	695	7264

Date of Treatment* Application Rate	Sgbt				
Treatment* Application Rate			Root	Impur	Extr
	Popl	Sucr	Yield	Index	Sucr
(1b/A)	#/60 <b>'</b>	olo	ton/A		lb/A
De&Ph&Et+Tfsu+Clpy+CletM (May 11)					
0.25+0.008+0.06+0.03 De&Ph&Et+Tfsu+Clpy+CletM (May 18, 31)					
0.33+0.008+0.06+0.03					
De&Ph&Et+Tfsu+Clpy+CletM (June 12)					
0.5+0.008+0.06+0.03	73	15.7	22.8	664	6444
De&Ph&Et+Tfsu+Clpy+CletM+MSO+Etho					la de la seconda
(May 11, 18, 31, June 12)					
0.08+0.004+0.03+0.03+1.5%+0.094	83	15.1	28.8	736	7709
Ethofumesate(Pre) (April 25) 3.75					
Desm&Phen&Etho (May 11) 0.25					
Desm&Phen&Etho (May 18, 31) 0.33			0 - 1	~~~	
Desm&Phen&Etho (June 12) 0.5	73	16.0	25.1	667	7172
Glyt+Premier90+AMS (May 28, June 21)	76	10 5	07 7	600	0004
1+0.25%+1.7     Glyt+Premier90+AMS (May 11, 18, 31, June 12)	76	16.5	27.7	600	8294
Glyt+Premier90+AMS (May 11, 18, 31, June 12) 1+0.25%+1.7	73	16.3	27.4	605	8095
- We have a set of the	****				
Glyt+Premier90+AMS (May 11)   1+0.25%+1.7     Cloth/Decomposition   100	80	16.7	24.3	534	7446
Glyt+Premier90+AMS (May 18) 1+0.25%+1.7	88	15.7	27.2	644	7718
Glyt+Premier90+AMS (May 31)   1+0.25%+1.7	71	15.9	24.4	602	7015
Glyt+Premier90+AMS(June 12) 1+0.25%+1.7	93	15.4	28.2	635	7887
Glyt+Premier90+AMS+Tfsu (May 18, June 12)		144 C			
1+0.25%+1.7+0.008	91	16.1	28.9	627	8419
Glyt+Premier90+AMS+Tfsu (May 18, June 12)					
1+0.25%+1.7+0.032	79	16.4	28.2	579	8422
Glyt+Premier90+AMS+Flumiclorac (May 18) 1+0.25%+1.7+0.015					
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7	77	16.1	25.7	618	7494
Glyt+Premier90+AMS+Clpy (May 31)		TO•T	2.3 • 1	010	/4/4
1+0.25%+1.7+0.03					
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7	76	15.9	28.0	605	8108
Glyt+Premier90+AMS+Clpy (May 31)	a sa ta				
1+0.25%+1.7+0.06					
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7	87	15.7	28.9	638	8176
Glyt+Premier90+AMS+CletM (May 18)			1	1. N. N.	
1+0.25%+1.7+0.09					
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7	67	15.0	25.2	729	6693
Glyt+Premier90+AMS+Etho (May 11)					
1+0.25%+1.7+3.75		15 5	05.1		
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7	70	15.5	25.1	612	7070
Ethofumesate (Pre) (April 25) 3.75					
Glyt+Premier90+AMS (May 18, June 12) 1+0.25%+1.7	73	15.6	25.5	657	7109
1+U.2J6T1./	13	T 0 * 0	دی.پ	0.07	1109
EXP MEAN	79	15.8	26.5	637	7570
C.V. %	16	4.1	9.4	14	10
LSD 5%	NS	0.9	3.5	NS	1021
LSD 1%	NS	NS	NS	NS	1360
# OF REPS	4	4	4	4	4

\* Premier 90=non-ionic surfactant from West Central; MSO=methylated seed oil from Loveland; AMS=Am-Stik liquid ammonium sulfate from West Central. Experiment summary on next page.

#### SUMMARY

The summary is from the combined date of evaluation data. The treatment that included flumiclorac gave the greatest sugarbeet injury. Increased rates of the registered sugarbeet herbicides gave increased sugarbeet injury and increased control of canola, common lambsquarters and quinoa, pigweed spp., and flax. Single applications of glyphosate on May 11 gave less control than single applications on May 18, May 31, or June 12. Two glyphosate applications generally gave better control than a single application.

Sugarbeet herbicides, Moorhead, 2007. (Dexter) 'Beta RZ02RR07' sugarbeet was seeded 1.25 inches deep in 22-inch rows April 30. Counter 15G insecticide at 12 pounds product per acre was applied modified in-furrow at planting. Preemerge ethofumesate was applied April 30 after planting. Postemergence treatments were applied May 17, May 29, June 5, and June 20. All treatments were applied in 17 gpa water at 40 psi through 8002 nozzles to the center four rows of six-row by 30-foot long plots. Sugarbeet injury and common lambsquarters and redroot pigweed control were evaluated June 29 and July 10.

April 30	May 17	May 29	June 5	June 20
12:30 PM	10:15 AM	9:00 AM	3:15 PM	8:30 AM
63	62	78	67	76
21	22	58	24	47
50	52	60	69	62
3	10	9	3	0
100	0	85	0	0
Good	Good	Good	Good	Good
preemerge	Cot-V1.2	V2.2-2.9	V4.5-5.9	V10-12
	Cot-21f	4-61f	6-81f(2-5")	4-61f(10-12")
	Cot	2-41f	4-61f	8-10"
	12:30 PM 63 21 50 3 100 Good	12:30 PM 10:15 AM   63 62   21 22   50 52   3 10   100 0   Good Good   preemerge Cot-V1.2    Cot-21f	12:30 PM 10:15 AM 9:00 AM   63 62 78   21 22 58   50 52 60   3 10 9   100 0 85   Good Good Good   preemerge Cot-V1.2 V2.2-2.9    Cot-21f 4-61f	12:30 PM 10:15 AM 9:00 AM 3:15 PM   63 62 78 67   21 22 58 24   50 52 60 69   3 10 9 3   100 0 85 0   Good Good Good Good   preemerge Cot-V1.2 V2.2-2.9 V4.5-5.9    Cot-21f 4-61f 6-81f(2-5")

			· · · · · · · · · · · · · · · · · · ·	Turno	0		T	0
	Date of		Sgbt	June 2 Rrpw	Colq	Sgbt	July 1 Rrpw	Colq
Treatment*	Application	Rate	ini	cntl	cntl	inj	cntl	cntl
		(lb/A)	 8	 &		5	 05	8
De&Ph&Et+Tfsu+C	Clpy+CletM+MSO	<b>v v v</b>				and English		
	, 17, 29, June 5,	20)						
	0.08+0.004+	+0.03+0.03+1.5%	11	95	99	0	94	98
De&Ph&Et+Tfsu+C	Clpy+CletM+MSO (Ma	ay 17, 29)						
	0.12+0.004+	+0.03+0.03+1.5%						
De&Ph&Et+Tfsu	a+Clpy+CletM+MSO	(June 5)						
		+0.03+0.03+1.5%						
De&Ph&Et+Tfsı	a+Clpy+CletM+MSO							
		+0.03+0.03+1.5%	19	97	99	1	95	99
De&Ph&Et+Tfsu+C	Clpy+CletM (May 17							
		0.008+0.06+0.03						
De&Ph&Et+Tfsı	1+Clpy+CletM (May							
		0.008+0.06+0.03						
De&Ph&Et+Tfsı	1+Clpy+CletM (June		0.5	~ ~ ~		<u>^</u>		0.0
		0.008+0.06+0.03	25	99	99	9	99	99
	Clpy+CletM+MSO+Eth							
(Ma	y 17, 29, June 5,		10	0.7	0.0	0	0.0	0.0
		3+.03+1.5%+.094	10	97	98	0	92	98
Ethofumesate (Pr	· · · ·	3.75						
Desm&Phen&Eth	···· 2 ··· 7	0.25						
Desm&Phen&Eth			14	99	99	6	99	0.0
Desm&Phen&Eth	(,	0.5	14	99	99	0	99	99
Glyt+Premier90-	AMS (May 29, June	e 20) 1+0.25%+1.7	0	99	99	0	99	99
	2240 /26 17 00		<u> </u>	99	99	0	99	99
Glyt+Premier90-	AMS (May 17, 29,		^	0.0	0.0	~	0.0	
		1+0.25%+1.7	0	99	99	0	99	99
Glyt+Premier90-		1+0.25%+1.7	0	56	50	0	8	13
Glyt+Premier90-	+AMS (May 29)	1+0.25%+1.7	0	87	86	0	64	65
Glyt+Premier90-	+AMS (June 5)	1+0.25%+1.7	0	97	93	0	93	92
Glyt+Premier90-	+AMS (June 20)	1+0.25%+1.7	0	97	97	0	99	99
	· · · · · · · · · · · · · · · · · · ·			1	the second		1. T. 1. T. 1.	

### Sugarbeet herbicides, Moorhead, 2007. (continued)

		June 2	.9		July 1	.0
Date of	Sgbt	Rrpw	Colq	Sgbt	Rrpw	Colq
Treatment* Application Rate	inj	cntl	cntl	inj	cntl	cntl
(1b/A)	olo	olo	olo	olo	oło	olo
Glyt+Premier90+AMS+Tfsu (May 29, June 20)						
1+0.25%+1.7+0.008	0	99	99	0	99	99
Glyt+P90+AMS+Tfsu (May 29, June 20)						
1+0.25%+1.7+0.032	0	99	99	0	99	99
Glyt+Premier90+AMS+Flumiclorac (May 29)						
1+0.25%+1.7+0.015						
Glyt+Premier90+AMS (June 20) 1+0.25%+1.7	73	99	99	55	99	99
Glyt+Premier90+AMS+Clpy (May 29)						
1+0.25%+1.7+0.03						
Glyt+Premier90+AMS (June 20) 1+0.25%+1.7	0	99	99	0	99	99
Glyt+Premier90+AMS+Clpy (May 29)						
1+0.25%+1.7+0.06						
Glyt+Premier90+AMS (June 20) 1+0.25%+1.7	0	99	99	0	99	99
Glyt+Premier90+AMS+CletM (May 29)						
1+0.25%+1.7+0.09						
Glyt+Premier90+AMS (June 20) 1+0.25%+1.7	0	99	99	0	99	99
Glyt+Premier90+AMS+Etho (May 17)						
1+0.25%+1.7+3.75						
Glyt+Premier90+AMS (June 20) 1+0.25%+1.7	0	99	99	0	99	99
Ethofumesate (Pre) (April 30) 3.75						
Glyt+Premier90+AMS (May 29, June 20)						
1+0.25%+1.7	3	99	99	0	99	99
EXP MEAN	8	95	95	4	91	92
C.V. %	31	3	4	67	7	5
LSD 5%	4	5	6	4	9	7
LSD 1%	5	6	8	5	12	9
# OF REPS	4	4	4	4	4	4

\* Premier 90=non-ionic surfactant from West Central; MSO=methylated seed oil from Loveland; AMS=Am-Stik liquid ammonium sulfate from West Central.

### Combined Evaluations

	Date of		Sgbt	Rrpw	Colq
Treatment*	Application	Rate	inj	cntl	cntl
		(lb/A)	8	ş	olo
De&Ph&Et+Tfsu+Clpy+Cle	etM+MSO				
(May 1	17, 29, June 5, 20)				
	0.08+0.004+0.	03+0.03+1.5%	6	94	98
De&Ph&Et+Tfsu+Clpy+Cle	etM+MSO (May 17,29)			****	
	0.12+0.004+0.	03+0.03+1.5%			
De&Ph&Et+Tfsu+Clpy+(	CletM+MSO (June 5)				
	0.16+0.004+0.	03+0.03+1.5%			
De&Ph&Et+Tfsu+Clpy+(	CletM+MSO (June 20)				
	0.22+0.004+0.	03+0.03+1.5%	10	96	99

### Sugarbeet Herbicides, Moorhead, 2007. (continued)

Combined Evaluations (continued)				
Date of		Sgbt	Rrpw	Colq
Treatment* Application	Rate	inj	cntl	cntl
	(lb/A)	90 10	00	oło
	5+0.008+0.06+0.03			
<pre>De&amp;Ph&amp;Et+Tfsu+Clpy+CletM(May 29, June 5)0.3</pre>				
· · ·	5+0.008+0.06+0.03	17	99	99
De&Ph&Et+Tfsu+Clpy+CletM+MSO+Etho				
(May 17, 29, June 5,20)	00.00.1 50.004		<b>~</b> -	20
	.03+.03+1.5%+.094	5	95	98
Ethofumesate(Pre) (April 30)	3.75			
Desm&Phen&Etho (May 17)	0.25			
Desm&Phen&Etho (May 29, June 5)	0.33	10	00	00
Desm&Phen&Etho (June 20)	0.5	10	99	99
Glyt+Premier90+AMS (May 29, June 20)	1+0.25%+1.7	0	99	99
Glyt+Premier90+AMS (May 17,29,June 5,20)	1+0.25%+1.7	0	99	99
Glyt+Premier90+AMS (May 17)	1+0.25%+1.7	0	32	31
Glyt+Premier90+AMS (May 29)	1+0.25%+1.7	0	75	76
Glyt+Premier90+AMS (June 5)	1+0.25%+1.7	0	95	92
Glyt+Premier90+AMS (June 20)	1+0.25%+1.7	0	98	98
Glyt+Premier90+AMS+Tfsu (May 29,June 20)	1+0.25%+1.7+0.008	0	99	99
Glyt+P90+AMS+Tfsu (May 29, June 20)	1+0.25%+1.7+0.032	0	99	99
Glyt+Premier90+AMS+Flumiclorac (May 29)	1+0.25%+1.7+0.015			
Glyt+Premier90+AMS (June 20)	1+0.25%+1.7	64	99	99
Glyt+Premier90+AMS+Clpy (May 29)	1+0.25%+1.7+0.03			
Glyt+Premier90+AMS (June 20)	1+0.25%+1.7	0	99	99
Glyt+Premier90+AMS+Clpy (May 29)	1+0.25%+1.7+0.06			
Glyt+Premier90+AMS (June 20)	1+0.25%+1.7	0	99	99
Glyt+Premier90+AMS+CletM (May 29)	1+0.25%+1.7+0.09			
Glyt+Premier90+AMS (June 20)	1+0.25%+1.7	0	99	99
Glyt+Premier90+AMS+Etho (May 17)	1+0.25%+1.7+3.75			
Glyt+Premier90+AMS (June 20)	1+0.25%+1.7	0	99	99
Ethofumesate (Pre) (April 30)	3.75		2 T	10 J.A.
Glyt+Premier90+AMS (May 29, June 20)	1+0.25%+1.7	1	99	99
EVD MEAN			93	94
EXP MEAN		6 72	93	94 7
C.V. 8 A the second sec		12	8	6
LSD 5% LSD 1%		6	10	9
# OF REPS		8	8	8
+ Or KEIS				

\* Premier 90=non-ionic surfactant from West Central; MSO=methylated seed oil from Loveland; AMS=Am-Stik liquid ammonium sulfate from West Central.

**SUMMARY:** Glyphosate applied May 17 or May 29 gave less weed control than latter applications because weeds emerged after May 29. Two glyphosate applications gave nearly total weed control. Registered herbicide treatments gave 94 to 99% weed control. Flumiclorac caused excessive sugarbeet injury.

Sugarbeet herbicides, Crookston, 2007. (Dexter) 'Beta RZ02RR07' sugarbeet was seeded 1.25 inches deep in 22-inch rows May 9. Counter 15G insecticide at 12 pounds product per acre was applied modified in-furrow at planting. 'Plainsman' amaranth, 'Interstate Hyola 420' canola at 14 lb/A, quinoa (*Chenopodium quinoa*), 'Golden German' millet at 34 lb/A, 'Maida' oat at 26 lb/A, and yellow-seeded flax at 12 lb/A were seeded in 4 foot strips across herbicide plots May 9, prior to sugarbeet seeding. Preemerge ethofumesate was applied May 9 after planting. Postemergence treatments were applied May 29, June 4, June 20, and June 27. All treatments were applied in 17 gpa water at 40 psi through 8002 nozzles to the center four rows of six-row by 30-foot long plots. Yellow foxtail, redroot pigweed, common lambsquarters and quinoa, amaranth, canola, flax, millet, oat, and curly dock (Cudo) control were evaluated July 5 and July 17.

Date of Application	May 9	May 29	June 4	June 20	June 27
Time of Day	12:45 PM	11:30 AM	9:30 AM	12:30 PM	12:00 PM
Air Temperature (°F)	80	74	68	76	62
Relative Humidity (%)	. 23	56	32	32	33
Soil Temp. (°F at 6")	58	61	62	64	67
Wind Velocity (mph)	10	5	13	9	8
Cloud Cover (%)	0	100	25	0	95
Soil Moisture	Good	Good	Good	Good	Good
Sugarbeet	preemerge	V1.0-2.1	V1.1-4.2	V5.8-6.8	V8.5-13.9
Redroot Pigweed		Cot-31f	Cot-51f	6-8"	10-12"
Amaranth		1-21f	Cot-4lf	2-5"	6-10"
Quinoa		4lf(2")	4-6"	8-12"	10-18"
Canola		2-31f(2")	2-41f(3-4")	16-20"	28-32"
Flax		Cot-1½"	1-4"	2-6"	4-10"
Millet		2-31f(1-2")	3-41f(3-5")	6-71f(10-12")	14-18"
Oat		2-31f(4-6")	3-41f(5-7")	6-7lf(14-16")	20-24"
Yellow Foxtail		3-41f(12-2")	3-51f(1-4")	7lf(6-10")	8lf(10-14")

#### July 5 Evaluation

			Rrpw	Colq					
Date of		Yeft	Amar	Quin	Cano	Flax	Mill	Oats	Cudo
Treatment* Application	Rate	cntl	cntl						
	(1b/A)	olo	olo	olo	99	oło	olo	olo	90
De&Ph&Et+Tfsu+Clpy+CletM+MSO									
(May 29, June 4, 20, 27)									
0.08+0.004+0.03+0.	03+1.5%	99	71	89	69	55	99	99	99
De&Ph&Et+Tfsu+Clpy+CletM+MSO									
(May 29,June 4)									
0.12+0.004+0.03+0.	03+1.5%								
De&Ph&Et+Tfsu+Clpy+CletM+MSO(June 2	0)								
0.16+0.004+0.03+0.	03+1.5%								
De&Ph&Et+Tfsu+Clpy+CletM+MSO(June 2	7)								
0.22+0.004+0.03+0.	03+1.5%	99	83	98	69	81	99	99	99
De&Ph&Et+Tfsu+Clpy+CletM (May 29)									
0.25+0.008+0.	06+0.03								
De&Ph&Et+Tfsu+Clpy+CletM (June 4, 2	0)								
0.33+0.008+0.	06+0.03								
De&Ph&Et+Tfsu+Clpy+CletM (June 27)									
0.5+0.008+0.	06+0.03	98	92	98	90	95	99	98	99
De&Ph&Et+Tfsu+Clpy+CletM+MSO+Etho								··· · · · · · · · · · · · · · · · · ·	
(May 29, June 4, 20, 27)									
0.08+.004+.03+.03+1.	5%+.094	98	82	95	71	58	99	99	99

#### Rrpw Colq Date of Yeft Amar Quin Cano Flax Mill Oats Cudo Treatment\* Application Rate cntl cntl cntl cntl cntl cntl cntl cntl (lb/A)응 ş ŝ Ethofumesate(Pre) (May 9) 3.75 Desm&Phen&Etho (May 29) 0.25 Desm&Phen&Etho (June 4, 20) 0.33 Desm&Phen&Etho (June 27) 0.5 Glyt+Premier90+AMS (June 4, 27) 97. 1+0.25%+1.7 Glyt+Premier90+AMS (May 29, June 4, 20, 27) 1+0.25%+1.7 Glyt+Premier90+AMS (May 29) 1+0.25%+1.7 Glyt+Premier90+AMS (June 4) 1+0.25%+1.7 Glyt+Premier90+AMS (June 20) 1+0.25%+1.7 Glyt+Premier90+AMS 1+0.25%+1.7 (June 27) Glyt+Premier90+AMS+Tfsu (June 4, 27) 1+0.25%+1.7+0.008 Glyt+P90+AMS+Tfsu (June 4, 27) 1+0.25%+1.7+0.032 Glyt+Premier90+AMS+Flumiclorac (June 4) 1+0.25%+1.7+0.015 Glyt+Premier90+AMS (June 27) 1+0.25%+1.7 Glyt+Premier90+AMS+Clpy (June 20) 1+0.25%+1.7+0.03 Glyt+Premier90+AMS (June 27) 1+0.25%+1.7 Glyt+Premier90+AMS+Clpy (June 20) 1+0.25%+1.7+0.06 Glyt+Premier90+AMS (June 27) 1+0.25%+1.7 Glyt+Premier90+AMS+CletM (June 20) 1+0.25%+1.7+0.09 Glyt+Premier90+AMS (June 27) 1+0.25%+1.7 Glyt+Premier90+AMS+Etho (May 29) 1+0.25%+1.7+3.75 Glyt+Premier90+AMS (June 27) 1+0.25%+1.7 Ethofumesate (Pre) (May 9) 3.75 Glyt+Premier90+AMS (June 4, 27) 1+0.25%+1.7 EXP MEAN C.V. % LSD 5% LSD 1% # OF REPS

### July 5 Evaluation (continued)

Experiment continued on next page.

July 17 Evaluation

JULY I/ EVALUACE	011									
	Date of		Voft	-	Colq		Flav	Oate	Mill	Cudo
Treatment*	Application	Rate							cntl	
		(lb/A)	8		8	8	 8	00	8	8
De&Ph&Et+Tfsu+Cl	pv+CletM+MSO	(120/11/	Ū		ç	Ū	, i i i i i i i i i i i i i i i i i i i		•	-
· · · · · · · · · · · · · · · · · · ·	(May 29, June	e 4, 20, 27)		•						
	0.08+0.004+0.		97	43	95	70	45	99	99	99
De&Ph&Et+Tfsu+Cl	py+CletM+MSO(Ma	ay 29, June 4)								
	0.12+0.004+0.	.03+0.03+1.5%								
De&Ph&Et+Tfsu+	Clpy+CletM+MSO									
	0.16+0.004+0.									
De&Ph&Et+Tfsu+	Clpy+CletM+MSO									
	0.22+0.004+0.		97	53	98	70	71	99	99 -	99
De&Ph&Et+Tfsu+Cl										
, _, _, _,		008+0.06+0.03								
De&Ph&Et+Tfsu+	Clpy+CletM (Jur									
		008+0.06+0.03								
De&Pn&Et+TISu+	Clpy+CletM (Jur	$10 \ 27$	95	86	99	88	96	98	99	99
			95	00	33	00	90	90		
De&Ph&Et+Tfsu+Cl	(May 29, June									
	0.08+.004+.03+.		96	68	93	75	35	99	99	95
Ethofumesate(Pre		3.75				15				
Desm&Phen&Etho	· · -	0.25								
Desm&Phen&Etho										
Desm&Phen&Etho		0.5	86	96	99	73	99	99	93	99
Glyt+Premier90+A		1+0.25%+1.7	98	99	99	99	99	99	99	99
Glyt+Premier90+A		ne 4, 20, 27)								
	,	1+0.25%+1.7	98	99	99	99	99	99	99	99
Glyt+Premier90+A	MS (May 29)	1+0.25%+1.7	16	8	45	61	82	79	44	35
Glyt+Premier90+A		1+0.25%+1.7	66	73	90	96	99	99	94	92
Glyt+Premier90+A		1+0.25%+1.7	97	94	99	99	99	99	99	97
Glyt+Premier90+A		1+0.25%+1.7	98	97	98	91	99	99	99	99
Glyt+Premier90+A										
0190,110,10100,11		25%+1.7+0.008	97	99	99	99	99	99	99	99
Glyt+P90+AMS+Tfs										
01/0/10/110/110		25%+1.7+0.032	97	98	99	99	99	99	99	99
Glyt+Premier90+A	MS+Flumiclorac	(June 4)								
		25%+1.7+0.015								
Glyt+Premier90	+AMS (June 27)	1+0.25%+1.7	96	95	99	99	99	99	99	99
Glyt+Premier90+A	MS+Clpy (June 2	20)								
_	1+0	.25%+1.7+0.03								
Glyt+Premier90	+AMS (June 27)	1+0.25%+1.7	99	99	99	99	99	99	99	99
Glyt+Premier90+A	MS+Clpy (June 2	20)								
		.25%+1.7+0.06								
Glyt+Premier90	+AMS (June 27)	1+0.25%+1.7	98	99	99	99	99	99	99	99
Glyt+Premier90+A										
		.25%+1.7+0.09								
	)+AMS (June 27)	1+0.25%+1.7	99	98	99	99	99	99	99	99
Glyt+Premier90+A	-									
		.25%+1.7+3.75		0.0	0.0	6.0	6.6	0.0	~ ~	~ ~
GIYC+Premier90	)+AMS (June 27)	1+0.25%+1.7	99	99	99	99	99	99	99	99

				Rrpw	Colq					
	Date of		Yeft	Amar	Quin	Cano	Flax	Oats	Mill	Cudo
Treatment*	Application	Rate	cntl							
	Contraction of the second s	(lb/A)	00	olo	olo	90	8	Q	90	00
Ethofumesate (Pre)	(May 9)	3.75								
Glyt+P90+AMS (Ju	ne 4, 27)	1+0.25%+1.7	98	99	99	99	99	99	99	99
EXP MEAN			91	84	95	90	90	98	96	95
C.V. %			5	8	8	7	11	2	5	4
LSD 5%			6	10	11	9	14	3	7	6
LSD 1%			9	13	15	12	19	5	10	7
# OF REPS			4	4	4	4	4	4	4	4

### July 17 Evaluation (continued)

\* Premier 90=non-ionic surfactant from West Central; MSO=methylated seed oil from Loveland; AMS=Am-Stik liquid ammonium sulfate from West Central.

### Combined Evaluations

				Rrpw	Colq	· . · ·				
	Date of		Yeft	Amar		Cano	Flax	Mill	Oats	Cudo
Treatment*	Application	Rate	cntl	cntl	cntl	cntl	cntl	cntl	cntl	cntl
		(lb/A)	90	90	90	00	8	90	e So	
De&Ph&Et+Tfsu+Clpy										
(May 29	, June 4, 20, 27									
·	0.08+0.004+0.03	3+0.03+1.5%	98	57	92	69	50	99	99	99
De&Ph&Et+Tfsu+Clpy										
	(May 29, June 4	•								
	0.12+0.004+0.03									
De&Ph&Et+Tfsu+Cl	0.16+0.004+0.03									
De&Ph&Et+Tfsu+Cl										
	0.22+0.004+0.03		98	68	98	69	76	99	99	99
De&Ph&Et+Tfsu+Clpy										
	-	8+0.06+0.03								
De&Ph&Et+Tfsu+Cl	py+CletM (June 4	, 20)								
		+0.06+0.03								
De&Ph&Et+Tfsu+Cl										
		8+0.06+0.03	97	89	99	89	96	99	98	99
De&Ph&Et+Tfsu+Clpy										
	9, June 4, 20, 2		07		0.4			0.0	0.0	07
	.08+.004+.03+.03		97	75	94	73	46	99	99	97
Ethofumesate(Pre)	(May 9)	3.75								
Desm&Phen&Etho Desm&Phen&Etho	(May 29) (June 4, 20)	0.25								
Desm&Phen&Etho	(June 4, 20) (June 27)	0.5	89	97	99	75	99	95	97	99
Glyt+Premier90+AMS		0.5								
Crych realizer 50 miles		+0.25%+1.7	98	99	99	98	99	99	99	99
Glyt+Premier90+AMS							· · ·			
		L+0.25%+1.7	98	99	9.9	99	99	99	99	99
Glyt+Premier90+AMS	(May 29) 1	L+0.25%+1.7	21	18	50	68	66	39	74	46
Glyt+Premier90+AMS		L+0.25%+1.7	76	82	89	97	99	94	98	93
Glyt+Premier90+AMS	······	L+0.25%+1.7	97	96	99	93	99			
Glyt+Premier90+AMS		L+0.25%+1.7	74		83	61	85	78		
Glyt+Premier90+AMS			/4			<u> </u>		10	, 0	
GTACLETEWTET 20-HWP		\$+1.7+0.008	98	99	99	99	99	99	99	99
Table continued on										

Combined Evaluations (continued)

	ie (concinuea)									
					Colq					
	Date of		Yeft	Amar	Quin	Cano	Flax	Mill	Oats	Cudo
Treatment*	Application	Rate	cntl							
		(1b/A)	90	8	90	olo	olo	90	0¦0	0 <sup>jo</sup>
Glyt+P90+AMS+Tfsu	(June 4, 27)									
		1.7+0.032	98	98	99	99	99	99	99	99
Glyt+Premier90+AMS	+Flumiclorac (Jun	e 4)								
	1+0.25%+	1.7+0.015								
Glyt+Premier90+A	MS (June 27)									
	1+	0.25%+1.7	97	97	99	99	99	99	99	99
Glyt+Premier90+AMS	+Clpy (June 20)									
	1+0.25%	+1.7+0.03								
Glyt+Premier90+A	MS (June 27)									
	1+	0.25%+1.7	99	99	99	90	99	99	99	99
Glyt+Premier90+AMS	+Clpy (June 20)									
_	1+0.25%	+1.7+0.06								
Glyt+Premier90+A	MS (June 27)									
	1+	0.25%+1.7	99	99	99	92	´ 99	99	99	99
Glyt+Premier90+AMS	+CletM (June 20)		-		-					
-	1+0.25%	+1.7+0.09								
Glyt+Premier90+A	MS (June 27)									
_	1+	0.25%+1.7	99	98	99	92	99	99	99	99
Glyt+Premier90+AMS	+Etho (May 29)	·······						_	****	
-	1+0.25%	+1.7+3.75								
Glyt+Premier90+A	MS (June 27)									
	1+	0.25%+1.7	99	99	99	98	99	99	99	99
Ethofumesate (Pre)	(May 9)	3.75								
Glyt+Premier90+A										
-	1+	0.25%+1.7	98	99	99	99	99	99	99	99
EXP MEAN			91	87	94	87	90	94	96	95
C.V. %			8	9	9	12	12	7	6	7
LSD 5%			7	8	8	10	10	7	6	6
LSD 1%			10	11	11	13	14	9	8	8
# OF REPS			8	8	8	8	8	8	8	8

**SUMMARY:** Registered herbicide treatments gave less control of pigweed spp, canola, and flax than glyphosate treatments. Glyphosate applied once on June 20 gave better control than glyphosate applied once on May 29, June 4 or June 27. Glyphosate applied twice gave 98 to 99% control of all species.

Sugarbeet herbicides, St. Thomas, 2007. (Dexter) 'Beta RZ02RR07' sugarbeet was seeded 1.25 inches deep in 22-inch rows April 25. Counter 15G insecticide at 12 pounds product per acre was applied modified in-furrow at planting. Preemerge ethofumesate was applied April 25 after planting. Postemergence treatments were applied May 11, May 18, May 31, and June 12. All treatments were applied in 17 gpa water at 40 psi through 8002 nozzles to the center four rows of six-row by 30-foot long plots. The entire experiment was sprayed with Roundup Original Max at 44 fl oz/A July 2, Headline at 9 fl oz/A July 31, and Eminent at 13 fl oz/A August 17. Sugarbeet injury and redroot pigweed and wild buckwheat control were evaluated June 22 and July 2. Sugarbeet from the center 2 rows was counted and harvested September 18.

Z. Sugarbeet from the Ce					
Date of Application	April 25	May 11	May 18	May 31	June 12
Time of Day	7:15 PM	12:30 PM	12:15 PM	11:30 AM	12:30 PM
Air Temperature (°F)	68	57	66	64	85
Relative Humidity (%)	28	28	54	50	45
Soil Temp. (°F at 6")	46	51	56	58	73
Wind Velocity (mph)	7	6	9	4	13
Cloud Cover (%)	10	100	100	35	10
Soil Moisture	Good	Good	Good	Good	Good
Sugarbeet		Cot	V1.0-2.3	V3.9-4.5	V8.5-13.1
Redroot Pigweed		Cot	Cot-21f	3-61f	2-4"
Wild Buckwheat			cot-11f	2-61f	4-6"tall

· · · · · · · · · · · · · · · · · · ·				June 2	2		July 2	
	Date of		Sgbt	Rrpw	Wibw	Sgbt	Rrpw	Wibv
Treatment*	Application	Rate	inj	cntl	cntl	inj	cntl	cntl
	annand A. Additional and a second distance of the second distance of the second distance of the second distance	(lb/A)	8	ę	8	0 O	ę	8
De&Ph&Et+Tfsu+C	lpy+CletM+MSO							
(May	y 11, 18, 31, June							
· ·	0.08+0.004+	-0.03+0.03+1.5%	1	98	99	4	96	99
De&Ph&Et+Tfsu+C	lpy+CletM+MSO (May							
		-0.03+0.03+1.5%						
De&Ph&Et+Tfsu-	+Clpy+CletM+MSO (M							
		0.03+0.03+1.5%						
De&Ph&Et+Tfsu-	+Clpy+CletM+MSO (J				2		0.7	~ ~ ~
		-0.03+0.03+1.5%	4	99	99	3	97	99
De&Ph&Et+Tfsu+C.	lpy+CletM (May 11)							
		0.008+0.06+0.03						
De&Ph&Et+Tisu-	+Clpy+CletM (May 1							
DocDbcEtiffer	+Clpy+CletM (June	0.008+0.06+0.03						
Dearmatting		).008+0.06+0.03	9.	99	99	8	98	99
Dof Phi Ft+Tfeu+C	lpy+CletM+MSO+Ethc						50	
	y 11, 18, 31, June							
(110)	0.08+0.004+0.03+0		3	99	99	1	96	99
Ethofumesate(Pro		3.75						
Desm&Phen&Eth		0.25						
Desm&Phen&Eth	, , ,	0.33						
Desm&Phen&Eth		0.5	4	99	99	5	99	99
Glyt+Premier90+	AMS (May 11, 18, 3	31, June 12)			······	· · · · ·		
		1+0.25%+1.7	0	99	99	1	98	99
Glyt+Premier90+	AMS (May 11)	1+0.25%+1.7	0	86	0	0	43	0
Glyt+Premier90+		1+0.25%+1.7	0	88	90	0	71	90
Glyt+Premier90+A		1+0.25%+1.7	0	94	93	0	74	80
Glyt+Premier90+		1+0.25%+1.7	0	99	23	0	99	44
	AMS+Tfsu (May 18,							
		).25%+1.7+0.008	0	99	99	1	99	98

### Sugarbeet herbicides, St. Thomas, 2007. (continued)

				June 2	2		July 2	
	Date of		Sgbt	Rrpw	Wibw	Sgbt	Rrpw	Wibw
Treatment*	Application	Rate	inj	cntl	cntl	inj	cntl	cntl
		(lb/A)	90	0jo	olo	ę	olo	8
Glyt+Premier90+	AMS+Tfsu (May 18,	June 12)						
	1+0	.25%+1.7+0.032	1	99	99	0	99	99
Glyt+Premier90+	+AMS+Flumiclorac (M	lay 18)						
	1+0	.25%+1.7+0.015						
Glyt+Premier9	90+AMS (June 12)	1+0.25%+1.7	97	99	99	94	93	99
Glyt+Premier90+	+AMS+Clpy (May 31)							
	1+	0.25%+1.7+0.03						
Glyt+Premier9	90+AMS (June 12)	1+0.25%+1.7	0	99	98	0	98	95
Glyt+Premier904	+AMS+Clpy (May 31)							
	1+	0.25%+1.7+0.06						
Glyt+Premier9	90+AMS (June 12)	1+0.25%+1.7	0	99	99	1	99	97
Glyt+Premier90+	+AMS+CletM (May 18)							
	1+	0.25%+1.7+0.09						
Glyt+Premier9	90+AMS (June 12)	1+0.25%+1.7	0	99	99	0	99	99
Glyt+Premier90+	+AMS+Etho (May 11)							
	1+	0.25%+1.7+3.75						
Glyt+Premier9	90+AMS (June 12)	1+0.25%+1.7	0	99	99	0	99	99
Ethofumesate (I	Pre) (April 25)	3.75						
Glyt+Premier9	90+AMS (May 18, Jun	le 12)						
		1+0.25%+1.7	1	99	99	0	99	99
EXP MEAN			7	97	88	7	92	88
C.V. %			51	2	4	30	4	7
LSD 5%			5	3	6	3	6	9
LSD 1%			6	4	8	4	8	12
# OF REPS			4	4	3	4	4	4

\* Premier 90=non-ionic surfactant from West Central; MSO=methylated seed oil from Loveland; AMS=Am-Stik liquid ammonium sulfate from West Central.

### Combined Evaluations

	Date of		Sgbt	Rrpw	Wibw
Treatment*	Application	Rate	inj	- <b>J F</b>	cntl
		(lb/A)	Ŷ	90	olo
De&Ph&Et+Tfsu+Clpy+Clet	M+MSO				
(May 11	, 18, 31, June 12)				
	0.08+0.004+0.0	)3+0.03+1.5%	3	97	99
De&Ph&Et+Tfsu+Clpy+Clet	M+MSO (May 11,18)				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	0.12+0.004+0.0	)3+0.03+1.5%			
De&Ph&Et+Tfsu+Clpy+Cl	etM+MSO (May 31)				
	0.16+0.004+0.0	03+0.03+1.5%			
De&Ph&Et+Tfsu+Clpy+Cl	etM+MSO (June 12)				
	0.22+0.004+0.0	)3+0.03+1.5%	3	98	99
De&Ph&Et+Tfsu+Clpy+Clet	M (May 11) 0.25+0.00	08+0.06+0.03			
De&Ph&Et+Tfsu+Clpy+Cl	etM (May 18, 31) 0.33+0.00	08+0.06+0.03			
De&Ph&Et+Tfsu+Clpy+Cl	etM (June 12) 0.5+0.00	08+0.06+0.03	8	99	99
De&Ph&Et+Tfsu+Clpy+Clet	M+MSO+Etho				
(May 11,	18, 31, June 12)				
	0.08+.004+.03+.0	03+1.5%+.094	2	97	99

### Sugarbeet Herbicides, St. Thomas, 2007. (continued)

Date of Treatment*   Sgbt Application   Rate (lb/A)   Sgbt Rrpw   Wibw Cnt1     Treatment*   Application   Rate   inj   cnt1   cnt1     (lb/A)   %   %   %   %     Ethofumesate(Pre)   (April 25)   3.75	Combined Evaluations (cont.	inued)				
Image: constraint of the system   (lb/A)   %   %   %     Ethofumesate (Pre)   (April 25)   3.75     Desm&Phen&Etho   (May 18, 31)   0.33     Desm&Phen&Etho   (June 12)   0.5   4   99   99     Glyt+Premier90+AMS (May 11, 18, 31, June 12)   1+0.25%+1.7   1   98   99     Glyt+Premier90+AMS   (May 18)   1+0.25%+1.7   0   64   0     Glyt+Premier90+AMS   (May 18)   1+0.25%+1.7   0   84   85     Glyt+Premier90+AMS   (May 31)   1+0.25%+1.7   0   99   35     Glyt+Premier90+AMS   (June 12)   1+0.25%+1.7   0   99   35     Glyt+Premier90+AMS+Tfsu   (May 18, June 12)   1+0.25%+1.7   0   99   98     Glyt+Premier90+AMS+Tfsu   (May 18, June 12)   1+0.25%+1.7   95   96   99     Glyt+Premier90+AMS+Clpy   (May 31)   1+0.25%+1.7+0.015   194   99   98     Glyt+Premier90+AMS+Clpy   (May 31)   1+0.25%+1.7+0.06   140		Date of		Sgbt	Rrpw	Wibw
Ethofumesate(Pre)(April 25)3.75Desm&Phen&Etho(May 18, 31)0.33Desm&Phen&Etho(June 12)0.54Glyt+Premier90+AMS(May 11,18,31, June 12)1+0.25%+1.719899Glyt+Premier90+AMS(May 11)1+0.25%+1.70640Glyt+Premier90+AMS(May 18)1+0.25%+1.707990Glyt+Premier90+AMS(May 18)1+0.25%+1.708485Glyt+Premier90+AMS(June 12)1+0.25%+1.709935Glyt+Premier90+AMS(June 12)1+0.25%+1.7+0.00819998Glyt+Premier90+AMS+Tfsu(May 18, June 12)1+0.25%+1.7+0.00819998Glyt+Premier90+AMS+Tfsu(May 18, June 12)1+0.25%+1.7+0.00819999Glyt+Premier90+AMS+Tfsu(May 18, June 12)1+0.25%+1.7+0.00319999Glyt+Premier90+AMS+Clpy(May 31)1+0.25%+1.7+0.03086Glyt+Premier90+AMS(June 12)1+0.25%+1.7+0.030986Glyt+Premier90+AMS(June 12)1+0.25%+1.709896Glyt+Premier90+AMS(June 12)1+0.25%+1.709999Glyt+Premier90+AMS(June 12)1+0.25%+1.709999Glyt+Premier90+AMS(June 12)1+0.25%+1.709999Glyt+Premier90+AMS(June 12)1+0.25%+1.709999Glyt+Premier90+AMS(June 12)1+0.25%+1	Treatment*	Application	Rate	inj	cntl	cntl
Desm&Phen&Etho   (May 11)   0.25     Desm&Phen&Etho   (May 18, 31)   0.33     Desm&Phen&Etho   (June 12)   0.5   4   99   99     Glyt+Premier90+AMS(May 11,18,31, June 12)   1+0.25%+1.7   1   98   99     Glyt+Premier90+AMS   (May 18)   1+0.25%+1.7   0   64   0     Glyt+Premier90+AMS   (May 18)   1+0.25%+1.7   0   84   85     Glyt+Premier90+AMS   (May 18, June 12)   1+0.25%+1.7   0   84   85     Glyt+Premier90+AMS   (June 12)   1+0.25%+1.7   0   84   85     Glyt+Premier90+AMS+Tfsu   (May 18, June 12)   1+0.25%+1.7   0   99   95     Glyt+Premier90+AMS+Flumiclorac   (May 18)   1+0.25%+1.7   0   99   99     Glyt+Premier90+AMS+Clpy   (May 31)   1+0.25%+1.7   95   96   99     Glyt+Premier90+AMS+Clpy   (May 31)   1+0.25%+1.7   0   98   96     Glyt+Premier90+AMS+Clpy   (May 31)   1+0.25%+1.7   0 </td <td></td> <td></td> <td>(lb/A)</td> <td>olo</td> <td>Ş</td> <td>00 00</td>			(lb/A)	olo	Ş	00 00
Desm&Phen&Etho   (May 11)   0.25     Desm&Phen&Etho   (May 18, 31)   0.33     Desm&Phen&Etho   (June 12)   0.5   4   99   99     Glyt+Premier90+AMS(May 11,18,31, June 12)   1+0.25%+1.7   1   98   99     Glyt+Premier90+AMS   (May 18)   1+0.25%+1.7   0   64   0     Glyt+Premier90+AMS   (May 18)   1+0.25%+1.7   0   84   85     Glyt+Premier90+AMS   (May 18, June 12)   1+0.25%+1.7   0   84   85     Glyt+Premier90+AMS   (June 12)   1+0.25%+1.7   0   84   85     Glyt+Premier90+AMS+Tfsu   (May 18, June 12)   1+0.25%+1.7   0   99   95     Glyt+Premier90+AMS+Flumiclorac   (May 18)   1+0.25%+1.7   0   99   99     Glyt+Premier90+AMS+Clpy   (May 31)   1+0.25%+1.7   95   96   99     Glyt+Premier90+AMS+Clpy   (May 31)   1+0.25%+1.7   0   98   96     Glyt+Premier90+AMS+Clpy   (May 31)   1+0.25%+1.7   0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Desm&Phen&Etho(May 18, 31)0.33 (June 12)Desm&Phen&Etho(June 12)0.549999Glyt+Premier90+AMS (May 11, 18, 31, June 12)1+0.25%+1.719899Glyt+Premier90+AMS(May 11)1+0.25%+1.70640Glyt+Premier90+AMS(May 18)1+0.25%+1.708485Glyt+Premier90+AMS(June 12)1+0.25%+1.709935Glyt+Premier90+AMS(June 12)1+0.25%+1.709935Glyt+Premier90+AMS+Tfsu(May 18, June 12)1+0.25%+1.7+0.00819998Glyt+Premier90+AMS+Flumiclorac(May 18)1+0.25%+1.7+0.0159999Glyt+Premier90+AMS+Flumiclorac(May 31)1+0.25%+1.7+0.0156161Glyt+Premier90+AMS(June 12)1+0.25%+1.7+0.03619998Glyt+Premier90+AMS(June 12)1+0.25%+1.709896Glyt+Premier90+AMS(June 12)1+0.25%+1.709896Glyt+Premier90+AMS(June 12)1+0.25%+1.709999Glyt+Premier90+AMS(June 12)1+0.25%+1.709999Glyt+Premier90+AMS(June 12)1+0.25%+1.709999Glyt+Premier90+AMS(June 12)1+0.25%+1.709999Glyt+Premier90+AMS(June 12)1+0.25%+1.709999Glyt+Premier90+AMS(June 12)1+0.25%+1.709999Glyt+Premi		-				
Desm&Phen&Etho(June 12)0.549999Glyt+Premier90+AMS (May 11, 18, 31, June 12)1+0.25%+1.719899Glyt+Premier90+AMS(May 11)1+0.25%+1.70640Glyt+Premier90+AMS(May 18)1+0.25%+1.70640Glyt+Premier90+AMS(May 31)1+0.25%+1.708485Glyt+Premier90+AMS(June 12)1+0.25%+1.708485Glyt+Premier90+AMS(June 12)1+0.25%+1.709935Glyt+Premier90+AMS+Tfsu(May 18, June 12)1+0.25%+1.7+0.00819998Glyt+Premier90+AMS+Tfsu(May 18, June 12)1+0.25%+1.7+0.00319999Glyt+Premier90+AMS+Clpy(May 31)1+0.25%+1.7+0.015						
Glyt+Premier90+AMS (May 11, 18, 31, June 12) 1+0.25%+1.7 1 98 99   Glyt+Premier90+AMS (May 11) 1+0.25%+1.7 0 64 0   Glyt+Premier90+AMS (May 18) 1+0.25%+1.7 0 64 0   Glyt+Premier90+AMS (May 31) 1+0.25%+1.7 0 84 85   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 35   Glyt+Premier90+AMS+Tfsu (May 18, June 12) 1+0.25%+1.7+0.008 1 99 98   Glyt+Premier90+AMS+Tfsu (May 18, June 12) 1+0.25%+1.7+0.032 1 99 99   Glyt+Premier90+AMS+Flumiclorac (May 18) 1+0.25%+1.7+0.032 1 99 99   Glyt+Premier90+AMS+Clpy (May 18) 1+0.25%+1.7+0.035 1 99 99   Glyt+Premier90+AMS+Clpy (May 31) 1+0.25%+1.7+0.03 1 99 98   Glyt+Premier90+AMS+Clpy (May 31) 1+0.25%+1.7+0.03 1 99 98   Glyt+Premier90+AMS+Clpy (May 31) 1+0.25%+1.7+0.03 1 99 98   Glyt+Premier90+AMS+CletM		-				
Glyt+Premier90+AMS (May 11) 1+0.25%+1.7 0 64 0   Glyt+Premier90+AMS (May 18) 1+0.25%+1.7 0 79 90   Glyt+Premier90+AMS (May 31) 1+0.25%+1.7 0 84 85   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 35   Glyt+Premier90+AMS+Tfsu (May 18, June 12) 1+0.25%+1.7+0.008 1 99 98   Glyt+Premier90+AMS+Flumiclorac (May 18) 1+0.25%+1.7+0.008 1 99 99   Glyt+Premier90+AMS+Flumiclorac (May 18) 1+0.25%+1.7+0.015 96 99   Glyt+Premier90+AMS+Clpy (May 31) 1+0.25%+1.7+0.03 95 96   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 98 96   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 98 96   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 98 96   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 99   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0			*****	······································		
Glyt+Premier90+AMS (May 18) 1+0.25%+1.7 0 79 90   Glyt+Premier90+AMS (May 31) 1+0.25%+1.7 0 84 85   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 35   Glyt+Premier90+AMS+Tfsu (May 18, June 12) 1+0.25%+1.7+0.008 1 99 98   Glyt+Premier90+AMS+Flumiclorac (May 18) 1+0.25%+1.7+0.015 1 99 99   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7+0.015 1 99 99   Glyt+Premier90+AMS+Clpy (May 31) 1+0.25%+1.7+0.015 1 90 98   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7+0.015 1 90 98 96   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 98 96   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 98 96   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 99   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 99   Glyt+Premier90+AMS (June 12) </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>99</td>						99
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Glyt+Premier90+AMS	(May 11)	1+0.25%+1.7	0	64	0
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 35   Glyt+Premier90+AMS+Tfsu (May 18, June 12) 1+0.25%+1.7+0.008 1 99 98   Glyt+P90+AMS+Tfsu (May 18, June 12) 1+0.25%+1.7+0.008 1 99 99   Glyt+Premier90+AMS+Tfsu (May 18, June 12) 1+0.25%+1.7+0.032 1 99 99   Glyt+Premier90+AMS+Flumiclorac (May 18) 1+0.25%+1.7+0.035 1 95 96 99   Glyt+Premier90+AMS+Clpy (May 31) 1+0.25%+1.7+0.03 1	Glyt+Premier90+AMS	(May 18)	1+0.25%+1.7	0	79	90
Glyt+Premier90+AMS+Tfsu (May 18, June 12) 1+0.25%+1.7+0.008 1 99 98   Glyt+P90+AMS+Tfsu (May 18, June 12) 1+0.25%+1.7+0.032 1 99 99   Glyt+Premier90+AMS+Flumiclorac (May 18) 1+0.25%+1.7+0.015 1 99 99   Glyt+Premier90+AMS+Clpy (May 31) 1+0.25%+1.7+0.015 1 95 96 99   Glyt+Premier90+AMS+Clpy (May 31) 1+0.25%+1.7+0.03 1 99 98 96   Glyt+Premier90+AMS+Clpy (May 31) 1+0.25%+1.7+0.03 1 98 96   Glyt+Premier90+AMS+Clpy (May 31) 1+0.25%+1.7+0.03 1 99 98   Glyt+Premier90+AMS+Clpy (May 31) 1+0.25%+1.7+0.06 1 99 98   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 1 99 99   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 99   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 99 99   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 99	Glyt+Premier90+AMS	(May 31)	1+0.25%+1.7	0	84	85
Glyt+P90+AMS+Tfsu (May 18, June 12) 1+0.25%+1.7+0.032 1 99 99   Glyt+Premier90+AMS+Flumiclorac (May 18) 1+0.25%+1.7+0.015 1 1 1 99 99   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7+0.015 1 1 99 99   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7+0.03 1 </td <td>Glyt+Premier90+AMS</td> <td>(June 12)</td> <td>1+0.25%+1.7</td> <td>( <b></b></td> <td>99</td> <td>35</td>	Glyt+Premier90+AMS	(June 12)	1+0.25%+1.7	( <b></b>	99	35
Glyt+Premier90+AMS+Flumiclorac (May 18) 1+0.25%+1.7+0.015   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 95 96 99   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 98 96   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 1 99 98   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 99 99   Ethofumesate (Pre) (April 25) 3.75 7	Glyt+Premier90+AMS+Tfsu (M	ay 18,June 12)	1+0.25%+1.7+0.008	1	.99	98
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Glyt+P90+AMS+Tfsu (Ma	y 18, June 12)	1+0.25%+1.7+0.032	1	99	99
Glyt+Premier90+AMS+Clpy Glyt+Premier90+AMS(May 31) (June 12)1+0.25%+1.7+0.03 1+0.25%+1.709896Glyt+Premier90+AMS(June 12)1+0.25%+1.709896Glyt+Premier90+AMS+Clpy Glyt+Premier90+AMS(June 12)1+0.25%+1.7+0.06 1+0.25%+1.719998Glyt+Premier90+AMS+CletM Glyt+Premier90+AMS(May 18)1+0.25%+1.7+0.09 1+0.25%+1.7+0.099999Glyt+Premier90+AMS+CletM Glyt+Premier90+AMS+Etho Glyt+Premier90+AMS(June 12)1+0.25%+1.7+0.09 1+0.25%+1.7+3.75 09999Glyt+Premier90+AMS Glyt+Premier90+AMS(June 12)1+0.25%+1.7+3.75 3.75999999Ethofumesate (Pre) Glyt+Premier90+AMS (May 18, June 12)3.75 	Glyt+Premier90+AMS+Flumicl	orac (May 18)	1+0.25%+1.7+0.015			
Glyt+Premier90+AMS(June 12)1+0.25%+1.709896Glyt+Premier90+AMS+Clpy(May 31)1+0.25%+1.7+0.06	Glyt+Premier90+AMS	(June 12)	1+0.25%+1.7	95	96	99
Glyt+Premier90+AMS+Clpy (May 31) 1+0.25%+1.7+0.06   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 1 99 98   Glyt+Premier90+AMS+CletM (May 18) 1+0.25%+1.7+0.09 1 99 99 99   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7+0.09 0 99 99 99   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 99   Glyt+Premier90+AMS+Etho (May 11) 1+0.25%+1.7+3.75 0 99 99   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 99   Ethofumesate (Pre) (April 25) 3.75 3.75   Glyt+Premier90+AMS (May 18, June 12) 1+0.25%+1.7 1 99 99   EXP MEAN 7 95 88 7 95 88   C.V. % 3 7 6 3 7 6   LSD 1% 3 7 6 3 9 8	Glyt+Premier90+AMS+Clpy	(May 31)	1+0.25%+1.7+0.03			
Glyt+Premier90+AMS(June 12)1+0.25%+1.719998Glyt+Premier90+AMS+CletM(May 18)1+0.25%+1.7+0.099999Glyt+Premier90+AMS(June 12)1+0.25%+1.709999Glyt+Premier90+AMS+Etho(May 11)1+0.25%+1.7+3.7509999Glyt+Premier90+AMS(June 12)1+0.25%+1.709999Ethofumesate (Pre)(April 25)3.753.75Glyt+Premier90+AMS(May 18, June 12)1+0.25%+1.719999EXP MEAN795884077LSD 5%376398	Glyt+Premier90+AMS	(June 12)	1+0.25%+1.7	0	98	96
Glyt+Premier90+AMS+CletM (May 18) 1+0.25%+1.7+0.09   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 99   Glyt+Premier90+AMS (May 11) 1+0.25%+1.7 0 99 99   Glyt+Premier90+AMS (May 11) 1+0.25%+1.7 0 99 99   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 99   Ethofumesate (Pre) (April 25) 3.75 3.75   Glyt+Premier90+AMS (May 18, June 12) 1+0.25%+1.7 1 99 99   EXP MEAN 7 95 88   C.V. % 40 7 7   LSD 5% 3 7 6   LSD 1% 3 9 8	Glyt+Premier90+AMS+Clpy	(May 31)	1+0.25%+1.7+0.06			
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 99   Glyt+Premier90+AMS+Etho (May 11) 1+0.25%+1.7+3.75 0 99 99   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 99   Ethofumesate (Pre) (April 25) 3.75 3.75   Glyt+Premier90+AMS (May 18, June 12) 1+0.25%+1.7 1 99 99   EXP MEAN 7 95 88   C.V. % 40 7 7   LSD 5% 3 7 6   LSD 1% 3 9 8	Glyt+Premier90+AMS	(June 12)	1+0.25%+1.7	1	99	98
Glyt+Premier90+AMS+Etho (May 11) 1+0.25%+1.7+3.75   Glyt+Premier90+AMS (June 12) 1+0.25%+1.7 0 99 99   Ethofumesate (Pre) (April 25) 3.75 3.75   Glyt+Premier90+AMS (May 18, June 12) 1+0.25%+1.7 1 99 99   EXP MEAN 7 95 88 40 7 7 LSD 5% 3 7 6   LSD 1% 3 9 8 3 9 8		(May 18)	1+0.25%+1.7+0.09			
Glyt+Premier90+AMS   (June 12)   1+0.25%+1.7   0   99   99     Ethofumesate (Pre)   (April 25)   3.75 <td>Glyt+Premier90+AMS</td> <td>(June 12)</td> <td>1+0.25%+1.7</td> <td>0</td> <td>99</td> <td>99</td>	Glyt+Premier90+AMS	(June 12)	1+0.25%+1.7	0	99	99
Ethofumesate (Pre) (April 25) 3.75   Glyt+Premier90+AMS (May 18, June 12) 1+0.25%+1.7 1 99 99   EXP MEAN 7 95 88 40 7 7   LSD 5% 3 7 6 3 9 8						
Glyt+Premier90+AMS (May 18, June 12) 1+0.25%+1.7 1 99 99   EXP MEAN 7 95 88   C.V. % 40 7 7   LSD 5% 3 7 6   LSD 1% 3 9 8	Glyt+Premier90+AMS			0	99	99
EXP MEAN 7 95 88   C.V. % 40 7 7   LSD 5% 3 7 6   LSD 1% 3 9 8						
C.V. % LSD 5% LSD 1% 3 7 6 3 9 8	Glyt+Premier90+AMS (Ma	y 18, June 12)	1+0.25%+1.7	1	99	99
C.V. % LSD 5% LSD 1% 3 7 6 3 9 8				<b>_</b>	0.5	0.0
LSD 5% LSD 1% 3 9 8						
LSD 1%					1. Sec. 1. Sec. 1.	
·王王王,王王,王王,王王,王王,王王,王王,王王,王王,王王,王王,王王,王王						

### Combined Evaluations (continued)

\* Premier 90=non-ionic surfactant from West Central; MSO=methylated seed oil from Loveland; AMS=Am-Stik liquid ammonium sulfate from West Central.

### Yield Data

	Date of			Sgbt		Root	Impur	Extr	
Treatment* A	pplication	Rate		Popl	Sucr	Yield	Index	Sucr	
		(1b/A)		#/60'	olo O	ton/A		lb/A	
De&Ph&Et+Tfsu+Clpy+C	CletM+MSO								
(May 11,	18, 31, June 12)								
_	0.08+0.004+0.03+	0.03+1.5%		89	14.5	26.2	786	7371	
De&Ph&Et+Tfsu+Clpy+C	CletM+MSO (May 11,1	8)	· .					· · ·	
	0.12+0.004+0.03+	0.03+1.5%							
De&Ph&Et+Tfsu+Clpy	+CletM+MSO (May 31	)							
- di Art	0.16+0.004+0.03+	0.03+1.5%							
De&Ph&Et+Tfsu+Clpy	+CletM+MSO (June 1	2)							
	0.22+0.004+0.03+	0.03+1.5%		93	14.3	25.3	847	6932	
				1.			a de la		

### Sugarbeet Herbicides, St. Thomas, 2007. (continued)

### Yield Data (continued)

Date of	Sgbt		Root	Impur	Extr
Treatment* Application Rate	Popl		Yield	Index	Sucr
(1b/A)	#/60 <b>′</b>	olo	ton/A		lb/A
De&Ph&Et+Tfsu+Clpy+CletM (May 11)					
0.25+0.008+0.06+0.03	i				
De&Ph&Et+Tfsu+Clpy+CletM (May 18, 31) 0.33+0.008+0.06+0.03					
De&Ph&Et+Tfsu+Clpy+CletM (June 12)					
0.5+0.008+0.06+0.03	89	14.2	25.6	862	7041
De&Ph&Et+Tfsu+Clpy+CletM+MSO+Etho		1110			
(May 11, 18, 31, June 12)					
0.08+0.004+0.03+0.03+1.5%+0.094	86	13.7	28.5	928	7472
Ethofumesate(Pre) (April 25) 3.75					
Desm&Phen&Etho (May 11) 0.25					
Desm&Phen&Etho (May 18, 31) 0.33	ł				
Desm&Phen&Etho (June 12) 0.5	82	13.4	25.7	994	6630
Glyt+Premier90+AMS (May 11, 18, 31, June 12)					
1+0.25%+1.7	93	14.0	26.0	946	6977
Glyt+Premier90+AMS (May 11) 1+0.25%+1.7	93	13.9	25.1	844	6654
Glyt+Premier90+AMS (May 18) 1+0.25%+1.7	89	14.1	27.1	918	7318
Glyt+Premier90+AMS (May 31) 1+0.25%+1.7		14.0	26.7	896	7208
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7		14.1	25.6	858	6926
Glyt+Premier90+AMS+Tfsu (May 18, June 12)		14.1	23.0	0.00	0920
1+0.25%+1.7+0.008	97	13.8	27.4	972	7216
Glyt+Premier90+AMS+Tfsu (May 18, June 12)		10.0	27.3		7210
(May 10, June 12) 1+0.25%+1.7+0.032	. 100	14.1	28.5	851	7746
Glyt+Premier90+AMS+Flumiclorac (May 18)	100	T.4.• T	20.5		7740
1+0.25%+1.7+0.015					
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7		13.4	16.0	964	4160
Glyt+Premier90+AMS+Clpy (May 31)					
1+0.25%+1.7+0.03	3				
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7		13.9	25.8	888	6901
Glyt+Premier90+AMS+Clpy (May 31)	th h data and a second s				
1+0.25%+1.7+0.06	5				
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7	85	13.8	26.2	937	6927
Glyt+Premier90+AMS+CletM (May 18)					
1+0.25%+1.7+0.09	)				
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7	89	13.9	27.0	882	7118
Glyt+Premier90+AMS+Etho (May 11)					
1+0.25%+1.7+3.75					
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7		13.5	29.9	958	7798
Ethofumesate (Pre) (April 25) 3.75	)				
Glyt+Premier90+AMS (May 18, June 12)	1 ^1	10 5	00.0	1000	7401
1+0.25%+1.7	91	13.5	29.2	1006	7481
EXP MEAN	88	13.9	26.2	902	6996
C.V. %	10	13.9 3.7	20.2 9.8	902 12	10
LSD 5%	13	NS	3.6	NS	1017
LSD 1%	17	NS	4.8	NS	1355
# OF REPS	4	4	4	4	4
* Promior 90-pop-ionia surfactant from West Cor	tral. MCO-	motherla	-	- 	 

\* Premier 90=non-ionic surfactant from West Central; MSO=methylated seed oil from Loveland; AMS=Am-Stik liquid ammonium sulfate from West Central.

Experiment summary on next page.

### Sugarbeet Herbicides, St. Thomas, 2007. (continued)

#### SUMMARY

The summary is from the combined date of evaluation data. The treatment that included flumiclorac gave 95% sugarbeet injury and the least sugarbeet yield while other treatments gave 0 to 8% injury and from 2500 to 3500 lb/A greater yield of extractable sucrose per acre. Redroot pigweed control and wild buckwheat control was excellent with all treatments except the treatments where glyphosate was applied once. The single glyphosate treatment on June 12 gave the best redroot pigweed control; probably because pigweed germinated and emerged after the earlier treatments. The single glyphosate treatment on May 18 gave the best wild buckwheat control. The wild buckwheat had not emerged on May 11 and the wild buckwheat became progressively more tolerant of the glyphosate as the plants became larger after May 18. Sugarbeet herbicides, Cavalier, 2007. (Dexter) 'Beta RZ02RR07' sugarbeet was seeded 1.25 inches deep in 22-inch rows April 25. Counter 15G insecticide at 12 pounds product per acre was applied modified in-furrow at planting. Preemerge ethofumesate was applied April 25 after planting. Postemergence treatments were applied May 11, May 18, May 31, and June 12. All treatments were applied in 17 gpa water at 40 psi through 8002 nozzles to the center four rows of six-row by 30-foot long plots. Sugarbeet injury and redroot pigweed, kochia, and common lambsquarters control were evaluated June 22 and July 2.

Date of Application	April 25	May 11	May 18	May 31	June 12
Time of Day	3:00 PM	11:00 AM	2:30 PM	10:00 AM	11:00 AM
Air Temperature (°F)	73	60	66	61	84
Relative Humidity (%)	7e Humidity (%) 21 30		45	46	48
Soil Temp. (°F at 6")	48	50	55	54	68
Wind Velocity (mph)			7	9	
Cloud Cover (%)	0	100	30	75	0
Soil Moisture	Good	Good	Good	Good	Good
Sugarbeet	preemerge	Cot	Cot-V1.5	V1.1-1.9	V6.5-8.1
Kochia		Cot	Cot-1/2"whorl	1/4-1"whorl	2-6"
Lambsquarters	mbsquarters Cot-21f		Cot-41f	4-101f(1-4")	6-10"
Redroot Pigweed		Cot	Cot-21f	1-41f	4-81f(1-3"

and the man be through the second of the					e 22				Ly 2	
	Date of		2	~		Colq	2	Rrpw		-
Treatment*	Application	Rate	inj	cntl	cntl	cntl	inj	cntl	cntl	cntl
		(1b/A)	olo	oło	olo	olo	olo	olo	0 <sup>1</sup> 0	olo
De&Ph&Et+Tfsu+Clpy+	CletM+MSO									
	11, 18, 31,									
0	.08+0.004+0.	.03+0.03+1.5%	16	91	77	99	5	76	46	99
De&Ph&Et+Tfsu+Clpy+	CletM+MSO(Ma	ay 11, 18)								
•		.03+0.03+1.5%								
De&Ph&Et+Tfsu+Clp										
-		.03+0.03+1.5%								
De&Ph&Et+Tfsu+Clp	-									
		.03+0.03+1.5%	31	93	88	98	15	79	63	99
De&Ph&Et+Tfsu+Clpy+										
		008+0.06+0.03								
De&Ph&Et+Tfsu+Clp										
		008+0.06+0.03								
De&Ph&Et+Tfsu+Clp	-		21	0.0	~ 4	0.0	05	0.0	0.0	0.0
		008+0.06+0.03	31	96	94	99	25	90	86	99
De&Ph&Et+Tfsu+Clpy+										
	11, 18, 31,		0.0	~ 4	7.6	0.0	4.0	0.1	- 1	0.0
		.03+1.5%+.094	20	94	76	99	13	81	51	99
Ethofumesate(Pre)	(April 25)	3.75								
Desm&Phen&Etho	(May 11)	0.25								
-	(May 18, 31)		0.0	07	07	0.0	0.5	0.0	0.0	0.0
Desm&Phen&Etho	(June 12)	0.5	20	97	97	99	25	92	93	98
Glyt+Premier90+AMS(	May 11, 18,		-							
		1+0.25%+1.7	0	99	99	99	0	93	99	99
Glyt+Premier90+AMS	(May 11)	1+0.25%+1.7	0	3	7 <u>8</u>	56	0	9	23	15
Glyt+Premier90+AMS	(May 18)	1+0.25%+1.7	0	38	76	74	0	21	40	24
Glyt+Premier90+AMS	(May 31)	1+0.25%+1.7	0	84	96	98	0	48	97	99
Glyt+Premier90+AMS	(June 12)	1+0.25%+1.7	6	97	99	97	1	93	98	98

# Sugarbeet herbicides, Cavalier, 2007. (continued)

		June	e 22	1. 		Ju	ly 2	
Date of	Sgbt	Rrpw	Kocz	Colq	Sgbt	Rrpw	Kocz	Colq
Treatment* Application Rate	inj	cntl	cntl	cntl	inj	cntl	cntl	cntl
(1b/A)	olo	00	olo	00	8	olo	Ŷ	6
Glyt+Premier90+AMS+Tfsu (May 18, June 12)								
1+0.25%+1.7+0.008	3	99	99	99	1	97	99	99
Glyt+P90+AMS+Tfsu (May 18, June 12)								
1+0.25%+1.7+0.032	4	99	99	99	3	99	98	99
Glyt+Premier90+AMS+Flumiclorac (May 18)								
1+0.25%+1.7+0.015								
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7	97	98	99	99	96	91	98	99
Glyt+Premier90+AMS+Clpy (May 31)				•				
1+0.25%+1.7+0.03								
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7	1	98	99	99	0	95	99	99
		· · · ·						
Glyt+Premier90+AMS+Clpy (May 31)								
1+0.25%+1.7+0.06					_			
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7	1	99	99	99	0	94	99	99
Glyt+Premier90+AMS+CletM (May 31)								
1+0.25%+1.7+0.09	_				-			
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7	0	98	99	99	0	93	99	99
Glyt+Premier90+AMS+Etho (May 11)								
1+0.25%+1.7+3.75	-							
Glyt+Premier90+AMS (June 12) 1+0.25%+1.7	0	99	99	98	. 0	99	99	99
Ethofumesate (Pre) (April 25) 3.75			ţ.		14 M 2			· · _ · _
Glyt+P90+AMS(May 18, June 12) 1+0.25%+1.7	1	98	99	98	0	96	99	99
	10	0.5	~~	0.4	10		0.0	0.0
EXP MEAN	12	85	92	94	10	77	82	88
C.V. %	42	4	7	6	35	5	12	4
LSD 5%	10	5	.9 11	8 10	5 6	6 8	14	5
LSD 1%	10	4	11 4	10 4	6 4	8 4	19 4	4
# OF REPS	- 4	4	4	4	4	4	4	4

\* Premier 90=non-ionic surfactant from West Central; MSO=methylated seed oil from Loveland; AMS=Am-Stik liquid ammonium sulfate from West Central.

#### Combined Evaluations

			······	0.1.1	<b>D</b>	77	~ 1
	Date of			-	Rrpw		+
Treatment*	Application	Rate		inj	cntl	cntl	cntl
		(lb/A)		Ŷ	olo	olo	olo
De&Ph&Et+Tfsu+Clpy+C	letM+MSO						
(May	11, 18, 31, June 12)						
	0.08+0.0	04+0.03+0.03+1.5%		11	84	62	99
De&Ph&Et+Tfsu+Clpy+C	letM+MSO (May 11,18)	······································		·			1
	0.12+0.0	04+0.03+0.03+1.5%					
De&Ph&Et+Tfsu+Clpy	+CletM+MSO (May 31)						
	0.16+0.0	04+0.03+0.03+1.5%					
De&Ph&Et+Tfsu+Clpy	+CletM+MSO (June 12)						
	0.22+0.0	04+0.03+0.03+1.5%		23	86	75	98
De&Ph&Et+Tfsu+Clpy+C	letM (May 11)0.2	5+0.008+0.06+0.03				en e state	
De&Ph&Et+Tfsu+Clpy	+CletM (May 18, 31)0.3	3+0.008+0.06+0.03					
De&Ph&Et+Tfsu+Clpy		5+0.008+0.06+0.03		28	93	90	99

Sugarbeet	Herbicides,	Cavalier,	2007.	(continued)

Combined Evaluations	(continued)						
	Date of	E		Sgbt	Rrpw	Kocz	Colq
Treatment*	Applicati	Lon	Rate	inj	cntl	cntl	cntl
			(lb/A)	90	₽ Po	90	8
De&Ph&Et+Tfsu+Clpy+Cl							
(May 11	, 18, 31, June						
			+.03+.03+1.5%+.094	16	88	64	99
Ethofumesate(Pre)	(April		3.75				
Desm&Phen&Etho	(May		0.25				
Desm&Phen&Etho	(May 18,		0.33		0.5	o <b>F</b>	
Desm&Phen&Etho	(June		0.5	23	95	95	98
Glyt+Premier90+AMS (Ma			1+0.25%+1.7	0	96	99	99
Glyt+Premier90+AMS	(May	11)	1+0.25%+1.7	0	6	50	36
Glyt+Premier90+AMS	(May	18)	1+0.25%+1.7	0	29	58	49
Glyt+Premier90+AMS	(May	31)	1+0.25%+1.7	0	66	97	98
Glyt+Premier90+AMS	(June	12)	1+0.25%+1.7	4	95	98	98
Glyt+Premier90+AMS+Tf	su(May 18,June	12)	1+0.25%+1.7+0.008	2	98	99	99
Glyt+P90+AMS+Tfsu	(May 18, June	12)	1+0.25%+1.7+0.032	3	99	99	99
Glyt+Premier90+AMS+F1	Lumiclorac (May	18)	1+0.25%+1.7+0.015				
Glyt+Premier90+AMS	(June		1+0.25%+1.7	96	94	98	99
Glyt+Premier90+AMS+C]	Гру (Мау	31)	1+0.25%+1.7+0.03				
Glyt+Premier90+AMS	(June	12)	1+0.25%+1.7	1	97	99	99
Glyt+Premier90+AMS+C1	ру (Мау	31)	1+0.25%+1.7+0.06				
Glyt+Premier90+AMS	(June		1+0.25%+1.7	1	96	99	99
Glyt+Premier90+AMS+C1	·		1+0.25%+1.7+0.09				
Glyt+Premier90+AMS	(June		1+0.25%+1.7	0	95	99	99
Glyt+Premier90+AMS+Et			1+0.25%+1.7+3.75				
Glyt+Premier90+AMS	(June		1+0.25%+1.7	0	99	99	98
Ethofumesate (Pre)	(April		3.75				
Glyt+Premier90+AMS	(May 18, June	12)	1+0.25%+1.7	1	97	99	98
EXP MEAN				11	81	87	91
C.V. %				43	8	13	10
LSD 5%				5	6	11	9
LSD 1%				6	8	15	12
# OF REPS				8	8	8	8

\* Premier 90=non-ionic surfactant from West Central; MSO=methylated seed oil from Loveland; AMS=Am-Stik liquid ammonium sulfate from West Central.

**SUMMARY:** Registered herbicide treatments caused more sugarbeet injury than glyphosate. Flumiclorac caused excessive sugarbeet injury. Glyphosate applied once on June 12 gave better pigweed control than glyphosate applied once in May, probably because pigweed was still emerging after May 31. Micro-rate and mid-rate treatments gave less control of redroot pigweed and kochia but similar control of common lambsquarters compared to glyphosate applied twice. The conventional-rate treatments and PRE ethofumesate followed by POST desm&phen&etho gave control similar to glyphosate applied twice. **Glyphosate on Roundup Ready sugarbeet, Prosper, 2007.** (Dexter) 'Beta RZ02RR07' sugarbeet was seeded 1.25 inches deep in 22-inch rows May 3. Counter 15G insecticide at 12 pounds product per acre was applied modified in-furrow at planting. 'Plainsman' amaranth, 'Interstate Hyola 420' canola at 14 lb/A, quinoa (Chenopodium quinoa), 'Golden German' millet at 34 lb/A, 'Maida' oat at 26 lb/A, and yellow-seeded flax at 12 lb/A were seeded in 4 foot strips across herbicide plots May 2, prior to sugarbeet seeding. Preemerge ethofumesate was applied May 3 after planting. Postemergence treatments were applied May 21, May 28, June 5, June 21, June 27, and July 11. All treatments were applied in 17 gpa water at 40 psi through 8002 nozzles to the center four rows of six-row by 30-foot long plots. The entire experiment was sprayed with Headline at 9 fl oz/A July 31. Sugarbeet injury and redroot pigweed and amaranth, common lambsquarters and quinoa, canola, flax, millet, and oat control were evaluated July 17 and July 30. Sugarbeet from the center 2 rows was counted and harvested September 11.

Date of Application	Мау З	May 21	May 28	June 5	June 21	June 27	July 11
Time of Day	10:00 AM	1:00 PM	10:00 AM	10:30 AM	11:00 AM	9:00 AM	8:30 AM
Air Temperature (°F)	61	71	80	57	74	67	63
Relative Humidity (%)	31	64	46	28	37	36	51
Soil Temp. (°Fat 6")	50	55	58	56	65	69	62
Wind Velocity (mph)	18	17	18	5	9	4	6
Cloud Cover (%)	10	90	10	5	70	25	0
Soil Moisture	Good	Good	Good	Good	Good	Good	Good
Sugarbeet		V1.0-1.5	V2.1-2.7	V4.2-5.9	V10.9-13.9	V14.9-17.9	Canopy
Redroot Pigweed		1-21f	2-31f	3-61f	8-10"	14 - 20"	16 - 20"
Amaranth		Cot-11f	2-31f	3-41f	8-12"	14 - 22"	16 - 22"
Quinoa		Cot-21f	4-61f(2")	3-6"	12-20"	22 - 30"	28 - 34"
Canola		Cot-21f(1/2-1")	3-41f(2-3")	5-61f(6")	28-32"	30 - 36"	30 - 36"
Flax		Cot-21f(1/2-1")	(1/2-2")	3-6"	8-14"	14 - 16"	16 - 18"
Millet		1.9-2.51f(1")	3-41f(1-3")	4-51f(3-	10-14"	16 - 24"	20 - 24"
Oats		1.9-2.11f(3")	3-41f(4-5")	4-51f(6-	28-32"	30 - 34"	30 - 36"
Com.Lambsquarters		Cot-21f	2-41f	6-81f(2-	10-14"	14 - 20"	16 - 22"

### July 17 Evaluation

				Brnw	Colq				
	Date of		Sabt	-	Quin	Cano	Flax	Oats	Fomi
Treatment*	Applicatio	n Rate			cntl				
		lb/A	8	용	8	8	0jo	8	&
De&Ph&Et+Tfsu+C	lpy+CletM+MSO ·								
	(May 21, 28, June	5, 21)							
	0.08+0.004+0.	03+0.03+1.5%	0	94	98	84	53	99	99
De&Ph&Et+Tfsu+C	lpy+CletM (May 21)								
	0.25+0.0	08+0.06+0.03							
De&Ph&Et+Tfsu	+Clpy+CletM (May 28, J								
		08+0.06+0.03							
De&Ph&Et+Tfsu	+Clpy+CletM (June 21)		-						
	0.5+0.0	08+0.06+0.03	6	99	99	96	98	99	99
Untreated Check		0	0	0	0	0	0	0	0
Glyphosate+AMS(	May 28, June 21, July	11) 0.75+2.9	0	99	99	99	99	99	99
Glyphosate+AMS+	P90 (May 28, June 21,	July 11)				• • •			
	0.	75+2.9+0.25%	0	99	99	99	99	99	99
MON79790+AMS (M	ay 28,June 21,27, July	11) 1.5+2.9	1	99	99	99	99	99	99
Glyphosate+AMS	(May 28)	0.75+2.9							· · ·
Glyphosate+AM	S+Dime (June 21) 0	.75+2.9+0.84							
Glyphosate+AM	S (July_11)	0.75+2.9	0	99	99	99	99	99	99
Glyphosate+AMS+	Clpy (May 28) 0	.75+2.9+0.09		·					
Glyphosate+AM	S (June 21, July 11)	0.75+2.9	0	99	99	99	99	99	99
Glyphosate+AMS+	Dime (May 28) 0	.75+2.9+0.84							
Glyphosate+AM	IS (June 21, July 11)	0.75+2.9	0	99	99	99	99	99	99
Glyphosate+AMS+	CletM (May 28) 0.	75+2.9+0.125							
Glyphosate+AM	IS (June 21, July 11)	0.75+2.9	0	99	99	99	99	99	99
Table continued	on next page.								

# Glyphosate on Roundup Ready sugarbeet, Prosper, 2007. (continued)

### July 17 Evaluation (continued)

			ĸrpw	Colq				
Date o	of	Sgbt	Amar					
Treatment* Applicat	tion Rate	inj	cntl	cntl	cntl	cntl	cntl	cntl
	lb/A	olo	8	olo	olo	olo Olo	90	99
Ethofumesate (Pre) (May 3)	3.75							
Glyt+AMS (May 28, June 21, July 2	11) 0.75+2.9	0	99	99	99	99	99	99
Glyphosate+AMS (May 28)	0.75+2.9							
Glyphosate+AMS+Etho (June 21)	0.75+2.9+2							
Glyphosate+AMS (July 11)	0.75+2.9	1	99	99	99	99	99	99
Ethofumesate (Pre) (May 3)	2.25							
Glyphosate+AMS (May 28)	0.75+2.9							
Glyphosate+AMS+Etho (June 21)	0.75+2.9+1.5							
Glyphosate+AMS (July 11)	0.75+2.9	0	99	. 99	99	99	99	99
Glyt+AMS+P90 (May 28, June 21)	0.75+2.9+0.25%							
Glyt+AMS+P90+Eminent (July 11)								
0.7!	5+2.9+0.25%+0.1	0	99	99	99	99	99	99
Glyt+AMS+P90 (May 28, June 21)	0.75+2.9+0.25%							
Glyt+AMS+P90+Headline (July 11)								
	+2.9+0.25%+0.15	0	99	99	99	99	99	99
Glyt+AMS+P90 (May 28, June 21)	0.75+2.9+0.25%							
Glyt+AMS+P90+SuperTin (July 11)					• .			
	+2.9+0.25%+0.25	1	99	99	99	99	99	99
Glyt+AMS+P90+Lorsban (May 28) 0.75	5+2.9+0.25%+0.5							
Glyt+AMS+P90(June 21, July 11)	0.75+2.9+0.25%	0	99	99	99	99	99	99
Glyphosate+AMS+P90(May 28, June 21)	0.75+2.9+0.25%	0	98	99	99	99	99	99
EXP MEAN		1	93	93	92	91	94	94
C.V. %		206	2	0	1	1	0	0
LSD 5%		2	2	0	1	2	0	0
LSD 1%		2	3	1	1	2	0	0
# OF REPS		4	4	4	4	4	4	4

surfactant from West Central.

#### July 30 Evaluation

				Rrpw	Colq				
	Date of		Sgbt	Amar	Quin	Cano	Flax	Oats	Fomi
Treatment* P	pplication	Rate	inj	cntl	cntl	cntl	cntl	cntl	cntl
		lb/A	elo elo	99	90	olo	90	olo	90
De&Ph&Et+Tfsu+Clpy+CletM+MSC	)								
(May 21,	28, June 5, 2	21)							
0.08	+0.004+0.03+0.	03+1.5%	0	96	98	83	63	99	99
De&Ph&Et+Tfsu+Clpy+CletM (Ma	y 21)								
	0.25+0.008+0.	06+0.03							
De&Ph&Et+Tfsu+Clpy+CletM (	May 28, June 5	5)							
	0.33+0.008+0.	06+0.03							
De&Ph&Et+Tfsu+Clpy+CletM (	June 21)								
	0.5+0.008+0.	06+0.03	1	_99	99_	95	94	99	99
Untreated Check		0	0	0	0	0	0	0	0
Glyphosate+AMS(May 28, June	21, July 11) (	).75+2.9	0	99	99	99	99	99	99
Glyphosate+AMS+P90 (May 28,	June 21, July	11)							
	0.75+2.	9+0.25%	0	99	99	99	99	99	99
MON79790+AMS (May 28, June 23	, 27,July 11)	1.5+2.9	0	99	99	99	99	99	99

### Glyphosate on Roundup Ready sugarbeet, Prosper, 2007. (continued)

### July 30 Evaluation (continued)

bury so availation (continued)								-
			Rrpw	Colq				
Date of		Sgbt		Quin				
Treatment* Application	Rate	inj	cntl	cntl	cntl	cntl	cntl	cntl
	lb/A	olo	olo	olo	olo	0 <sup>0</sup>	olo	olo
	.75+2.9							
	.9+0.84							
Glyphosate+AMS (July 11) 0	.75+2.9	0	99	99	99	99	99	99
Glyphosate+AMS+Clpy (May 28) 0.75+2	.9+0.09	-			·.			:
Glyphosate+AMS (June 21, July 11) 0	.75+2.9	0	99	99	99	99	99	99
Glyphosate+AMS+Dime (May 28) 0.75+2	.9+0.84		•					
Glyphosate+AMS (June 21, July 11) 0	.75+2.9	0	99	99	99	99	99	99
Glyphosate+AMS+CletM (May 28) 0.75+2.	9+0.125				1997 1997			
Glyphosate+AMS (June 21, July 11) 0	.75+2.9	0	99	99	99	99	99	99
Ethofumesate (Pre) (May 3)	3.75		1.1					
Glyt+AMS (May 28, June 21, July 11) 0	.75+2.9	0	99	99	99	99	99	99
Glyphosate+AMS (May 28) 0	.75+2.9	1.4				a ta ta		11.000
Glyphosate+AMS+Etho (June 21) 0.7	5+2.9+2							
	.75+2.9	0	99	99	99	99	99	99
Ethofumesate (Pre) (May 3)	2.25							
Glyphosate+AMS (May 28) 0	.75+2.9							
Glyphosate+AMS+Etho (June 21) 0.75+	2.9+1.5							
Glyphosate+AMS (July 11) 0	.75+2.9	0	99	_99_	99	99	99	99
Glyt+AMS+P90 (May 28, June 21) 0.75+2.	9+0.25%							
Glyt+AMS+P90+Eminent (July 11)								
0.75+2.9+0.	25%+0.1	0	99	99	99	99	99	99
Glyt+AMS+P90 (May 28, June 21) 0.75+2.	9+0.25%							
Glyt+AMS+P90+Headline (July 11)								
0.75+2.9+0.2		0	99	99	99	99	99	99
	9+0.25%							
Glyt+AMS+P90+SuperTin (July 11)								
0.75+2.9+0.2	5%+0.25	0	99	99	99	99	99	99
Glyt+AMS+P90+Lorsban (May 28) 0.75+2.9+0.	25%+0.5	1				en Araanti A		
Glyt+AMS+P90(June 21, July 11) 0.75+2.	9+0.25%	0	99	99	99	99	99	99
Glyphosate+AMS+P90(May 28, June 21) 0.75+2.	9+0.25%	0	98	99	99	99	99	99
EXP MEAN		0	93	93	92	91	94	94
C.V. 8		849	1	0	2	3	0	0
LSD 5% and the second		NS	1	1	2	4	0	0
LSD 1%		NS	2	1	3	6	0	0
# OF REPS		4	4	4	4	4	4	4
AMS=Am-Stik liquid ammonium sulfate from W	lest Cent	ral;	P90=P	remie	r 90 1	non-i	onic	

AMS=Am-Stik liquid ammonium sulfate from West Central; P90=Premier 90 non-ionic surfactant from West Central.

Experiment continued on next page.

### Glyphosate on Roundup Ready sugarbeet, Prosper, 2007. (continued) Combined Evaluations

Date of Treatment* Application Rate			Colq	<u> </u>		<u> </u>	<b>.</b> .
		Amar					
	<u>inj</u>					cntl	
lb/A	0je	olo	olo	olo	olo	olo	olo
De&Ph&Et+Tfsu+Clpy+CletM+MSO (May 21, 28, June 5, 21)							
(May 21, 20, 0ulle 3, 21) 0.08+0.004+0.03+0.03+1.5%	0	95	98	83	58	99	99
De&Ph&Et+Tfsu+Clpy+CletM (May 21)							
0.25+0.008+0.06+0.03							
De&Ph&Et+Tfsu+Clpy+CletM (May 28, June 5)							
0.33+0.008+0.06+0.03							
De&Ph&Et+Tfsu+Clpy+CletM (June 21)							
0.5+0.008+0.06+0.03	4	99	99	95	96	99	99
Untreated Check 0	0	0	0	0	0	0	0
Glyphosate+AMS(May 28, June 21, July 11) 0.75+2.9	0	99	99	99	99	99	99
Glyphosate+AMS+P90 (May 28, June 21, July 11)				"			
0.75+2.9+0.25%	0	99	99	99	99	99	99
MON79790+AMS (May 28, June 21, 27, July 11) 1.5+2.9	1	99	99	99	99	99	99
	<b>1</b>		33	39	99	39	99
Glyphosate+AMS   (May 28)   0.75+2.9     Glyphosate+AMS+Dime   (June 21)   0.75+2.9+0.84							
Glyphosate+AMS (July 11) 0.75+2.9	0	99	99	99	99	99	99
Glyphosate+AMS+Clpy (May 28) 0.75+2.9+0.09						99	99
Glyphosate+AMS (June 21, July 11) 0.75+2.9	0	99	99	99	99	99	99
Glyphosate+AMS+Dime (May 28) 0.75+2.9+0.84	0		33	33		33	99
Glyphosate+AMS+Dime (May 28) 0.75+2.9+0.84 Glyphosate+AMS (June 21, July 11) 0.75+2.9	0	99	99	99	99	99	99
	0	33	99	39		99	
	0	99	99	99	99	99	0.0
Glyphosate+AMS (June 21, July 11) 0.75+2.9	0	99	99	99		99	99
Ethofumesate (Pre) (May 3) 3.75 Glyt+AMS (May 28, June 21, July 11) 0.75+2.9	0	99	99	99	99	99	99
		99	99	99		99	99
Glyphosate+AMS   (May 28)   0.75+2.9     Glyphosate+AMS+Etho   (June 21)   0.75+2.9+2							
	1	99	99	99	99	99	99
	<u>+</u>	33	99	99		99	99
Ethofumesate (Pre)   (May 3)   2.25     Glyphosate+AMS   (May 28)   0.75+2.9							
Glyphosate+AMS   (May 28)   0.75+2.9     Glyphosate+AMS+Etho   (June 21)   0.75+2.9+1.5							
Glyphosate+AMS (July 11) 0.75+2.9	0	99	99	99	99	99	99
Glyt+AMS+P90 (May 28, June 21) 0.75+2.9+0.25%						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Glyt+AMS+P90 (May 20, Julie 21) 0.75+2.9+0.25% Glyt+AMS+P90+Eminent (July 11)							
0.75+2.9+0.25%+0.1	0	99	99	99	99	99	99
Glyt+AMS+P90 (May 28, June 21) 0.75+2.9+0.25%							
Glyt+AMS+P90+Headline (July 11)							
0.75+2.9+0.25%+0.15	0	99	99	99	99	99	99
Glyt+AMS+P90 (May 28, June 21) 0.75+2.9+0.25%							
Glyt+AMS+P90+SuperTin (July 11)							
0.75+2.9+0.25%+0.25	1	99	99	99	99	99	99
Glyt+AMS+P90+Lorsban (May 28) 0.75+2.9+0.25%+0.5							
Glyt+AMS+P90(June 21, July 11) 0.75+2.9+0.25%	0	99	99	99	99	99	99
Glyphosate+AMS+P90(May 28, June 21) 0.75+2.9+0.25%	0	98	99	99	99	99	99
	0	93	93	92	91	94	94
EXP MEAN	341	95 1	93	92 1	3	94 0	94 0
EXP MEAN C.V. %		1					
C.V. %		1	Ω	1		()	$\cap$
C.V. % LSD 5%	1	1 2	0 1	1 2	3 3	0 0	0 0
C.V. %		1 2 8	0 1 8	1 2 8	3 3 8	0 0 8	0 0 8

surfactant from West Central. Experiment continued on next page.

Date of	Sgbt	· · · · · · · · · · · · · · · · · · ·	Root	Impur	Extr
Treatment* Application Rate	popl	Sucr	Yield	Index	Sucr
lb/A	#/60'	olo	ton/A		lb/A
De&Ph&Et+Tfsu+Clpy+CletM+MSO					
(May 21, 28, June 5, 21)					
0.08+0.004+0.03+0.03+1.5%	.79	15.9	27.4	607	7902
De&Ph&Et+Tfsu+Clpy+CletM (May 21)					
0.25+0.008+0.06+0.03					
De&Ph&Et+Tfsu+Clpy+CletM (May 28, June 5)					
0.33+0.008+0.06+0.03					
De&Ph&Et+Tfsu+Clpy+CletM (June 21) 0.5+0.008+0.06+0.03	84	16.0	23.8	675	6845
	69	15.6	15.8	679	4412
	79	16.4	28.3	608	8465
Glyphosate+AMS(May 28, June 21, July 11) 0.75+2.9		10.4	20.3	000	0405
Glyphosate+AMS+P90 (May 28, June 21, July 11) 0.75+2.9+0.25%	77	16.6	27.2	594	8233
MON79790+AMS (May 28, June 21, 27, July 11) 1.5+2.9	74	16.1	26.8	575	7881
Glyphosate+AMS (May 28) 0.75+2.9					
Glyphosate+AMS+Dime (June 21) 0.75+2.9+0.84 Glyphosate+AMS (July 11) 0.75+2.9	77	16.4	28.3	617	8437
Glyphosate+AMS+Clpy (May 28) 0.75+2.9+0.09		10.4	20.5	017	0407
Glyphosate+AMS (June 21, July 11) 0.75+2.9	87	16.5	30.8	626	9198
Glyphosate+AMS+Dime (May 28) 0.75+2.9+0.84		10.5	50.0	020	5150
Glyphosate+AMS (June 21, July 11) 0.75+2.9	81	16.0	29.9	634	8656
Glyphosate+AMS+CletM (May 28) 0.75+2.9+0.125		10.0		034	0050
Glyphosate+AMS (June 21, July 11) 0.75+2.9	90	16.7	28.4	605	8592
Ethofumesate (Pre) (May 3) 3.75					
Glyt+AMS (May 28, June 21, July 11) 0.75+2.9	84	15.9	29.1	665	8316
Glyphosate+AMS (May 28) 0.75+2.9					
Glyphosate+AMS+Etho (June 21) 0.75+2.9+2					
Glyphosate+AMS (July 11) 0.75+2.9	97	16.0	31.2	607	9028
Ethofumesate (Pre) (May 3) 2.25					
Glyphosate+AMS (May 28) 0.75+2.9					
Glyphosate+AMS+Etho (June 21) 0.75+2.9+1.5					
Glyphosate+AMS (July 11) 0.75+2.9	82	15.9	28.8	685	8172
Glyt+AMS+P90 (May 28, June 21) 0.75+2.9+0.25%					
Glyt+AMS+P90+Eminent (July 11)	0.5				
0.75+2.9+0.25%+0.1	85	15.8	30.2	651	8628
Glyt+AMS+P90 (May 28, June 21) 0.75+2.9+0.25%					
Glyt+AMS+P90+Headline (July 11) 0.75+2.9+0.25%+0.15	88	16.6	29.3	588	8873
Glyt+AMS+P90 (May 28, June 21) 0.75+2.9+0.25%	00	10.0	29.3	566	00/3
Glyt+AMS+P90 (May 28, June 21) 0.75+2.9+0.25% Glyt+AMS+P90+SuperTin (July 11)					
0.75+2.9+0.25%+0.25	82	15.9	29.2	634	8397
Glyt+AMS+P90+Lorsban (May 28) 0.75+2.9+0.25%+0.5		±0.9		004	0001
Glyt+AMS+P90(June 21, July 11) 0.75+2.9+0.25%	81	16.2	28.5	613	8361
Glyphosate+AMS+P90(May 28, June 21) 0.75+2.9+0.25%	81	16.2	29.4	635	8624
	υŢ			000	0024
EXP MEAN	82	16.1	27.9	628	8168
C.V. %	14	4	10	11	11
LSD 5%	NS	NS	4.0	NS	1321
LSD 1%	NS	NS	5.3	NS	1761
# OF REPS	4	4	4	4	4

AMS=Am-Stik liquid ammonium sulfate from West Central; P90=Premier 90 non-ionic surfactant from West Central. Experiment summary on next page.

#### SUMMARY

The summary is from the combined dates of evaluation. All treatments including glyphosate gave nearly total control of all species except sugarbeet. Sugarbeet showed less than 5% injury from all glyphosate and conventional treatments. The micro-rate treatment gave less control of pigweed spp., lambsquarters spp., and flax than other treatments. The conventional rate treatment gave less control of canola and flax than the glyphosate treatments. The untreated check yielded less extractable sucrose per acre than all other treatments. Sugarbeet treated with the conventional rate of conventional herbicides yielded less than many treatments. Sugarbeet treated with the micro-rate yielded numerically greater than sugarbeet treated with the conventional rate. Since the conventional rate gave better weed control than the micro-rate, the lower yield from the conventional rate plots suggests that the conventional rate caused enough sugarbeet injury to cause yield loss even though the visual evaluations of injury did not detect severe injury. This raises a question of whether the 'Beta RZ02RR07' variety used in this experiment was especially susceptible to injury from conventional herbicides. **Glyphosate on Roundup Ready sugarbeet, Crookston, 2007.** (Dexter) 'Beta RZ02RR07' sugarbeet was seeded 1.25 inches deep in 22-inch rows May 9. Counter 15G insecticide at 12 pounds product per acre was applied modified in-furrow at planting. 'Plainsman' amaranth, 'Interstate Hyola 420' canola at 14 lb/A, quinoa (Chenopodium quinoa), 'Golden German' millet at 34 lb/A, 'Maida' oat at 26 lb/A, and yellow-seeded flax at 12 lb/A were seeded in 4 foot strips across herbicide plots May 9, prior to sugarbeet seeding. Preemerge ethofumesate was applied May 9 after planting. Postemergence treatments were applied May 29, June 4, June 20, June 27, July 5 and July 13. All treatments were applied in 17 gpa water at 40 psi through 8002 nozzles to the center four rows of six-row by 30-foot long plots. Sugarbeet injury and redroot pigweed and amaranth, common lambsquarters and quinoa, canola, flax, oat, millet, and yellow foxtail control were evaluated July 20 and July 30.

Date of Application	May 9	May 29	June 4	June 20	June 27	July 5	July 13
Time of Day	12:45 PM	11:30 AM	11:00 AM	12:30 PM	1:00 PM	10:00 AM	10:30 AM
Air Temperature (°F)	80	74	68	76	62	73	74
Relative Humidity (%)	23	56	32	32	33	52	38
Soil Temp. (°F at 6")	58	61	62	64	67	67	62
Wind Velocity (mph)	10	.5	13	9	8	4	5
Cloud Cover (%)	• 0	100	10	0	95	95	70
Soil Moisture	Good	Good	Good	Good	Good	Good	Good
Sugarbeet		Cot-V2.1	V1.1-4.2	V5.8-6.8	V8.5-13.9	V14.1-20.9	Canopy
Amaranth		1-21f	Cot-41f	2-5"	6-10"	20 - 26"	28-30"
Quinoa		4lf(2")	4-6"	8-12"	10-18"	26 - 30"	30-32"
Canola		2-31f(2")	2-41f(3-4")	16-20"	28-32"	36 - 42"	38-42"
Flax		Cot-1.5"	1-4"	2-6"	4-10"	16 - 20"	16-22"
Oat		2-31f(4-6")	3-41f(5-7")	6-71f10-12"	20-24"	30 - 34"	30-36"
Millet		2-31f(1-2")	3-41f(3-5")	6-71f14-16"	14-18"	22 - 26"	30-38"
RedRoot Pigweed		Cot-31f	Cot-51f	6-8"	10-14"	16 - 26"	24-30"
Com.Lambsquarter		2-41f	2-3"	10-12"	12-16"	18 - 26"	22-26"

### July 20 Evaluation

			Rrpw	Colq						
·	Date of		Amar	Quin	Cano	Flax	Oats	Fomi	Yeft	Sgbt
Treatment*	Application	Rate	cntl	cntl	cntl	cntl	cntl	cntl	cntl	inj
		lb/A	00	olo	olo	olo	e de	olo	olo	010
De&Ph&Et+Tfsu+Clpy	+CletM+MSO							•		
(May 2)	9, June 4, 20, July									
	0.08+0.004+0.03+0	.03+1.5%	55	94	70	30	99	99	99	0
De&Ph&Et+Tfsu+Clpy	+CletM (May 29)									
	0.25+0.008+0	.06+0.03								
De&Ph&Et+Tfsu+Cl	oy+CletM (June 4, 2									
	0.33+0.008+0	.06+0.03								
De&Ph&Et+Tfsu+Cl	py+CletM (June 27)									
	0.5+0.008+0	.06+0.03	94	99	90	89	99	99	99	5
Untreated Check	·	0	0	0	0	0	0	0	0	0
Glyphosate+AMS (Jun	ne 4, 27, July 13)									
		0.75+2.9	99	99	99	99	99	99	99	0
Glyphosate+AMS+P90	(June 4, 27, July 1	13)								
	0.75+2	.9+0.25%	99	99	99	99	99	99	99	0
MON79790+AMS (June	4, 27, July 5, 13	)								
		1.5+2.9	99	99	99	99	99	99	99	0
Glyphosate+AMS	(June 4)	0.75+2.9								
Glyphosate+AMS+D	ime(June 27) 0.75+:	2.9+0.84								
Glyphosate+AMS	(July 13)	0.75+2.9	99	99	99	99	99	99	99	0
Glyphosate+AMS+Clp	y (June 4) 0.75+	2.9+0.09	5	5 C						
Glyphosate+AMS (	June 27, July 13)	0.75+2.9	99	99	99	99	99	99	99	0
Glyphosate+AMS+Dim	e (June 4) 0.75+	2.9+0.84	:					·······	· · · · ·	
. – –	June 27, July 13)	0.75+2.9	99	99	99	99	99	99	99	• O
<u> </u>							-			
# Glyphosate on Roundup Ready sugarbeet, Crookston, 2007. (continued)

# July 20 Evaluation (continued)

	on (continued)		Rrpw	Colq						
	Date of				Cano	Flax	Oats	Fomi	Yeft	Sabt
Treatment*	Application	n Rate			cntl					in
······································		lb/A	olo	ę	8	olo .	olo	8	 0jo	
Glyphosate+AMS+Cl	etM (June 4) 0.75-									
~ ~	(June 27, July 13)		99	99	99	99	99	99	99	0
Ethofumesate (Pre		3.75								
	4, 27, July 13)	0.75+2.9	99	99	99	99	99	99	99	0
Glyphosate+AMS	(June 4)	0.75+2.9								
		0.75+2.9+2								
Glyphosate+AMS	(July 13)	0.75+2.9	99	99	9'9	99	99	99	99	0
Ethofumesate (Pre		2.25								
Glyphosate+AMS	(June 4)	0.75+2.9								
	Etho (June 27) 0.7									
Glyphosate+AMS	(July 13)	0.75+2.9	99	99	99	99	99	99	99	0
Glyt+AMS+P90 (Jun		+2.9+0.25%								
Glyt+AMS+P90+Em										
-		+0.25%+0.1	99	99	99	99	99	99	99	0
Glyt+AMS+P90 (Jun		+2.9+0.25%								
	adline (July 13)									
-	0.75+2.9+0	).25%+0.15	99	99	99	99	99	99	99	0
Glyt+AMS+P90 (Jun		+2.9+0.25%								
	perTin (July 13)									
· · · · · · · · · · · · · · · · · · ·	0.75+2.9+0	).25%+0.25	99	99	99	99	99	99	99	5
Glyt+AMS+P90+Lors	ban (June 4)	******								*****
1		+0.25%+0.5								
Glyt+AMS+P90 (J	une 21, July 11)									
-	0.75-	+2.9+0.25%	99	99	99	99	99	99	99	0
Glyphosate+AMS+P9	0 (June 27, July 2	13)								
	-	+2.9+0.25%	99	99	99	99	99	99	99	0
EXP MEAN			91	93	91	89	93	94	93	1
C.V. %			2	2	2	2	0	0	0	0
LSD 5%			3	3	3	2	0	0	0	NS
LSD 1%			4	4	4	3	0	0	1	NS
# OF REPS			4	4	4	4	4	4	4	4
AMS=Am-Stik liqui	d ammonium sulfate	e from Wes	Cent:	ral; 1	P90=P	remie	r 90	non-i	onic	
surfactant from W	lest Central.									
July 30 Evaluatio	n .									
			Rrpw	Colq						
	Date of		Amar	Quin	Cano	o Fla	ax O	ats	Fomi	Yeft
Treatment*	Application	Rate	cntl	cntl	cnt	l cnt	tl c	ntl	cntl	cntl

			T/T PW	COrd					
	Date of		Amar	Quin	Cano	Flax	Oats	Fomi	Yeft
Treatment*	Application	Rate	cntl	cntl	cntl	cntl	cntl	cntl	cntl
•		lb/A	e Se	ç	ę	00	ę	oło	olo
De&Ph&Et+Tfsu+Cl	Lpy+CletM+MSO								
(May	7 29, June 4, 20, July	(27)							
	0.08+0.004+0.03+0.0	)3+1.5%	71	96	74	33	99	99	99
De&Ph&Et+Tfsu+Cl	Lpy+CletM (May 29)				•				********
	0.25+0.008+0.0	06+0.03							
De&Ph&Et+Tfsu+	+Clpy+CletM (June 4, 2	20)							
	0.33+0.008+0.0	06+0.03							
De&Ph&Et+Tfsu+	+Clpy+CletM (June 27)								
	0.5+0.008+0.0	06+0.03	97	99	90	95	98	99	99
Untreated Check		0	0	0	0	0	0	0	0
Table continued	on next page.								

Glyphosate on Roundup Ready sugarbeet, Crookston, 2007. (continued)
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July 30 Evaluation (continued)

Date of	Rrpw Amar	Colq Quin	Cano	Flax	Oats	Fomi	Yeft
Treatment* Application Rate	cntl	cntl	cntl	cntl	cntl	cntl	cntl
lb/A	0 <sup>j</sup> O	8		8	%	8	90 90
Glyphosate+AMS (June 4, 27, July 13)							
0.75+2.9	99	99	99	99	99	99	99
Glyphosate+AMS+P90(June 4, 27, July 13)							
0.75+2.9+0.25%	99	99	99	99	99	99	99
MON79790+AMS (June 4, 27, July 5, 13)							
1.5+2.9	99	99	99	99	99	99	99
Glyphosate+AMS (June 4) 0.75+2.9							
Glyphosate+AMS+Dime(June 27)0.75+2.9+0.84							
Glyphosate+AMS (July 13) 0.75+2.9	99	99	99	99	99	99	99
Glyphosate+AMS+Clpy (June 4) 0.75+2.9+0.09							
Glyphosate+AMS (June 27, July 13) 0.75+2.9	99	99	99	99	99	99	99
Glyphosate+AMS+Dime (June 4) 0.75+2.9+0.84					44.3 		
Glyphosate+AMS (June 27, July 13) 0.75+2.9	99	99	99	99	99	99	99
Glyphosate+AMS+CletM(June 4) 0.75+2.9+0.125		te Alexandre	Sa sulta	The New York			1.1.1.1.1.1
Glyphosate+AMS (June 27, July 13) 0.75+2.9	99	99	99	99	99	99	99
Ethofumesate (Pre) (May 9) 3.75					n an		
Glyt+AMS (June 4, 27, July 13) 0.75+2.9	99	99	99	99	99	99	99
Glyphosate+AMS (June 4) 0.75+2.9						an an an an a	
Glyphosate+AMS+Etho (June 27) 0.75+2.9+2			n na Alina A			Arrest Arrest	
Glyphosate+AMS (July 13) 0.75+2.9	99	99	99	99	99	99	99
Ethofumesate (Pre) (May 9) 2.25			the state			ta a se	al Num
Glyphosate+AMS (June 4) 0.75+2.9							
Glyphosate+AMS+Etho(June 27) 0.75+2.9+1.5							
Glyphosate+AMS (July 13) 0.75+2.9	99	99	99	99	99	99	99
Glyt+AMS+P90 (June 4, 27) 0.75+2.9+0.25%							
Glyt+AMS+P90+Eminent (July 13)							
0.75+2.9+0.25%+0.1	99	99	99	99	99	99	99
Glyt+AMS+P90 (June 4, 27) 0.75+2.9+0.25%					1.5		
Glyt+AMS+P90+Headline (July 13)							
0.75+2.9+0.25%+0.15	99	99	99	99	99	99	99
Glyt+AMS+P90 (June 4, 27) 0.75+2.9+0.25%							n haaraan A
Glyt+AMS+P90+SuperTin (July 13)							
0.75+2.9+0.25%+0.25	99	99	99	99	99	99	99
Glyt+AMS+P90+Lorsban (June 4)		No. 1					
0.75+2.9+0.25%+0.5							
Glyt+AMS+P90 (June 21, July 11)							
0.75+2.9+0.25%	99	99	99	99	99	99	99
Glyphosate+AMS+P90 (June 27, July 13)	1.1		111	a de Ara. Mais		1.111	
0.75+2.9+0.25%	99	99	99	99	99	99	99
EXP MEAN	92	93	92	90	93	94	93
C.V. %	1	1	1	2	0	0	0
LSD 5%	2	1	2	2	0	0	0
LSD 1%	2	2	2	3	1	0	0
# OF REPS	4	4	4	4	4	4	4

surfactant from West Central.

Experiment continued on next page.

# Glyphosate on Roundup Ready sugarbeet, Crookston, 2007. (continued)

### Combined Evaluations

			Dames	Cola				·····		
	Date of			Colq	Cana	Flow	Oata	Ford	Voft	c~b+
Treatment*	Application	Rate					cntl		Yeft	sgbt inj
		lb/A	8	<u></u>		- <u></u> 8	<u></u>	<u>8</u>	8	
De&Ph&Et+Tfsu+Clpy+Cl		ID/A	6	6	б	ð	6	õ	б	б
	June 4, 20, July	7 271								
	.08+0.004+0.03+0.		63	95	72	31	99	99	99	0
De&Ph&Et+Tfsu+Clpy+Cl					12	51				
Dearmatc+11Su+C1py+C1	0.25+0.008+0.	06+0 03								
De&Ph&Et+Tfsu+Clpy+										
Dealuane itsa etpy	0.33+0.008+0.									
De&Ph&Et+Tfsu+Clpy+		00.0100								
	0.5+0.008+0.	06+0.03	95	99	90	92	98	99	99	5
Untreated Check		0	0	0	0	0	0	0	0	0
Glyphosate+AMS (June	$4, 27, 111 \times 13$									
styphosace mine (cane		).75+2.9	99	99	99	99	99	99	99	0
Glyphosate+AMS+P90(Ju										
Gryphosace (Mip 1 20 (00	· · · ·	.9+0.25%	99	99	99	99	99	99	99	0
MON79790+AMS (June 4,										
HONTSTSCIALIS (Culle 4)	, 27, 001y 3, 13,	1.5+2.9	99	99	99	99	99	99	99	0
Glyphosate+AMS	(June 4) (	),75+2.9								
Glyphosate+AMS+Dime										
		).75+2.9	99	99	99	99	99	99	99	0
Glyphosate+AMS+Clpy		2.9+0.09								
Glyphosate+AMS (Jur			99	99	99	99	99	99	99	0
Glyphosate+AMS+Dime		2.9+0.84								
Glyphosate+AMS (Jur			99	99	99	99	99	99	99	0
Glyphosate+AMS+CletM										
Glyphosate+AMS (Jur			99	99	99	99	99	99	99	0
Ethofumesate (Pre)	(May 9)	3.75								
Glyt+AMS (June 4, 2	· <b>_</b> ·	).75+2.9	99	99	99	99	99	99	99	0
		0.75+2.9								<u>~</u>
Glyphosate+AMS+Etho		75+2.9+2						`		
		0.75+2.9	99	99	99	99	99	99	99	0
	(May 9)	2.25								
		0.75+2.9								
Glyphosate+AMS+Ethe	,									
		0.75+2.9	99	99	99	99	99	99	99	0
Glyt+AMS+P90 (June 4)		.9+0.25%								
Glyt+AMS+P90+Eminer										
*	0.75+2.9+0	.25%+0.1	99	99	99	99	99	99	99	0
Glyt+AMS+P90 (June 4	, 27) 0.75+2	.9+0.25%								
Glyt+AMS+P90+Headl										
-	0.75+2.9+0.2	25%+0.15	99	99	99	99	99	99	99	0
Glyt+AMS+P90 (June 4	, 27) 0.75+2	.9+0.25%		····						
Glyt+AMS+P90+Super'	-									
			99	99	99	99	99	99	99	5
	0.75+2.9+0	258+0.25	22							5
Glyt+AMS+P90+Lorsban		25%+0.25								
	(June 4) 0.75+2.9+0									

### Glyphosate on Roundup Ready sugarbeet, Crookston, 2007. (continued)

### Combined Evaluations (continued)

				Rrpw	Colq						
		Date of		Amar	Quin	Cano	Flax	Oats	Fomi	Yeft	Sgbt
Treatment*	·	Application	Rate	cntl	cntl	cntl	cntl	cntl	cntl	cntl	inj
			lb/A	of of	00	00	90	8	80	90	8
Glyphosate+	AMS+P90 (June	27, July 13)									
		0.75+2.	9+0.25%	99	99	99	99	99	99	99	0
EXP MEAN				91	93	91	89	93	94	93	1
C.V. %				3	2	2	2	0	0	0	0
LSD 5%				3	2	2	. 2	0	0	0	NS
LSD 1%				3	2	2	2	0	0	0	NS
# OF REPS			ъ.	8	8	8	8	8	8	8	4
AMS=Am-Stik	liquid ammon:	ium sulfate f	rom West	Cent	ral;	P90=P:	remie	r 90 i	non-io	onic	

surfactant from West Central.

**SUMMARY:** The summary is from the combined dates of evaluation. Sugarbeet injury was negligible from all treatments. All treatments gave nearly total control of oat, foxtail millet, and yellow foxtail. Glyphosate gave nearly total control of all evaluated species except sugarbeet when used alone or in combinations. The micro-rate of conventional herbicides gave less control of pigweed spp., lambsquarters spp., canola, and flax as compared to the conventional rate of conventional herbicides. The conventional rate of conventional herbicides gave less control of pigweed spp., canola, and flax than the glyphosate treatments.

Glyphosate and conventional herbicides influence on sugarbeet yield, Prosper, 2007. (Dexter) 'Beta RZ02RR07' and 'Beta 993RR' sugarbeet was seeded 1.25 inches deep in 22-inch rows May 3. Counter 15G insecticide at 12 pounds product per acre was applied modified in-furrow at planting. Preemerge ethofumesate was applied May 3 after planting. Postemergence treatments were applied May 28, June 5, June 21, and June 27. All treatments were applied in 17 gpa water at 40 psi through 8002 nozzles to the center four rows of six-row by 30-foot long plots. The entire experiment was sprayed with Headline at 9 fl oz/A July 31. Sugarbeet injury was evaluated July 5 and July 17. Sugarbeet from the center 2 rows was counted and harvested September 11.

Date of Application	May 3	May 28	June 5	June 21	June 27
Time of Day	10:00 AM	12:00 PM	11:45 AM	12:30 PM	9:15 AM
Air Temperature (°F)	61	80	62	79	67
Relative Humidity (%)	31	46	20	33	36
Soil Temp. (°Fat 6")	50	58	61	70	69
Wind Velocity (mph)	18	18	5	9	4
Cloud Cover (%)	10	65	5	30	25
Soil Moisture	Good	Good	Good	Good	Good
Sugarbeet		V2.1-2.7	V4.2-5.9	V10.9-13.9	V14.9-17.9

July 5 and July 17 Evaluations AND Yield	July	5	and	July	17	Evaluations	AND	Yield	Data
--	------	---	-----	------	----	-------------	-----	-------	------

		7-5	7-17					
	Herbicide	Sgbt	Sgbt	Sgbt		Root	Impur	Extr
Variety	Treatment	inj	inj	Popl	Sucr	Yield	Index	Sucr
		olo	olo	#/60'	olo	ton/A		lb/A
Beta Rz02RR07	1)Micro-rate	6	1	89	15.8	28.8	608	8255
Beta Rz02RR07	2)Conventional Rate	18	5	90	15.4	26.8	642	7468
Beta Rz02RR07	3)Untreated Check	0	0	81	16.5	26.3	543	7976
Beta Rz02RR07	4)Glyphosate 2 times	0	0	92	16.4	30.2	588	9053
Beta Rz02RR07	5)Glyphosate 4 times	0	0	95	15.9	30.5	585	8841
Beta Rz02RR07	6)Pre fb Conv. Rate	18	6	93	15.6	26.6	600	7520
Beta Rz02RR07	7)Pre fb Glyp. 2 times	1	0	83	16.6	28.7	526	8757
Beta 993RR	1)Micro-rate	5	1	79	15.4	27.7	689	7656
Beta 993RR	2)Conventional Rate	11	1	97	15.4	28.8	701	7927
Beta 993RR	3)Untreated Check	0	0	78	15.7	25.2	667	7160
Beta 993RR	4)Glyphosate 2 times	0	0	90	15.6	32.3	670	9028
Beta 993RR	5)Glyphosate 4 times	1	0	80	16.2	30.1	621	8854
Beta 993RR	6)Pre fb Conv. Rate	19	3	81	15.2	26.8	719	7279
Beta 993RR	7)Pre fb Glyp. 2 times	3	0	91	16.1	31.1	617	9056
Experiment Mea	in j	6	1	87	15.8	28.6	627	8202
CV8		55	160	11	5	11	12	11
LSD 5%		5	3	13	NS	NS	105	1257
LSD 1%		6	4	NS	NS	NS	NS	1682
Number of Reps	3	4	4	4	4	4	4	4

Experiment continued on next page

Glyphosate and conventional herbicides influence on sugarbeet yield, Prosper, 2007. (continued)

Herbicide Treatments	Date of Application	Rate
1)Micro-rate	· · · · · · · · · · · · · · · · · · ·	lb/A
De&Ph&Et+Tfsu+Clpy+CletM+MSO	(May 28, June 5, 21, 27)	0.08+0.004+0.03+0.03+1.5%
2)Conventional Rate		
De&Ph&Et+Tfsu+Clpy+CletM	(May 28)	0.25+0.008+0.06+0.03
De&Ph&Et+Tfsu+Clpy+CletM	(June 5, 21)	0.33+0.008+0.06+0.03
De&Ph&Et+Tfsu+Clpy+CletM	(June 27)	0.5+0.008+0.06+0.03
3) Untreated Check		0
4) Glyphosate 2 times		
Glyphosate+P90+AMS	(June 5, 27)	1+0.25%+1.7
5) Glyphosate 4 times		
Glyphosate+P90+AMS (May 28	, June 5, 21, 27)	1+0.25%+1.7
6) Preemergence fb Conventional	Rate	
Ethofumesate(Pre)	(May 3)	3.75
De&Ph&Et+Tfsu+Clpy+CletM	(May 28)	0.25+0.008+0.06+0.03
De&Ph&Et+Tfsu+Clpy+CletM	(June 5, 21)	0.33+0.008+0.06+0.03
De&Ph&Et+Tfsu+Clpy+CletM	(June 27)	0.5+0.008+0.06+0.03
7) Preemergence fb Glyphosate 2	times	
Ethofumesate(Pre)	(May 3)	3.75
Glyphosate+P90+AMS	(June 5, 27)	1+0.25%+1.7
AMS=Am-Stik liquid ammonium sul	fate from West Central: P	90=Premier 90 non-ionic

AMS=Am-Stik liquid ammonium sulfate from West Central; P90=Premier 90 non-ionic surfactant from West Central.

**SUMMARY:** Averaged over all treatments, 'Beta RZ02RR07' yielded 8267 lb/A of extractable sucrose and 'Beta 993' yielded 8137 lb/A of extractable sucrose. Averaged over the two varieties, the 3 treatments containing glyphosate yielded 8931 lb/A of extractable sucrose, the 3 treatments containing only conventional herbicides yielded 7685 lb/A, and the untreated check yielded 7568 lb/A. Weed populations were very non-uniform in this experiment and weed control was not evaluated. The results suggest that the two Roundup Ready sugarbeet varieties were injured by conventional herbicide treatments evaluated.

Adjuvants with sugarbeet herbicides, Prosper, 2007. (Dexter) Beta RZ02RR07' sugarbeet was seeded 1.25 inches deep in 22-inch rows May 3. Counter 15G insecticide at 12 pounds product per acre was applied modified in-furrow at planting. 'Plainsman' amaranth, 'Interstate Hyola 420' canola at 14 lb/A, quinoa (*Chenopodium quinoa*), 'Golden German' millet at 34 lb/A, 'Maida' oat at 26 lb/A, and yellow-seeded flax at 12 lb/A were seeded in 4 foot strips across herbicide plots May 2, prior to sugarbeet seeding. Postemergence treatments were applied May 28, June 5, and June 21. All treatments were applied in 17 gpa water at 40 psi through 8002 nozzles to the center four rows of six-row by 30-foot long plots. Redroot pigweed and amaranth, common lambsquarters and quinoa, canola, flax, millet, and oat control were evaluated June 29 and July 9.

Date of Application	May 28	June 5	June 21
Time of Day	8:00 AM	9:00 AM	8:30 AM
Air Temperature (°F)	66	57 -	74
Relative Humidity (%)	51	28	37
Soil Temp. (°F at 6")	53	56	65
Wind Velocity (mph)	12	5	9
Cloud Cover (%)	100	5	70
Soil Moisture	Good	Good	Good
Sugarbeet	V2.1 - 2.7	V4.2 - 5.9	V10.2 - 14.2
Amaranth/Redroot Pigweed	2-3 lf	3-4 lf	8-12"
Quinoa/Common Lambsquarters	4-6 lf (2")	(3-6")	12-20"
Canola	3-4 lf (2-3")	5-6 lf (6")	28-32" flowering
Flax	(1/2-2")	(3-6")	8-14"
Millet	3-4 lf (1-3")	4-5 lf (3-6")	10-14"
Oat	3-4 lf (4-5")	4-5 lf (6-8")	jointing 28-32"

### June 29 Evaluation

				Colq	Rrpw			
	Date of	Sgbt	Cano	Quin	Amar	Flax	Oats	Fomi
Treatment*	Application Rate	inj	cntl	cntl	cntl	cntl	cntl	cntl
	lb/A	qo	olo	olo	oło	olo	q	olo Olo
De&Ph&Et+Tf	su+Clpy+CletM+MSO							
	(May 28, June 5, 21)							
	0.08+0.004+0.03+0.03+1.5%	5	60	99	92	53	99	99
De&Ph&Et+Tf	su+Clpy+CletM+Destiny							
	(May 28, June 5, 21)							
	0.08+0.004+0.03+0.03+1.5%	4	68	99	90	48	99	99
De&Ph&Et+Tf	su+Clpy+CletM+Scoil							
	(May 28, June 5, 21)							
	0.08+0.004+0.03+0.03+1.5%	5	69	99	90	55	99	99
De&Ph&Et+Tf	su+Clpy+CletM+Quad7							
	(May 28, June 5, 21)							
	0.08+0.004+0.03+0.03+1.5%	6	65	98	78	50	99	99
De&Ph&Et+Tf	su+Clpy+CletM+LI6193							
	(May 28, June 5, 21)							
	0.08+0.004+0.3+0.3+1.5%	5	66	96	88	50	99	99
De&Ph&Et+Tf	su+Clpy+CletM+LI6231							
	(May 28, June 5, 21)							
	0.08+0.004+0.3+0.3+1.5%	8	74	99	89	63	99	99
De&Ph&Et+Tf	su+Clpy+CletM+AG05006							
	(May 28, June 5, 21)							
	0.08+0.004+0.03+0.03+1.5%	5	69	97	86	48	99	99
De&Ph&Et+Tf	su+Clpy+CletM+AG05006							
	(May 28, June 5, 21)							
	0.08+0.004+0.03+0.03+1%	1	65	98	61	45	99	99

# June 29 Evaluation (continued)

	Date of		Sgbt	Cano	Colq Quin	Rrpw Amar	Flax	Oats	Fomi
Treatment*	Application	Rate	inj	cntl	cntl	cntl	cntl	cntl	cntl
		lb/A		8		8	§		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
De&Ph&Et+Tfsu	+Clpy+CletM+AG05006	10/A	0	-0	-0	-0	0	70	õ
	May 28, June 5, 21)								
```	0.08+0.004+0.03+0.	03+0.75%	5	58	99	88	43	99	99
De&Ph&Et+Tfsu	+Clpy+CletM+AG05055							s	
	May 28, June 5, 21)								
	0.08+0.004+0.03+0	.03+2.5%	4	65	99	84	46	99	99
De&Ph&Et+Tfsu	+Clpy+CletM+MSO (May 2	(8)							
	0.12+0.004+0.03+0								
De&Ph&Et+Tf	su+Clpy+CletM+MSO (Jun	e 5)							
	0.16+0.004+0.03+0								
De&Ph&Et+Tf	su+Clpy+CletM+MSO (Jun	e 21)							
	0.22+0.004+0.03+0	.03+1.5%	6	63	99	97	55	99	99
De&Ph&Et+Tfsu	+Clpy+CletM+Destiny (M	lay 28)	· · · · · ·		a sa ta t				
	0.12+0.004+0.03+0	.03+1.5%							
De&Ph&Et+Tf	<pre>su+Clpy+CletM+Destiny</pre>	(June 5)							
	0.16+0.004+0.03+0	.03+1.5%							
De&Ph&Et+Tf	su+Clpy+CletM+Destiny(								
· • ·	0.22+0.004+0.03+0	.03+1.5%	5	71	99	95	63	99	99
De&Ph&Et+Tfsu	+Clpy+CletM+Scoil (May								
	0.12+0.004+0.03+0								
De&Ph&Et+Tf	su+Clpy+CletM+Scoil (J								
	0.16+0.004+0.03+0								
De&Ph&Et+Tf	su+Clpy+CletM+Scoil (J		_						
	0.22+0.004+0.03+0		6	66	99	96	53	99	99
De&Ph&Et+Tfsu	+Clpy+CletM+Quad7 (May								
	0.12+0.004+0.03+0								
De&Ph&Et+Ti	su+Clpy+CletM+Quad7 (J								
	0.16+0.004+0.03+0								
De&Pn&Et+TI	su+Clpy+CletM+Quad7 (J 0.22+0.004+0.03+0		9	66	99	92	58	99	99
				00	99	92			
Je&Pn&Et+TISu	+Clpy+CletM+LI6193 (Ma 0.12+0.004+0.03+0								
	su+Clpy+CletM+LI6193 (								
Dearmarctit	0.16+0.004+0.03+0								
D⊝&Pb&Ft+Tf	su+Clpy+CletM+LI6193 (								
Dearmanerit	0.22+0.004+0.03+0		6	70	99	95	58	99	99
Do&Ph&Et+Tfsu	+Clpy+CletM+LI6231 (Ma								
Dearmane (1150	0.12+0.004+0.03+0								
De&Ph&Et+Tf	su+Clpy+CletM+LI6231 (								
	0.16+0.004+0.03+0								
De&Ph&Et+Tf	su+Clpy+CletM+LI6231 (								
	0.22+0.004+0.03+0		15	73	99	. 94	70	99	99
De&Ph&Et+Tfsu	+Clpy+CletM+AG05006 (M								
	0.12+0.004+0.03+0	-			Sec.			•	
	su+Clpy+CletM+AG05006								
De&Ph&Et+Tf									
De&Ph&Et+Tf	0.16+0.004+0.03+0	).03+1.5%							

#### Colq Rrpw Date of Sgbt Cano Quin Amar Flax Oats Fomi Treatment\* Application Rate inj cntl cntl cntl cntl cntl cntl 1b/A 8 2 영 e S 9 8 잋 De&Ph&Et+Tfsu+Clpy+CletM+AG05006 (May 28) 0.12+0.004+0.03+0.03+1% De&Ph&Et+Tfsu+Clpy+CletM+AG05006 (June 5) 0.16+0.004+0.03+0.03+1% De&Ph&Et+Tfsu+Clpy+CletM+AG05006(June 21) 0.22+0.004+0.03+0.03+1% 4 68 99 95 53 99 99 De&Ph&Et+Tfsu+Clpy+CletM+AG05006 (May 28) 0.12+0.004+0.03+0.03+0.75% De&Ph&Et+Tfsu+Clpy+CletM+AG05006 (June 5) 0.16+0.004+0.03+0.03+0.75% De&Ph&Et+Tfsu+Clpy+CletM+AG05006(June 21) 0.22+0.004+0.03+0.03+0.75% 4 65 99 96 59 99 99 De&Ph&Et+Tfsu+Clpy+CletM+AG05055 (May 28) 0.12+0.004+0.03+0.03+2.5% De&Ph&Et+Tfsu+Clpy+CletM+AG05055 (June 5) 0.16+0.004+0.03+0.03+2.5% De&Ph&Et+Tfsu+Clpy+CletM+AG05055(June 21) 5 69 99 94 55 99 99 0.22+0.004+0.03+0.03+2.5% De&Ph&Et+Tfsu+Clpy+CletM+MSO+AMS (May 28) 0.12+0.004+0.03+0.03+1.5%+2.5 De&Ph&Et+Tfsu+Clpy+CletM+MSO+AMS (June 5) 0.16+0.004+0.03+0.03+1.5%+2.5 De&Ph&Et+Tfsu+Clpy+CletM+MSO+AMS(June 21) 5 71 99 98 55 99 99 0.22+0.004+0.03+0.03+1.5%+2.5 De&Ph&Et+Tfsu+Clpy+V-10207+MSO+AMS (May 28) 0.12+0.004+0.03+0.03+1.5%+2.5 De&Ph&Et+Tfs+Clp+V-10207+MSO+AMS (June 5) 0.16+0.004+0.03+0.03+1.5%+2.5 De&Ph&Et+Tfs+Clp+V-10207+MSO+AMS(June 21) 96 59 99 0.22+0.004+0.03+0.03+1.5%+2.5 6 76 99 99 De&Ph&Et+Tfsu+Clpy+CletM+MSO+AMS (May 28) 0.12+0.004+0.03+0.023+1.5%+2.5 De&Ph&Et+Tfsu+Clpy+CletM+MSO+AMS (June 5) 0.16+0.004+0.03+0.023+1.5%+2.5 De&Ph&Et+Tfsu+Clpy+CletM+MSO+AMS(June 21) 99 99 5 73 99 94 60 0.22+0.004+0.03+0.023+1.5%+2.5 De&Ph&Et+Tfsu+Clpy+V-10207+MSO+AMS (May 28) 0.12+0.004+0.03+0.023+1.5%+2.5 De&Ph&Et+Tfs+Clp+V-10207+MSO+AMS (June 5) 0.16+0.004+0.03+0.023+1.5%+2.5 De&Ph&Et+Tfs+Clp+V-10207+MSO+AMS(June 21) 75 99 95 58 99 99 0.22+0.004+0.03+0.023+1.5%+2.5 5 De&Ph&Et+Tfsu+Clpy+CletM+MSO+AMS (May 28) 0.12+0.004+0.03+0.016+1.5%+2.5 De&Ph&Et+Tfsu+Clpy+CletM+MSO+AMS (June 5) 0.16+0.004+0.03+0.016+1.5%+2.5 De&Ph&Et+Tfsu+Clpy+CletM+MSO+AMS(June 21) 69 60 99 0.22+0.004+0.03+0.016+1.5%+2.5 6 99 96 99

#### June 29 Evaluation (continued)

Adjuvants with s	ugarbeet herbicides	, Prosper,	2007.	(continued)
Tuno 20 Evaluati				

				Colq	Rrpw			
Date of		Sgbt	Cano	Quin	Amar	Flax	Oats	Fomi
Treatment* Application	Rate	inj	cntl	cntl	cntl	cntl	cntl	cntl
	lb/A	00 00	ę	olo	8	8	olo	ę
De&Ph&Et+Tfsu+Clpy+V-10207+MSO+AMS	(May 28)							
0.12+0.004+0.03+0.016	+1.5%+2.5							
De&Ph&Et+Tfs+Clp+V-10207+MSO+AMS	(June 5)							
0.16+0.004+0.03+0.016	+1.5%+2.5							
De&Ph&Et+Tfs+Clp+V-10207+MSO+AMS	(June 21)							
0.22+0.004+0.03+0.016	+1.5%+2.5	5	69	99	97	60	99	99
De&Ph&Et+Tfsu+Clpy+Clet+MSO (May 2	8)							·.
0.12+0.004+0.03+0	.016+1.5%							
De&Ph&Et+Tfsu+Clpy+Clet+MSO (Jun	e 5)							
0.16+0.004+0.03+0								
De&Ph&Et+Tfsu+Clpy+Clet+MSO (Jun	e 21)							
0.22+0.004+0.03+0	.016+1.5%	5	68	99	92	58	99	99
De&Ph&Et+Tfsu+Clpy+CletM+MSO (May	28)	1		-	- 1			
0.12+0.004+0.03+0	.016+1.5%							
De&Ph&Et+Tfsu+Clpy+CletM+MSO (Ju	ne 5)							
0.16+0.004+0.03+0	.016+1.5%							
De&Ph&Et+Tfsu+Clpy+CletM+MSO (Ju	ne 21)							
0.22+0.004+0.03+0	.016+1.5%	- 5	60	99	94	55	99	99
EXP MEAN		6	68	99	91	55	99	99
C.V. %		36	8	1	8	15	0	0
LSD 5%		3	7	2	10	11	NS	NS
LSD 1%		4	10	NS	13	15	NS	NS
# OF REPS		Λ	4	4	4	4	4	4

\*MSO=methylated seed oil from Loveland; Scoil=methylated seed oil from UAP; Destiny=methylated seed oil from Agriliance; AG05006 and AG05055=experimental adjuvants from Agriliance; LI6231 and LI6193=experimental adjuvants from Loveland; Quad7=basic blend adjuvant from UAP; AMS=Am-Stik ammonium sulfate from West Central.

### July 9 Evaluation

	· · · · · · · · · · · · · · · · · · ·				Colq	Rrpw	-		
	Date of		Sgbt	Cano	Quin	Amar	Flax	Oats	Fomi
Treatment*	Application	Rate	inj	cntl	cntl	cntl	cntl	cntl	cntl
·····		lb/A	olo olo	90	8	8	00	· · · · · · · · · · · · · · · · · · ·	olo
De&Ph&Et+Tfs	su+Clpy+CletM+MSO								
	(May 28, June 5, 21)								
	0.08+0.004+0.03	8+0.03+1.5%	0	45	99	90	30	99	99
De&Ph&Et+Tfs	su+Clpy+CletM+Destiny							·	
	(May 28, June 5, 21)								
	0.08+0.004+0.03	3+0.03+1.5%	0	55	99	88	28	99	99
De&Ph&Et+Tfs	su+Clpy+CletM+Scoil								
	(May 28, June 5, 21)								
	0.08+0.004+0.03	3+0.03+1.5%	0	48	98	76	29	99	99
De&Ph&Et+Tfs	su+Clpy+CletM+Quad7					, and the second se			
	(May 28, June 5, 21)								
	0.08+0.004+0.03	3+0.03+1.5%	0	48	98	66	33	99	99
De&Ph&Et+Tf:	su+Clpy+CletM+LI6193	1.1		NATION AND					5 A. A. A.
	(May 28, June 5, 21)								
	0.08+0.004+0	.3+0.3+1.5%	0	53	99	84	28	99	99
De&Ph&Et+Tf:	su+Clpy+CletM+LI6231								
	(May 28, June 5, 21)								
	0.08+0.004+0	.3+0.3+1.5%	0	50	98	83	34	99	99
Table conti	nued on next page.								

July 9 Evaluation (continued)

	Date of		Sgbt	Cano	Colq Quin	Rrpw Amar	Flax	Oats	Fomi
Treatment*	Application	Rate	inj	cntl	cntl	cntl	cntl	cntl	cntl
		lb/A	8	90	Ş	90	do	Ş	8
	1+Clpy+CletM+AG05006								
(	May 28, June 5, 21)								
	0.08+0.004+0.03+0.	03+1.5%	0	45	99	83	31	99	99
	a+Clpy+CletM+AG05006								
(	(May 28, June 5, 21)								
	0.08+0.004+0.03+	0.03+1%	0	48	96	55	29	99	99
De&Ph&Et+Tfsu	1+Clpy+CletM+AG05006								
(	(May 28, June 5, 21)								
	0.08+0.004+0.03+0.0	3+0.75%	0	43	98	85	25	99	99
De&Ph&Et+Tfsu	1+Clpy+CletM+AG05055								
(	(May 28, June 5, 21)								
	0.08+0.004+0.03+0.	03+2.5%	0	48	99	88	30	99	99
De&Ph&Et+Tfsu	1+Clpy+CletM+MSO (May 28	)							
	0.12+0.004+0.03+0.								
De&Ph&Et+Tf	Esu+Clpy+CletM+MSO (June	5)							
	0.16+0.004+0.03+0.								
De&Ph&Et+Tf	Su+Clpy+CletM+MSO (June	•							
	0.22+0.004+0.03+0.	03+1.5%	0	50	99	96	38	99	99
De&Ph&Et+Tfsu	1+Clpy+CletM+Destiny (Ma								
	0.12+0.004+0.03+0.								
De&Ph&Et+Tf	Esu+Clpy+CletM+Destiny (								
	0.16+0.004+0.03+0.								
De&Ph&Et+Ti	Esu+Clpy+CletM+Destiny(J								
1	0.22+0.004+0.03+0.		0	58	99	94	38	99	99
De&Ph&Et+Tfsu	1+Clpy+CletM+Scoil (May								
	0.12+0.004+0.03+0.								
De&Ph&Et+T1	fsu+Clpy+CletM+Scoil (Ju								
	0.16+0.004+0.03+0.								
De&Ph&Et+Ti	Esu+Clpy+CletM+Scoil (Ju		0	<b></b>	0.0	0.0	Э.Г	0.0	0.0
	0.22+0.004+0.03+0.		0	55	99	96	35	99	99
De&Ph&Et+Tisi	1+Clpy+CletM+Quad7 (May								
	0.12+0.004+0.03+0.								
De&Pn&Et+Ti	fsu+Clpy+CletM+Quad7 (Ju	-							
	0.16+0.004+0.03+0.								
Dearnaet+11	fsu+Clpy+CletM+Quad7 (Ju 0.22+0.004+0.03+0.		1	50	99	91	20	99	99
	1+Clpy+CletM+LI6193 (May		L		99	91	39	99	99
DeaPhaEt+TIS	0.12+0.004+0.03+0.								
	fsu+Clpy+CletM+LI6193 (J								
Dearmatt-1.	0.16+0.004+0.03+0.								
DerDert+T	fsu+Clpy+CletM+LI6193 (J								
Dearmancer	0.22+0.004+0.03+0.		0	58	99	94	45	99	99
Doc Dbc Et+Tfa	1+Clpy+CletM+LI6231 (May								
DEALHADC+ITSI	0.12+0.004+0.03+0.								
$D \ominus c P h c F + + T$	fsu+Clpy+CletM+LI6231 (J								
Dearmant'I.	0.16+0.004+0.03+0.								
$D \rightarrow c P h c r + + T$	fsu+Clpy+CletM+LI6231 (J								
DCGLIIGECTI.	0.22+0.004+0.03+0.		3	58	99	89	45	99	99
	0.2210.00410.0310.	0011.00				د ن	4J		

July 9 Evalua	tion (continued)								
					Colq	Rrpw			
	Date of		Sgbt	Cano	Quin	Amar	Flax	Oats	Fomi
Treatment*	Application	Rate	inj	cntl	cntl	cntl	cntl	cntl	cntl
		lb/A	 0/0	90 90	00	90	8	90	0g
De&Ph&Et+Tfsu	+Clpy+CletM+AG05006 (M	ay 28)							
	0.12+0.004+0.03+0								
De&Ph&Et+Tf	su+Clpy+CletM+AG05006								
	0.16+0.004+0.03+0								
De&Ph&Et+Tf	su+Clpy+CletM+AG05006(	June 21)							
	0.22+0.004+0.03+0		0	53	99	97	43	99	99
De&Ph&Et+Tfsu	+Clpy+CletM+AG05006 (M								
	0.12+0.004+0.03								
De&Ph&Et+Tf	su+Clpy+CletM+AG05006								
Dournabovia	0.16+0.004+0.03								
De&Pb&Et+Tf	su+Clpy+CletM+AG05006(								
	0.22+0.004+0.03		0	50	99	94	38	99	99
Dof PhiFt+Tfen	+Clpy+CletM+AG05006 (M								
Dearmanchirsu	0.12+0.004+0.03+0.								
Dos PhiFt+Tf	su+Clpy+CletM+AG05006								
Dearmancint	0.16+0.004+0.03+0.								
Doc Pbc Ft + Tf	su+Clpy+CletM+AG05006(								
Dearmancitt	0.22+0.004+0.03+0.		0	50	99	96	38	99	99
DecDbertunfen	+Clpy+CletM+AG05055 (M								
DearnaEt+TISu	0.12+0.004+0.03+0								
Dearnabutii	su+Clpy+CletM+AG05055 0.16+0.004+0.03+0								
Do (Db (Et ) Df									
Dearmatit	su+Clpy+CletM+AG05055( 0.22+0.004+0.03+0		0	50	99	94	40	99	99
						94	40		
De&Pn&Et+lisu	+Clpy+CletM+MSO+AMS (M	-							
	0.12+0.004+0.03+0.03+								
Dearnabl+11	su+Clpy+CletM+MSO+AMS								
	0.16+0.004+0.03+0.03+								
De&PN&EC+II	su+Clpy+CletM+MSO+AMS(		0	55	99	0.0	20	0.0	0.0
	0.22+0.004+0.03+0.03+		0	55	99	96	38	99	99
De&Ph&Et+Tisu	+Clpy+V-10207+MSO+AMS								
	0.12+0.004+0.03+0.03+								
De&Ph&Et+Ti	s+Clp+V-10207+MSO+AMS								
	0.16+0.004+0.03+0.03+								
De&Ph&Et+Tf	s+Clp+V-10207+MSO+AMS(				0.0	0.1	4.0		~ ~
	0.22+0.004+0.03+0.03+		0	55	99	91	43	99	99
	+Clpy+CletM+MSO+AMS (M								
	0.12+0.004+0.03+0.023+								
	su+Clpy+CletM+MSO+AMS								
	0.16+0.004+0.03+0.023+								
	su+Clpy+CletM+MSO+AMS (								
	0.22+0.004+0.03+0.023+	1.5%+2.5	0	55	99	97	43	99	99
De&Ph&Et+Tfsu	+Clpy+V-10207+MSO+AMS	(May 28)	1.1						S. La State
	0.12+0.004+0.03+0.023+	1.5%+2.5							
De&Ph&Et+Tf	s+Clp+V-10207+MSO+AMS	(June 5)					1999 - M.		
	0.16+0.004+0.03+0.023+	1.5%+2.5							
De&Ph&Et+Tf	s+Clp+V-10207+MSO+AMS (	June 21)							
	0.22+0.004+0.03+0.023+	1.5%+2.5	0	53	99	92	39	99	99

### Adjuvants with sugarbeet herbicides, Prosper, 2007. (continued) July 9 Evaluation (continued)

					Colq	Rrpw			
	Date of		Sgbt	Cano	Quin	Amar	Flax	Oats	Fomi
Treatment*	Application	Rate	_inj	cntl	cntl	cntl	cntl	cntl	cntl
		lb/A	olo	olo	olo	olo	olo	olo	90 90
De&Ph&Et+Tfsu	1+Clpy+CletM+MSO+AMS (1	-							
	0.12+0.004+0.03+0.016	+1.5%+2.5							
De&Ph&Et+Ti	fsu+Clpy+CletM+MSO+AMS								
	0.16+0.004+0.03+0.016								
De&Ph&Et+Ti	<pre>fsu+Clpy+CletM+MSO+AMS</pre>	· ·							
	0.22+0.004+0.03+0.016	+1.5%+2.5	0	55	99	95	38	99	99
De&Ph&Et+Tfsu	a+Clpy+V-10207+MSO+AMS	(May 28)							
	0.12+0.004+0.03+0.016	+1.5%+2.5							
De&Ph&Et+Ti	fs+Clp+V-10207+MSO+AMS	(June 5)							
	0.16+0.004+0.03+0.016	+1.5%+2.5							
De&Ph&Et+Ti	Es+Clp+V-10207+MSO+AMS	(June 21)							
	0.22+0.004+0.03+0.016	+1.5%+2.5	0	50	99	96	43	99	99
De&Ph&Et+Tfsu	+Clpy+Clet+MSO (May 2)	3)							
	0.12+0.004+0.03+0	.016+1.5%							
De&Ph&Et+Ti	fsu+Clpy+Clet+MSO (June	ə 5)							
	0.16+0.004+0.03+0	.016+1.5%							
De&Ph&Et+Ti	fsu+Clpy+Clet+MSO (June	e 21)							
	0.22+0.004+0.03+0	.016+1.5%	0	50	99	94	43	99	99
De&Ph&Et+Tfsu	1+Clpy+CletM+MSO (May 2	28)							
	0.12+0.004+0.03+0	.016+1.5%							
De&Ph&Et+Ti	fsu+Clpy+CletM+MSO (Ju	ne 5)							
	0.16+0.004+0.03+0	.016+1.5%							
De&Ph&Et+Ti	fsu+Clpy+CletM+MSO (Ju	ne 21)							
	0.22+0.004+0.03+0	.016+1.5%	0	50	99	94	38	99	99
EXP MEAN			0	51	99	89	36	99	99
C.V. %			793	12	1	9	18	0	0
LSD 5%			NS	8	NS	11	9	0	0
LSD 1%			NS	NS	NS	15	12	0	0
# OF REPS			4	4	4	4	4	4	4

\*MSO=methylated seed oil from Loveland; Scoil=methylated seed oil from UAP; Destiny=methylated seed oil from Agriliance; AG05006 and AG05055=experimental adjuvants from Agriliance; LI6231 and LI6193=experimental adjuvants from Loveland; Quad7=basic blend adjuvant from UAP; AMS=Am-Stik ammonium sulfate from West Central.

### Combined Evaluations

,				Colq	Rrpw			
	Date of	Sgbt	Cano	Quin	Amar	Flax	Oats	Fomi
Treatment*	Application Rate	inj	cntl	cntl	cntl	cntl	cntl	cntl
	lb/A	90	010	qo	olo	90	90 90	00
De&Ph&Et+Tfsu	u+Clpy+CletM+MSO							
	(May 28, June 5, 21)							
	0.08+0.004+0.03+0.03+1.5%	3	53	99	91	41	99	99
De&Ph&Et+Tfsu	u+Clpy+CletM+Destiny							
	(May 28, June 5, 21)							
	0.08+0.004+0.03+0.03+1.5%	2	61	99	89	38	99	99
De&Ph&Et+Tfsu	u+Clpy+CletM+Scoil							
	(May 28, June 5, 21)							
	0.08+0.004+0.03+0.03+1.5%	3	58	98	83	42	99	99
De&Ph&Et+Tfsu	u+Clpy+CletM+Quad7	······						
	(May 28, June 5, 21)							
	0.08+0.004+0.03+0.03+1.5%	3	56	98	72	41	99	99
Table continu	ued on next page							

# Combined Evaluations (continued)

	Date of		Sgbt	Cano	Colq Quin	Rrpw Amar	Flax	Oats	Fom:
[reatment*	Application	Rate	inj	cntl	cntl	cntl	cntl	cntl	cnt.
		lb/A	 %	<u>%</u>		8	8	8	
e&Ph&Et+Tfsu	+Clpy+CletM+LI6193	10/11	Ū	v	. <b>U</b>			0.	0
	May 28, June 5, 21)								
	0.08+0.004+0.3	+0.3+1.5%	3	59	97	86	39	99	99
De&Ph&Et+Tfsu	+Clpy+CletM+LI6231		· · · · ·			Service Services			
	May 28, June 5, 21)								
	0.08+0.004+0.3	+0.3+1.5%	4	62	99	86	48	99	99
De&Ph&Et+Tfsu	+Clpy+CletM+AG05006				Mark, Mark				
1	May 28, June 5, 21)								
	0.08+0.004+0.03+	0.03+1.5%	3	57	98	84	39	99	99
De&Ph&Et+Tfsu	+Clpy+CletM+AG05006				ter Stear	······································	· · · ·		
· (	May 28, June 5, 21)								
	0.08+0.004+0.0	3+0.03+1%	1	56	97	58	37	99	99
De&Ph&Et+Tfsu	+Clpy+CletM+AG05006								÷
(	May 28, June 5, 21)								
	0.08+0.004+0.03+0	.03+0.75%	3	50	98	87	34	99	99
De&Ph&Et+Tfsu	+Clpy+CletM+AG05055								1
it in the <b>(</b>	May 28, June 5, 21)								
·	0.08+0.004+0.03+	0.03+2.5%	2	56	99	86	38	99	99
De&Ph&Et+Tfsu	+Clpy+CletM+MSO (May								
	0.12+0.004+0.03+								
De&Ph&Et+Tf	su+Clpy+CletM+MSO (Ju			a series a					
	0.16+0.004+0.03+								
De&Ph&Et+Tf	su+Clpy+CletM+MSO (Ju		2	5.0	• •	0.7			
	0.22+0.004+0.03+		3	56	99	97	46	99	99
De&Ph&Et+Tfsu	+Clpy+CletM+Destiny (								
	0.12+0.004+0.03+								
De&Pn&Et+Ti	Su+Clpy+CletM+Destiny								
	0.16+0.004+0.03+								
Dearnatiti	su+Clpy+CletM+Destiny 0.22+0.004+0.03+		3	64	99	95	50	99	99
Do C Db C Et I Efer	+Clpy+CletM+Scoil (Ma			04					
Jearnacttist	0.12+0.004+0.03+								
Doc Phc F + Tf	su+Clpy+CletM+Scoil (								
Dearmaderii	0.16+0.004+0.03+								
De&Ph&Et+Tf	su+Clpy+CletM+Scoil (								
	0.22+0.004+0.03+		3	61	99	96	44	99	99
De&Ph&Et+Tfsi	1+Clpy+CletM+Quad7 (Ma								
bearmane, ribt	0.12+0.004+0.03+								
De&Ph&Et+Tf	su+Clpy+CletM+Quad7								
	0.16+0.004+0.03+								
De&Ph&Et+Tf	<pre>Esu+Clpy+CletM+Quad7 (</pre>								
	0.22+0.004+0.03+		5	58	99	92	48	99	99
De&Ph&Et+Tfsu	1+Clpy+CletM+LI6193 (N	lay 28)	-						
	0.12+0.004+0.03+								
De&Ph&Et+Ti	<pre>Esu+Clpy+CletM+LI6193</pre>	(June 5)							
	0.16+0.004+0.034								
De&Ph&Et+Ti	<pre>Esu+Clpy+CletM+LI6193</pre>								
	0.22+0.004+0.03+	0 03+1 5%	3	64	99	94	51	99	99

# Combined Evaluations (continued)

	Date of		Sgbt	Cano	Colq Quin	Rrpw Amar	Flax	Oats	Fomi
Treatment*	Application	Rate	inj	cntl	cntl	cntl	cntl	cntl	cnt]
		lb/A	90	9 <mark>0</mark>	90	8	용	olo O	olo
De&Ph&Et+Tfsu	1+Clpy+CletM+LI6231 (Ma								
	0.12+0.004+0.03+0								
De&Ph&Et+Tf	su+Clpy+CletM+LI6231								
	0.16+0.004+0.03+0								
De&Ph&Et+Ti	Su+Clpy+CletM+LI6231		0	65	0.0	0.1	50	0.0	0.0
	0.22+0.004+0.03+		9	65	99	91	58	99	99
De&Ph&Et+Tisu	+Clpy+CletM+AG05006 (I								
	0.12+0.004+0.03+								
De&Pn&Et+Ti	Esu+Clpy+CletM+AG05006								
	0.16+0.004+0.03+0								
De&Pn&Et+11	Esu+Clpy+CletM+AG05006		3	59	99	97	E 1	99	
	0.22+0.004+0.03+				99	97	51	99	99
De&Ph&Et+Tisu	1+Clpy+CletM+AG05006 (I	- ·							
	0.12+0.004+0.03 Su+Clpy+CletM+AG05006								
De&Pn&EC+11	0.16+0.004+0.0	•							
	su+Clpy+CletM+AG05006								
Dearmantin	0.22+0.004+0.0		2	59	99	95	45	99	99
DoubleFt	1+Clpy+CletM+AG05006 (1								
Dearmateriist	0.12+0.004+0.03+0	-							
DocPhart+Tf	Esu+Clpy+CletM+AG05006								
Dearmanetti	0.16+0.004+0.03+0								
De&Pb&Et+Tf	Su+Clpy+CletM+AG05006								
	0.22+0.004+0.03+0		2	58	99	96	48	99	99
De&Ph&Et+Tfsu	1+Clpy+CletM+AG05055 (1	······································			· · · · · · · · · · · · · · · · · · ·				
	0.12+0.004+0.03+	-							
De&Ph&Et+Tf	<pre>fsu+Clpy+CletM+AG05055</pre>	(June 5)							
	0.16+0.004+0.03+	0.03+2.5%							
De&Ph&Et+Tf	<pre>Esu+Clpy+CletM+AG05055</pre>	(June 21)							
	0.22+0.004+0.03+	0.03+2.5%	3	59	99	94	48	99	99
De&Ph&Et+Tfsu	+Clpy+CletM+MSO+AMS ()	May 28)							
	0.12+0.004+0.03+0.03	+1.5%+2.5							
De&Ph&Et+T1	<pre>fsu+Clpy+CletM+MSO+AMS</pre>	(June 5)							
	0.16+0.004+0.03+0.03								
De&Ph&Et+Ti	fsu+Clpy+CletM+MSO+AMS								
	0.22+0.004+0.03+0.03		3	63	99	97	46	99	99
De&Ph&Et+Tfsu	1+Clpy+V-10207+MSO+AMS								
	0.12+0.004+0.03+0.03								
De&Ph&Et+Ti	<pre>Es+Clp+V-10207+MSO+AMS</pre>								
	0.16+0.004+0.03+0.03								
De&Ph&Et+T:	Es+Clp+V-10207+MSO+AMS		2	6.6	0.0	<b>.</b>		0.0	
	0.22+0.004+0.03+0.03		3	66	99	94	51	99	99
De&Ph&Et+Tfsi	+Clpy+CletM+MSO+AMS (	-							
	0.12+0.004+0.03+0.023								
De&Ph&Et+T:	fsu+Clpy+CletM+MSO+AMS								
	0.16+0.004+0.03+0.023								
Devenver+1	fsu+Clpy+CletM+MSO+AMS		n	61	0.0	0 5	E 1	0.0	0.0
	0.22+0.004+0.03+0.023	+1.38+2.5	33	64	99	95	51	99	99

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Combined Eval	luations (continued)								
			<u></u>		Colq	Rrpw			
	Date of		Sgbt	Cano	Quin	Amar	Flax	Oats	Fomi
Treatment*	Application	Rate	inj	cntl	cntl	cntl	cntl	cntl	cntl
	anger for en af	lb/A	olo	clo	olo	olo To	olo Olo	olo	olo
De&Ph&Et+Tfsu	+Clpy+V-10207+MSO+AMS	(May 28)							
	0.12+0.004+0.03+0.023+	1.5%+2.5							
De&Ph&Et+Tf	Es+Clp+V-10207+MSO+AMS	(June 5)							
	0.16+0.004+0.03+0.023+								
De&Ph&Et+Tf	fs+Clp+V-10207+MSO+AMS(								
· · ·	0.22+0.004+0.03+0.023+		3	64	99	94	48	99	99
De&Ph&Et+Tfsu	+Clpy+CletM+MSO+AMS (M	ay 28)				en de la			
	0.12+0.004+0.03+0.016+	1.5%+2.5							
De&Ph&Et+Tf	Esu+Clpy+CletM+MSO+AMS								
	0.16+0.004+0.03+0.016+								
De&Ph&Et+Tf	Esu+Clpy+CletM+MSO+AMS (								
	0.22+0.004+0.03+0.016+	1.5%+2.5	3	62	99	96	49	99	99
De&Ph&Et+Tfsu	+Clpy+V-10207+MSO+AMS								
	0.12+0.004+0.03+0.016+								
De&Ph&Et+Tf	Es+Clp+V-10207+MSO+AMS								
	0.16+0.004+0.03+0.016+								
De&Ph&Et+Tf	Es+Clp+V-10207+MSO+AMS(								
	0.22+0.004+0.03+0.016+		3	59	99	96	51	99	99
De&Ph&Et+Tfsu	1+Clpy+Clet+MSO (May 28								
	0.12+0.004+0.03+0.								
De&Ph&Et+Ti	fsu+Clpy+Clet+MSO (June								
	0.16+0.004+0.03+0.								
De&Ph&Et+T1	Esu+Clpy+Clet+MSO (June		_						
	0.22+0.004+0.03+0.		3	59	99	93	50	99	99
De&Ph&Et+Tfsi	1+Clpy+CletM+MSO (May 2								
	0.12+0.004+0.03+0.								
De&Ph&Et+T1	fsu+Clpy+CletM+MSO (Jun								
	0.16+0.004+0.03+0.						•		
De&Ph&Et+T1	Esu+Clpy+CletM+MSO (Jun								
	0.22+0.004+0.03+0.	016+1.5%	3	55	99	94	46	99	99
			2	5.0	0.0	0.0	1.0	0.0	0.0
EXP MEAN			3	59	99	90	46	99	99
C.V. %			63	9	1	8	15	0	0
LSD 5%			2	5	1	7	7	NS	NS
LSD 1%			3	7	2	9	9	NS	NS
# OF REPS			8	8	8	8	8	8	8

\*MSO=methylated seed oil from Loveland; Scoil=methylated seed oil from UAP; Destiny=methylated seed oil from Agriliance; AG05006 and AG05055=experimental adjuvants from Agriliance; LI6231 and LI6193=experimental adjuvants from Loveland; Quad7=basic blend adjuvant from UAP; AMS=Am-Stik ammonium sulfate from West Central.

**SUMMARY:** The summary is from the combined evaluation date data. All treatments gave nearly total control of oat and foxtail millet. Control of common lambsquarters and quinoa was from 97 to 99%. The first 10 treatments are the micro-rate plus various adjuvants. The standard micro-rate plus MSO gave less canola control than the microrate plus Destiny, Scoil, LI6913, and LI6231. The standard micro-rate plus MSO gave more pigweed spp. Control than the micro-rate plus Scoil, Quad7, and AG05006. The standard micro-rate plus MSO gave more flax control than the micro-rate plus AG05006 and less flax control than LI6231. Treatments 11 through 18 are mid-rate treatments plus various adjuvants. The mid-rate plus MSO plus AMS gave better control of canola

Summary continued on next page.

### Summary (continued)

than the mid-rate plus MSO without AMS. The mid-rate plus MSO gave less canola control than the mid-rate plus Destiny, Scoil, LI6193, and LI6231. The greatest control of flax was from the mid-rate plus LI6231, but this treatment also caused more sugarbeet injury than the other treatments. The last three treatments are a comparison of V-10207, clethodim, and clethodim M at a lower rate than in other treatments along with other herbicides that make up the micro-rate. The three treatments gave similar control of all species.