

NOT FOR PUBLICATION
SUMMARY OF 2010
WEED CONTROL EXPERIMENTS

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Reference to commercial products or trade names is made with no intended endorsement, and failure to mention products or trade names is done with no intended discrimination by North Dakota State University. Experiments with pesticides on non-labeled crops or target species does not imply endorsement for non-labeled uses of pesticides by North Dakota State University.

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Gold Section: Sugarbeet Weed Control	Page
Resistant wild oat, Crookston, MN, 2010	1 - 2
Giant ragweed control in Roundup Ready sugarbeet, SW Hutchinson, MN Site #1, 2010.....	3 - 4
Giant ragweed control in Roundup Ready sugarbeet, SW Hutchinson, MN Site# 2, 2010.....	5 - 6
Common ragweed control in Roundup Ready sugarbeet, Mayville, ND, 2010.....	7 - 12
Maximizing UpBeet and glyphosate with adjuvants, Prosper, ND, 2010.....	13 - 16
Lay-by herbicides for Roundup Ready sugarbeet, Hector, MN, 2010	17 - 19
Preemergence and preplant incorporated herbicides in Roundup Ready sugarbeet, Hector, MN, 2010.....	20 - 22
Weed control in sugarbeet, Crookston, MN, 2010	23 - 25
Sharpen carryover to sugarbeet, Prosper, ND, 2010.....	26

Green section: Weed Control in Small Grains	Page
Pyroxasulfone pre-emergence in wheat, Exp 1.....	1
Pyroxasulfone pre-emergence in wheat, Exp 2.....	2
Saflufenacil pre-emergence in wheat, Exp 1	3
Saflufenacil pre-emergence in wheat, Exp 2.....	4
Cereal response to saflufenacil.....	5
Effect of Sharpen and Aim on weed control with Glyphosate.....	6
Pre-emergence herbicides in wheat.....	7
2010 Prepare Herbicide + Glyphosate on Winter Wheat	8 - 9
Control of foxtail barley, Fargo	10
Control of foxtail barley, West Fargo	11
Control of foxtail barley, Casselton	12
Evaluating resistance management herbicide programs.....	13
Herbicide antagonism to wild oat control.....	14
Gibberellic acid (GA3) effect on grass control.....	15
Station Grass Control, Fargo	16
Wild oat control in wheat, Langdon	17
Wild oat control in durum wheat, Williston 2009.....	18
Wolverine for grass control in durum wheat, Williston 2009.....	19
Wild oat control in durum with Rimfire Max, Williston 2009.....	20

Green section: Continued	Page
Wolverine for grass control in durum wheat, Williston. 2010.....	21
Flucarbazone plus safener (ARY454) activity ⁶ on wild oat	22
Broad spectrum control with flucarbazone and Fluroxypyr (ARY548).....	23
Wild oat control with Propoxycarbazone&Mesosulfuron and adjuvants	24
Wild Oat control with Propoxycarbazone&Mesosulfuron.....	25
POST wild oat control in spring wheat, Cathay, 2010	26
2010 Evaluation of Weed Control with Rimfire Max on Spring Wheat	27
2010 Rimfire Max on Winter Wheat	28
Japanese brome control in Spring Wheat	29
POST foxtail control in spring wheat, Carrington, 2010.....	30 - 31
Broadleaf weed control with Huskie herbicide in spring wheat, Carrington, 2010 ...	32
Broadleaf herbicide antagonism to yellow foxtail.....	33
Foxtail control with Everest herbicide plus safener formulations in spring wheat Carrington, 2010	34 - 35
Flucarbazone with safener (ARY4564) activity on yellow foxtail	36
Crop response to flucarbazone (ARY454) tank-mixes	37
Adjuvant evaluation for safened flucarbazone (ARY454).....	38
Foxtail control with flucarbazone (ARY454) and adjuvants.....	39
Enhance foxtail control with Tribenuron	40
Volunteer barley control in wheat.....	41
Broad spectrum weed control in cereals	42
Station Broadleaf Control	43
Broadleaf weed control in wheat, Langdon	44
Kochia control in wheat	45
Kochia control in wheat, Exp 2.....	46
BAS810H use in wheat	47
Dicamba&Fluroxypyr efficacy at different kochia sizes	48
2010 Evaluation of Weed Control with Orion and Pulsar Tank Mixes on spring Wheat.....	49
Huskie for broadleaf weed control in durum wheat, Williston, 2010.....	50
Broadleaf weed control with Wolverine herbicide in spring wheat, Carrington 2010	51
2010 Evaluation of Broadleaf Herbicides on Spring Wheat, Trial #1.....	52

Green section: Continued	Page
2010 Evaluation of Broadleaf Herbicides on spring Wheat, Trial #2	53
Wild buckwheat control with pyrasulfotol.....	54
Wild buckwheat control with flucarbazone premix.....	55
Wild buckwheat control with Pyraflufen.....	56
Weed control with AGH 0935	57
Gibberellic acid (GA3) effects on broadleaf weed control.	58
Wheat response to GA142.....	59

Tan Section: Application Technology and Volunteer Management

	Page
Adjuvants with Laudis and Impact.....	1
Glyphosate with acidic AMS replacement adjuvants.....	2
Glyphosate with HSOC adjuvants	3
Sharpen + Glyphosate with water conditioners	4
Sharpen + Glyphosate with adjuvants.....	5
Water conditioning adjuvants	6 - 7
Broadleaf control at various spray quality	8
Broadleaf control with 2,4-D formulations at different spray qualities, Fargo	9
Broadleaf control with 2,3-D formulations at different spray qualities, Casselton....	10
Broadleaf efficacy at different spray quality.....	11
Spray quality with Buccaneer	12
Spray quality with Buccaneer Plus	13
Spray quality with clethodim.....	14
Spray quality with Ignite	15
Spray quality with Laudis	16
Spray quality with Status.....	17
Wild oat control at various spray quality.....	18
Adjuvant rate for saflufenacil, Fargo	19
Adjuvant rate for saflufenacil, Casselton	20
Application volume of oil adjuvants	21 - 22
Herbicides by oil adjuvant volume.....	23 - 24

Blue Section: Weed Control in Corn and Soybean	Page
Soil-applied weed control in corn	1
Balance Flexx in corn.....	2 - 4
Kixor in corn	5
Weed control with Kixor herbicide in corn, Carrington, 2010.....	6
Laudis with adjuvant packages in corn.....	7
Realm Q in corn	8
Corn response to foliar fungicide and pre-harvest desiccant, Carrington 2010.....	9 - 10
Corn response to special product tank mixtures with glyphosate, Carrington, 2010	11
Corn response to nitrogen and timing of weed control, Carrington, 2010	12 - 13
PRE weed control in soybean	14
Residual weed control in soybean	15
PRE weed control in soybean, Buffalo and Prosper	16 - 17
Soybean weed control with Sharpen, Carrington, 2010	18 - 19
Weed management in soybean	20 - 21
Kixor in soybean	22
Tackle in Roundup Ready soybean	23
Sharpen followed by PPO-inhibiting herbicides and glyphosate in Roundup Ready soybean, Hutchinson MN, 20 10	24 - 27
Soybean weed control with selected glyphosate products, Carrington, 2010	28 - 29
Flexstar GT 3.5 (new formulation) efficacy and crop tolerance in RR soybean, Hutchinson, MN, 2010.....	30 - 31
Sharpen tank-mixtures in Roundup Ready soybean, Hutchinson, MN 2010.....	32 - 33
Sharpen tank-mixtures in Roundup Ready soybean, Hector, MN, 2010.....	34 - 35
Sharpen tank-mixtures in Roundup Ready soybean, Mayville, ND, 2010.....	36 - 39
Micro-rate validation in soybean	40 - 41
Herbicide resistant soybean system comparison	42 - 44
Stinger rates and adjuvant rates on soybean.....	45
KIH-485 (pyroxasulfone) carryover to rotational crops.....	46

Yellow section: **Alfalfa, Canola, Chickling Pea, Dry Bean, Dry Pea,**

Fallow, Flax, Lentil, Onion, Potato, Safflower, Sunflower.

	Page
Dandelions control with preplant herbicide applications, Kindred, ND, 2010	1 - 2
Weed control with SU Ratios	3 - 4
Alfalfa response to sulfentrazone.....	5
Volunteer Roundup Ready canola control.....	6

Chickpea tolerance to Sharpen applied preemergence	7
Chickpea tolerance to Sharpen tank mixed with other PPO inhibitors.	8
Permit + Spartan on dry beans	9
Dry bean tolerance.....	10 - 11
Post weed control with bentazon and Imazamox tank mixtures in dry bean, Carrington, 2010	12
Basagran – Raptor ratios in dry bean.....	13 - 14
Cadet in dry beans	15
Sharpen and dry bean desiccation.....	16 – 17
Dry bean desiccation with Sharpen.....	18
Vida dry edible bean desiccation	19 - 20
Dry pea tolerance to clethodim and quizalofop	21
Dry pea tolerance to Sharpen tank mixed with other PPO inhibitors.....	22
Evaluation of weed control and dry pea tolerance to different Basagran:Raptor ratios	23
Japanese brome control in dry pea.....	24
Dry pea desiccation with Sharpen.....	25
POST weed control with bentazon and Imazamox tank mixtures in field pea, Carrington, 2010	26
Field pea weed control with Sharpen, Carrington, 2010.....	27
Herbicide performance for preharvest desiccation of field pea, Carrington, 2010...	28
Sharpen field pea desiccation	29 – 30
Vida field pea desiccation	31 - 32
Weed control in field pea, Williston 2009	33
Residual Effect of Huskie Applied in 2009 on 2010 Field Pea and Lentil, 2010.....	34
Effect of seeding date on lentil tolerance to Spartan.....	35
Clearfield lentil tolerance to Sharpen	36 - 37
Weed control in lentil, Williston 2009	38
Clearfield Lentil weed control and tolerance	39 - 40
Lentil desiccation with Sharpen.....	41
Weed control in non-irrigated potato with SOLIDA.....	42 - 44
Weed control in irrigated potato with SOLIDA.....	45 - 46
Adjuvants with pre-emergence herbicides for improved weed control on red potato	47 - 49
Weed control with Reflex +/- Dual or +/- Boundary as a pre-emergence treatment in Ranger Russet potato	50 - 51

Weed control with Reflex +/- Dual or +/- Boundary as a pre-emergence in Russet Burbank Potato.....	52 - 53
Weed control with Reflex +/- Dual or +/- Boundary as a pre-emergence treatment in Shepody potato.....	54 - 55
Vida and Aceto Diquat as desiccants in red Norland potatoes.....	56 - 58
Adjuvants to improve desiccation with Sharpen herbicide in red Lasoda potato.....	59 - 61
Effect of glyphosate droplet concentration in Russet Burbank potato.....	62 - 63
Simulated glyphosate drift in Red Norland potato.....	64 - 65
Simulated glyphosate drift in Red Lasoda potato.....	66 - 67
Simulated glyphosate drift in Sangre potato.....	68 - 69
Pre-emergence herbicides for weed control in safflower, Williston, 2009.....	70
Postemergence weed control in safflower, Williston, 2009.....	71
Safflower Cultivar Tolerance to Selected SU Herbicides, 2010.....	72 - 73
Spartan on safflower, Williston, 2010.....	74
Weed control with PRE and POST herbicides in ALS Sunflower.....	75
Weed control in ALS sunflower.....	76
Sunflower desiccation with flumioxazin.....	77

Pink Section	Perennial and Noxious Weed Control	Page
Long-term control of leafy spurge with aminocyclopyrachlor.		1 - 2
Aminopyralid applied in combination with imazapic and picloram for leafy spurge control		3
Evaluation of aminocyclopyrachlor for plumeless thistle control		4
Evaluation of aminocyclopyrachlor for Russian olive control		5 - 7
Aminopyralid applied alone or in combination with metsulfuron for western snowberry and Canada thistle control		8 - 9
Aminopyralid applied alone or in combination with clopyralid for Canada thistle control		10 - 11
Yellow toadflax control with DPX-MAT28		12
Perennial weed control with aminopyralid and aminocyclopyrachlor, Sheridan County.		13-14

CLIMATIC DATA, 2010, Carrington ND

Date	Precipitation												April		May		June		July		August		Sept	
	April	May	June	July	August	Sept	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min		
1	0.49	0.00	0.07	0.00	0.00	0.00	52	38	46	37	65	46	91	68	83	63	74	47						
2	0.68	0.01	0.00	0.00	0.00E	0.12	39	32	45	35	70	40	89	72	86	65	69	52						
3	0.00	0.00	0.17	0.00	0.00	0.00	56	30	55	37	69	48	85	65	85	60	67	43						
4	0.00	0.02	0.01	0.00	0.00	0.00	57	31	58	40	74	50	77	58	78	54	71	40						
5	0.00	0.32	0.00	0.00	0.00	0.00	58	33	43	34	75	55	79	55	78	53	69	50						
6	0.00	0.14	0.00	0.00	0.00	1.65	56	31	43	33	73	52	74	51	82	50	58	49						
7	0.00	0.37	0.00	0.00	0.02	0.00	56	29	41	32	79	47	77	53	88	61	65	42						
8	0.00	0.00	0.06	0.00	0.00	0.00	62	27	52	28	76	57	78	51	94	59	67	38						
9	0.00	0.03	0.01	0.00	0.00	0.14	55	30	56	30	68	52	84	51	96	66	59	54						
10	0.00	0.13	0.32	0.35	0.72	0.12	56	28	51	42	56	51	90	55	85	63	73	53						
11	0.00	0.00	0.07	0.00	0.01	0.00	58	24	49	40	64	54	72	53	91	60	70	50						
12	0.01	0.08	0.02	0.00	0.40	0.00	56	37	51	36	61	54	73	49	78	64	70	40						
13	0.06	0.34	0.00	0.90	0.29	0.00	68	45	49	41	70	50	82	61	80	61	69	39						
14	0.00	0.00	0.00	0.20	0.00	0.00	70	43	72	38	72	45	73	55	72	58	61	45						
15	0.00	0.00	0.00	0.00	0.00	0.00	55	42	75	43	75	47	79	55	72	52	61	41						
16	0.00	0.00	0.00	0.00	0.00	0.01	58	31	70	44	81	52	83	57	73	48	69	40						
17	0.00	0.00	1.63	0.00	0.00	0.00	64	29	77	46	76	57	82	60	85	46	52	37						
18	0.00	0.00	0.00	0.00	0.00	0.00	67	35	79	45	62	53	80	52	67	46	58	30						
19	0.00	0.00	0.00	0.00	0.00	0.00	70	37	80	46	76	52	79	57	76	48	59	45						
20	0.00	0.00	0.00	0.01	0.00	0.01	70	35	80	46	79	54	79	53	90	62	59	50						
21	0.00	0.02	0.00	0.00	0.00	0.00	62	30	76	48	77	57	76	49	86	58	57	40						
22	0.00	0.24	0.19	0.00	0.00	0.02	69	34	72	57	79	56	73	55	96	68	54	38						
23	0.00	0.04	0.00	0.01	0.01	0.30	74	44	72	51	76	59	72	51	78	56	47	44						
24	0.02	0.79	0.00	0.00	0.00	0.05	65	45	65	51	83	57	78	53	74	47	63	41						
25	0.00	0.00	0.29	0.00	0.00	0.00	63	37	66	50	78	62	81	51	75	41	69	42						
26	0.10	0.00	0.38	0.08	0.00	0.00	58	42	74	47	81	63	92	66	83	51	78	48						
27	0.00	0.00	0.00	0.23	0.00	0.00	64	37	84	55	73	58	78	55	93	57	73	45						
28	0.00	0.00	0.00	0.00	0.00	0.00	69	45	89	66	72	52	78	54	78	59	77	40						
29	0.02	0.07	0.00	0.02	0.00	0.01	57	45	86	54	75	51	79	58	85	57	70	49						
30	0.04	0.00	0.00	0.15	0.18	0.00	60	33	68	50	85	60	83	61	72	58	69	42						
31		0.00		0.00	0.01				74	52			87	58	69	47								
Total/Avg	1.42	2.60	3.22	1.95	1.64	2.43	61	35	64	44	73	53	80	56	82	56	65	44						

CLIMATIC DATA, 2010, Casselton ND

Date	Precipitation																	
	April			May			June			July			August			Sept		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	-	-	0.07	0.07	0.00	0.07	0.07	0.00	0.07	0.00	0.07	0.07	0.00	0.07	0.00	0.07	0.00	0.07
2	-	-	0.04	0.04	0.00	0.04	0.04	0.00	0.04	0.00	0.04	0.04	0.00	0.04	0.00	0.04	0.00	0.04
3	-	-	0.03	0.03	0.00	0.03	0.03	0.00	0.03	0.00	0.03	0.03	0.00	0.03	0.00	0.03	0.00	0.03
4	-	-	0.00	0.00	0.32	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	-	-	0.09	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	-	-	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	-	-	0.36	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	-	-	0.80	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	-	-	0.00	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	-	-	0.03	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	-	-	0.47	0.22	0.00	0.00	0.00	0.40	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	-	-	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.44	0.00	0.48	0.00	0.00	0.00	0.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.06	0.00	0.00	2.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.18	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.08	0.10	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.17	0.32	0.18	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.03	0.00	0.09	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.20	0.00	0.16	0.00	0.00	0.00	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.20	0.03	0.29	0.21	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	1.03	1.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.46	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	-	-	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total/Avg	1.13	3.41	3.79	4.83	3.2	5.06	64	37	66	46	77	56	81	61	83	50	66	44

CLIMATIC DATA, 2010, Crookston MN

Date	Precipitation												July						August						Sept					
	April			May			June			July			August			Sept			July			August			Sept					
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg			
1	0.00	0.00	0.03	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
2	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
3	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
4	0.00	0.00	0.31	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
5	0.00	0.00	0.18	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
6	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
7	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
8	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
10	0.00	0.00	0.05	0.60	0.00	0.00	0.00	1.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
11	0.00	0.00	0.03	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
12	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
13	0.33	0.33	0.33	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
14	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
15	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
17	0.00	0.00	0.00	0.37	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
18	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
19	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
21	0.00	0.00	0.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
22	0.00	0.00	0.42	0.10	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
23	0.00	0.00	0.00	0.00	0.06	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
24	0.00	0.00	2.81	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
25	0.03	0.00	0.00	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
26	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
27	0.00	0.00	0.00	0.05	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
28	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
29	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
30	1.10	0.00	0.00	0.00	0.07	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
31			0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Total/Avg	2.25	2.25	5.36	4.33	3.05	2.28	5.33	63	37	47	74	56	82	60	82	59	64	45	45	48	48	40	45	49	47	36	39	49		

CLIMATIC DATA, 2010, Fargo, ND

Date	Precipitation												April		May		June		July		August		Sept	
	April	May	June	July	August	Sept	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min		
	0.00	0.02	0.00	0.00	0.01	0.01	58	45	52	41	65	47	93	69	80	69	80	69	76	54	76	54		
2	0.00	0.02	0.00	0.00	0.00	0.04	57	37	48	39	72	41	91	70	85	64	85	64	69	55	69	55		
3	0.00	0.01	0.33	0.27	0.00	0.00	58	35	52	38	78	50	91	74	86	67	86	67	67	47	67	47		
4	0.00	0.00	0.00	0.29	0.00	0.00	62	34	63	40	80	57	83	64	82	61	82	61	70	42	70	42		
5	0.00	0.15	0.06	0.00	0.00	0.00	61	37	49	37	78	55	83	60	79	56	79	56	72	54	72	54		
6	0.00	0.00	0.00	0.01	0.00	2.11	61	32	49	36	73	52	79	58	81	55	81	55	66	50	66	50		
7	0.00	1.09	0.00	0.01	0.00	0.18	50	29	41	37	79	51	78	62	89	68	89	68	60	46	60	46		
8	0.00	0.00	0.09	0.00	0.00	0.00	56	23	52	33	75	60	82	59	88	67	88	67	68	40	68	40		
9	0.00	0.00	0.00	0.00	0.00	0.09	61	37	59	32	68	55	86	57	93	66	93	66	62	55	62	55		
10	0.00	0.39	0.12	0.00	0.08	1.13	63	33	58	43	64	54	88	66	82	73	82	73	62	57	62	57		
11	0.00	0.25	0.59	0.00	0.00	0.00	68	27	46	42	69	60	76	56	90	66	90	66	70	51	70	51		
12	0.00	0.15	0.15	0.00	1.73	0.00	64	45	53	41	65	61	78	50	79	66	79	66	72	47	72	47		
13	0.44	0.19	0.00	0.42	0.31	0.00	68	47	48	43	68	53	81	62	81	65	81	65	70	43	70	43		
14	0.00	0.00	0.26	0.86	0.06	0.00	74	57	74	43	75	48	79	62	76	61	76	61	64	50	64	50		
15	0.00	0.00	0.29	0.00	0.00	0.01	58	44	75	48	72	57	83	58	72	56	72	56	57	44	57	44		
16	0.00	0.00	0.00	0.00	0.00	0.14	59	36	74	52	81	53	86	63	72	53	72	53	64	37	64	37		
17	0.00	0.00	0.74	0.00	0.00	0.00	66	27	78	54	86	64	86	66	83	48	83	48	60	41	60	41		
18	0.00	0.00	0.00	0.00	0.08	0.00	69	35	80	56	74	61	81	62	70	53	70	53	58	35	58	35		
19	0.00	0.00	0.00	0.00	0.00	0.00	72	39	80	58	73	59	81	64	79	54	79	54	62	47	62	47		
20	0.00	0.00	0.00	0.39	0.00	0.00	74	37	81	56	83	61	81	61	81	66	81	66	62	53	62	53		
21	0.00	0.00	0.00	0.00	0.00	0.00	65	33	77	59	85	64	80	61	82	62	82	62	60	44	60	44		
22	0.00	0.09	0.05	0.00	0.00	0.00	70	41	77	59	85	60	80	64	91	71	91	71	61	42	61	42		
23	0.00	0.00	0.00	0.09	0.05	1.64	75	45	77	63	78	61	77	61	86	60	86	60	54	50	54	50		
24	0.03	0.15	0.00	0.10	0.00	0.12	65	50	88	58	85	61	78	61	75	53	75	53	63	47	63	47		
25	0.09	0.00	0.13	0.00	0.00	0.51	62	48	76	57	84	64	83	58	74	46	74	46	63	51	63	51		
26	0.00	0.00	0.33	0.00	0.00	0.00	62	46	78	50	79	65	89	67	80	53	80	53	72	46	72	46		
27	0.00	0.00	0.24	1.70	0.00	0.00	68	35	86	59	79	61	79	62	93	63	93	63	73	52	73	52		
28	0.00	0.00	0.00	0.00	0.00	0.00	70	46	91	65	73	53	80	56	88	65	88	65	71	44	71	44		
29	0.74	0.04	0.00	0.00	0.00	0.00	63	48	93	63	76	49	80	57	89	70	89	70	73	52	73	52		
30	0.15	0.09	0.00	0.00	0.33	0.00	59	46	70	52	83	61	81	65	91	72	91	72	72	44	72	44		
31		0.04		0.00	0.00		39	39	79	51			86	62	74	55								
Total/Avg	1.45	2.68	3.38	4.14	2.65	5.98	64	39	68	49	76	57	83	62	82	61	82	61	66	47	66	47		

CLIMATIC DATA, 2010, Hettinger, ND

Date	Precipitation												August		July		June		May		April		September	
	April	May	June	July	August	Sept	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min		
1	0.65	0.03	0.00	0.00	0.00	0.02	43	33	46	34	63	47	91	65	92	62	74	50						
2	0.52	0.01	0.00	0.00	0.00E	0.01	48	27	44	30	67	45	98	60	86E	64E	67	43						
3	0.00	0.00	0.00	0.00	0.26E	0.00	54	25	60	29	77	52	77	56	74	55	72	37						
4	0.00	0.00	0.00	0.00	0.00	0.00	50	26	54	37	76	52	76	46	79	54	79	46						
5	0.01	0.00	0.06	0.00	0.00	0.35	50	24	46	34	73	47	78	48	83	52	77	53						
6	0.00	0.57	0.00	0.18	0.00	0.70	56	33	38	32	73	42	66	51	87	55	56	48						
7	0.00	0.40	0.48	0.00	0.00	0.00	58	23	42	30	65	53	77	44	93	55	69	38						
8	0.00	0.00	0.01	0.00	0.00	0.00	62	24	51	24	72	46	84	50	90	63	70	48						
9	0.00	0.02	0.00	0.00	0.00	0.05	51	27	51	34	66	41	87	47	93	63	85	56						
10	0.00	0.45	0.00	0.06	0.00	0.10	57	23	45	34	72	54	91	51	92	63	64	47						
11	0.02	0.00	0.02	0.02	0.05	0.00	68	31	48	38	67	54	73	56	93	54	70	44						
12	0.00	0.32	0.00	0.04	0.56	0.00	62	40	41	35	61	50	83	54	88	58	75	44						
13	0.54	0.10	0.00	0.43	0.00	0.00	72	40	58	34	67	47	83	58	78	54	79	41						
14	0.00	0.00	0.00	0.60	0.00	0.00	67	35	68	33	68	45	75	55	72	55	68	46						
15	0.00	0.00	0.00	0.00	0.00	1.18	50	36	67	36	73	40	88	51	75	50	56	45						
16	0.00	0.00	0.02	0.00	0.00	0.00	58	25	71	42	84	49	94	53	79	48	78	45						
17	0.00	0.00	1.40	0.00	0.00	0.04	61	34	72	43	69	51	86	60	86	50	55	33						
18	0.00	0.00	0.00	0.35	0.01	0.01	66	43	74	51	69	47	82	54	79	55	45	30						
19	0.04	0.00	0.01	0.00	0.00	0.00	65	39	72	51	69	50	75	56	72	60	54	41						
20	0.00	0.03	0.06	0.00	0.00	0.00	67	39	71	47	80	53	81	51	93	58	66	44						
21	0.00	0.17	0.52	0.95	0.00	0.00	67	37	62	51	79	51	73	58	94	51	63	37						
22	0.00	0.03	0.05	0.00	0.00	0.00	68	39	72	51	77	50	80	60	100	69	66	45						
23	0.04	0.00	0.00	0.98	0.00	0.76	66	40	69	42	77	57	71	55	84	48	50	35						
24	0.00	1.31	0.00	0.00	0.00	0.00	62	37	57	47	83	56	76	52	76	45	74	31						
25	0.02	0.00	0.02	0.00	0.00	0.00	49	29	61	42	87	61	89	57	81	40	72	40						
26	0.00	0.00	0.24	0.00	0.00	0.00	43	32	73	39	80	55	92	64	92	52	84	47						
27	0.00	0.12	0.00	0.04	0.00	0.00	60	24	80	58	78	53	78	61	95	52	72	46						
28	0.14	0.00	0.00	0.00	0.00	0.00	70	41	86	66	83	50	76	52	80	61	86	45						
29	0.03	0.00	0.00	0.00	0.37	0.00	60	33	73	50	86	60	86	62	86	56	69	40						
30	0.02	0.09	0.00	0.00	0.71	0.00	53	34	70	38	95	64	87	59	63	53	72	34						
31		0.00		0.00	0.01				74	46			86	60	71	47								
Total/Avg	2.03	3.65	2.89	3.65	1.71	3.22	59	32	61	41	75	51	82	55	84	54	69	43						

CLIMATIC DATA, 2010, Hutchinson MN

Date	Precipitation												April		May		June		July		August		Sept	
	April	May	June	July	August	Sept	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min		
1	0.00	0.00	0.15	0.00	0.00	0.15	69	46	65	44	83	54	83	59	85	66	86	56						
2	0.01	0.00	0.00	0.00	T	1.34	78	46	61	42	83	56	88	65	90	66	74	56						
3	0.00	0.00	T	0.00	0.00	0.22	66	35	64	43	72	53	88	66	87	71	71	54						
4	0.00	T	0.11	0.56	0.04	0.00	60	35	59	42	78	55	93	70	90	70	64	43						
5	T	0.00	0.02	0.03	0.00	0.00	64	37	79	43	85	61	82	69	86	61	69	44						
6	0.84	0.12	T	T	0.00	0.00	61	37	56	39	68	55	82	68	78	59	77	54						
7	0.07	0.66	0.00	0.00	0.64	0.03	48	37	52	41	76	57	86	67	83	59	73	56						
8	0.00	0.06	0.47	0.00	T	0.00	53	29	49	34	79	58	81	60	89	67	67	42						
9	0.00	0.00	0.00	0.00	0.23	0.61	51	29	50	34	71	58	86	61	92	71	68	42						
10	0.00	0.10	0.15	0.00	0.20	0.67	68	32	58	35	72	57	88	64	93	72	63	55						
11	0.00	0.94	0.65	0.74	0.00	0.32	64	37	57	40	66	57	90	64	86	69	65	53						
12	0.16	0.27	0.61	0.00	0.22	0.00	69	37	45	40	73	54	85	60	93	70	74	48						
13	0.05	0.28	T	0.00	0.39	0.00	66	47	46	42	59	55	79	60	93	68	81	48						
14	0.03	0.00	0.45	T	0.00	0.00	75	48	52	42	65	59	86	62	84	65	74	48						
15	0.38	0.00	0.00	0.00	0.01	0.35	70	57	72	43	68	60	93	59	82	59	68	50						
16	0.00	0.00	0.00	0.00	0.00	0.35	69	44	75	47	76	58	86	60	76	53	74	50						
17	0.00	0.00	0.26	T	0.00	0.00	58	40	75	51	84	61	91	67	79	54	55	49						
18	0.00	0.00	0.00	0.00	T	0.00	63	39	76	51	90	60	96	66	80	56	64	46						
19	0.00	0.00	0.00	0.00	0.04	0.00	67	43	79	49	89	60	83	61	80	63	55	45						
20	0.00	0.00	0.00	0.00	0.01	0.00	69	45	82	53	77	61	79	64	80	67	65	50						
21	0.00	0.05	0.01	T	T	0.30	71	42	80	56	84	62	84	61	88	68	88	53						
22	0.00	0.15	0.00	1.16	T	0.00	61	37	65	53	82	65	87	63	85	65	72	47						
23	0.05	0.00	1.07	0.00	0.00	3.85	66	37	82	55	94	66	80	68	91	65	66	47						
24	0.35	0.00	0.00	0.68	0.55	1.33	68	47	86	71	76	58	85	64	89	60	73	53						
25	0.20	T	3.20	0.00	0.00	0.03	62	47	95	62	86	60	81	61	75	53	61	44						
26	0.00	0.00	1.19	0.00	0.00	0.07	55	43	90	57	88	63	85	62	72	52	62	43						
27	0.00	0.00	0.15	0.13	0.00	0.00	58	40	80	59	84	63	87	65	80	53	67	42						
28	0.00	0.00	0.00	0.00	0.00	0.00	61	40	85	58	82	60	95	64	86	62	76	42						
29	0.00	0.00	0.00	0.00	0.00	0.00	70	42	90	61	73	56	79	62	89	62	70	51						
30	0.37	T	0.00	0.22	0.08	0.00	74	54	93	63	74	56	80	62	91	63	76	46						
31		0.00	0.00	0.00	0.90				72	52			76	65	90	67								
Total/Avg	2.51	1.48	8.49	3.52	4.89	9.62	64	41	70	48	78	59	85	64	85	63	70	49						

CLIMATIC DATA, 2010, Langdon, ND

Date	Precipitation												July		August		Sept	
	April			May			June			July			August		Sept			
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Max	Min		
1	0.35	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	0.43	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
3	0.11	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.22	0.17	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.02	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.82	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
13	0.14	0.02	0.00	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.10	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
22	0.00	1.24	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.18	0.16	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.00	1.20	0.13	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.01	0.03	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.19	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.50	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
30	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
31		0.03		0.49														
Total/Avg	1.55	4.98	3.60	2.57	2.98	5.09	3.60	3.60	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09		

	July		August		Sept	
	Max	Min	Max	Min	Max	Min
	85	66	80	61	75	45
	86	69	83	61	64	51
	86	64	79	61	63	45
	78	60	74	59	67	41
	77	55	75	53	65	48
	72	54	77	50	61	42
	76	53	84	59	60	38
	74	53	87	63	63	34
	82	52	92	63	61	45
	86	57	84	64	71	53
	71	52	86	62	66	49
	74	46	84	62	67	43
	80	59	76	61	59	38
	71	56	69	56	60	46
	77	53	67	52	59	45
	80	58	66	43	64	41
	77	58	80	41	48	36
	78	53	70	42	56	32
	76	55	75	46	57	40
	76	53	86	59	53	49
	78	52	80	58	52	40
	70	56	92	65	45	37
	76	54	81	56	47	42
	78	57	66	49	60	43
	79	56	71	42	62	45
	88	65	83	50	75	49
	77	57	87	55	71	45
	75	54	67	55	74	45
	75	55	80	55	69	47
	80	60	63	55	68	43
	85	57	64	49		

CLIMATIC DATA, 2010, Oakes ND

Date	Precipitation												May						June						July						August						Sept					
	April			May			June			July			Augu			Sept			Max		Min		Max		Min		Max		Min		Max		Min		Max		Min					
	April	May	June	July	Augu	Sept	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min										
1	0.00	0.01	0.00	0.00	0.37	0.05	57	44	53	39	66	50	89	70	84	68	74	49																								
2	0.02	0.00	0.00	0.00	0.00	0.24	48	36	46	38	71	45	90	72	89	66	69	54																								
3	0.00	0.00	0.10	0.19	0.00	0.00	59	30	58	42	76	53	87	68	86	63	68	44																								
4	0.00	0.00	0.01	0.13	0.00	0.00	61	31	63	41	77	54	82	62	81	59	73	40																								
5	0.00	0.00	0.08	0.24	0.00	0.00	56	33	50	40	75	57	82	60	79	54	71	49																								
6	0.00	0.27	0.00	0.27	0.00	2.06	61	34	45	39	76	54	71	57	83	55	58	50																								
7	0.00	0.51	0.00	0.01	0.27	0.08	57	31	45	34	78	53	79	58	92	65	66	46																								
8	0.00	0.00	0.27	0.00	0.00	0.02	60	26	53	33	78	59	84	56	85	67	69	41																								
9	0.00	0.00	0.08	0.00	0.00	3.49	58	37	52	32	74	56	84	58	92	63	64	56																								
10	0.00	0.48	0.43	0.00	0.38	0.73	62	31	53	41	75	55	90	64	86	68	73	54																								
11	0.00	0.12	0.00	0.00	0.00	0.00	67	31	45	41	71	61	77	55	92	64	73	50																								
12	0.03	0.23	0.19	0.00	0.10	0.00	64	46	47	40	64	60	76	55	82	67	76	48																								
13	0.00	0.32	0.05	0.66	0.47	0.00	81	52	49	42	69	55	84	61	84	62	73	44																								
14	0.02	0.01	0.26	0.01	0.07	0.00	74	52	72	37	72	52	78	56	74	58	68	48																								
15	0.00	0.00	0.12	0.00	0.00	0.42	59	42	75	47	75	56	84	56	74	53	56	45																								
16	0.00	0.00	0.00	0.00	0.00	0.00	61	38	71	54	83	55	89	60	73	52	65	38																								
17	0.00	0.00	0.74	0.41	0.00	0.02	64	29	77	50	86	61	93	64	84	50	60	39																								
18	0.00	0.00	0.00	0.00	0.00	0.00	69	36	79	51	75	55	80	60	74	55	59	37																								
19	0.00	0.00	0.00	0.02	0.00	0.00	71	39	79	51	78	57	82	61	71	59	60	49																								
20	0.00	0.00	0.09	0.45	0.00	0.00	73	40	80	52	85	60	82	60	83	64	66	49																								
21	0.00	0.00	0.00	0.00	0.00	0.00	66	38	79	54	84	62	80	59	87	60	62	45																								
22	0.00	1.21	0.40	0.90	0.00	0.04	70	37	77	58	83	61	78	62	96	70	66	40																								
23	0.25	0.01	0.00	0.13	0.00	2.11	73	43	73	59	76	61	72	57	83	57	52	47																								
24	0.34	0.16	0.00	0.01	0.00	0.02	58	50	83	56	86	59E	78	57	75	51	65	46																								
25	0.00	0.00	0.00	0.00	0.00	0.04	57	45	72	54	87	67	81	55	76	45	69	45																								
26	0.46	0.00	0.01	0.00	0.00	0.00	60	44	76	49	82	64	87	68	83	50	71	48																								
27	0.00	0.00	0.35	0.00	0.00	0.00	66	40	86	58	79	62	87	61	90	58	76	49																								
28	0.00	0.00	0.00	0.00	0.00	0.00	70	44	91	68	75	54	80	54	86	62	74	43																								
29	0.42	0.34	0.00	0.00	0.00	0.00	61	44	92	57	78	50	81	58	90	71	72	49																								
30	0.25	0.16	0.00	0.00	0.01	0.00	61	40	69	55	87	59	83	62	90	68	71	44																								
31		0.00		0.00	0.00				76	54			90	61	75	51																										
Total/	1.79	3.83	3.18	3.43	1.67	9.32	63	39	67	47	77	59	83	60	83	60	67	46																								

CLIMATIC DATA, 2010, Prosper, ND

Date	Precipitation												April		May		June		July		August		Sept	
	April	May	June	July	August	Sept	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min		
1	0.00	0.01	0.00	0.00	0.01	0.00	57	45	53	39	66	47	90	68	81	66	81	66	76	47				
2	0.00	0.01	0.00	0.00	0.00E	0.13	56	37	49	36	72	44	89	69	86E	62E	86E	62E	69	55				
3	0.00	0.00	0.25	0.00	0.00E	0.00	58	34	53	37	77	45	89	74	85	64	85	64	67	44				
4	0.00	0.00	0.00	0.14	0.00	0.00	60	30	62	36	80	55	82	59	80	59	80	59	71	41				
5	0.00	0.07	0.00	0.00	0.00	0.00	60	32	47	38	77	53	82	55	79	55	79	55	71	46				
6	0.02	0.02	0.00	0.00	0.00	1.96	59	33	48	36	75	51	78	54	80	55	80	55	65	49				
7	0.00	1.23	0.00	0.01	0.00	0.07	51	30	41	37	82	49	80	57	87	58	87	58	62	43				
8	0.00	0.00	0.15	0.00	0.00	0.00	57	25	53	33	76	56	82	52	89	63	89	63	67	38				
9	0.00	0.00	0.00	0.00	0.00	0.03	57	33	58	31	70	53	85	53	93	60	93	60	61	51				
10	0.00	0.43	0.12	0.00	0.24	1.30	61	27	58	43	64	53	89	61	82	64	82	64	61	57				
11	0.00	0.16	0.09	0.00	0.01	0.00	66	26	48	42	69	60	75	52	91	63	91	63	71	49				
12	0.00	0.20	0.01	0.00	1.24	0.00	62	41	52	41	67	59	77	47	75	66	75	66	74	43				
13	0.28	0.21	0.00	0.71	0.59	0.00	68	45	49	43	70	51	79	60	82	63	82	63	71	42				
14	0.00	0.00	0.02	1.02	0.00	0.00	74	48	74	42	76	48	78	56	76	58	76	58	63	46				
15	0.00	0.00	0.74	0.00	0.00	0.01	59	40	77	40	72	57	81	55	73	52	73	52	58	41				
16	0.00	0.00	0.00	0.00	0.00	0.11	60	36	71	48	79	53	85	58	72	48	72	48	66	36				
17	0.00	0.00	0.84	0.02	0.00	0.00	66	28	79	47	84	61	86	60	83	44	83	44	60	41				
18	0.00	0.00	0.00	0.01	0.12	0.00	68	32	81	50	72	58	81	59	69	50	69	50	59	32				
19	0.00	0.00	0.00	0.08	0.00	0.00	73	35	82	50	76	58	81	58	80	49	80	49	63	45				
20	0.00	0.00	0.00	0.36	0.02	0.00	76	36	83	51	83	59	81	59	81	63	81	63	60	48				
21	0.00	0.00	0.07	0.00	0.01	0.00	65	36	81	53	84	61	76	57	83	61	83	61	61	43				
22	0.00	0.15	0.10	0.42	0.00	0.00	70	34	74	58	83	59	76	60	91	67	91	67	62	38				
23	0.00	0.02	0.00	0.05	0.04	1.34	76	41	78	59	79	60	76	56	86	57	86	57	52	49				
24	0.03	0.19	0.00	0.00	0.00	0.06	67	50	87	57	84	58	78	59	76	50	76	50	64	47				
25	0.12	0.01	0.06	0.00	0.00	0.29	62	47	75	53	87	63	82	55	73	45	73	45	64	45				
26	0.00	0.00	0.72	0.00	0.00	0.00	64	44	78	49	77	61	89	66	81	46	81	46	72	43				
27	0.00	0.00	0.01	1.25	0.00	0.00	69	39	88	54	77	60	78	58	91	57	91	57	75	51				
28	0.00	0.00	0.00	0.00	0.00	0.00	71	42	93	63	73	52	79	55	81	63	81	63	72	43				
29	0.66	0.00	0.00	0.00	0.00	0.00	62	46	94	62	76	48	78	54	90	68	90	68	73	49				
30	0.05	0.04	0.00	0.00	1.24	0.00	58	46	71	49	82	59	80	62	91	65	91	65	73	42				
31		0.00		0.00	0.00				79	46			86	61	74	51								
Total/Avg	1.16	2.75	3.18	4.07	3.51	5.30	64	37	68	46	76	55	82	58	82	57	82	57	66	45	66	45		

CLIMATIC DATA, 2010, St Thomas, ND

Date	Precipitation												April						May						June						July						August						Sept					
	April		May		June		July		August		Sept		April		May		June		July		August		Sept		April		May		June		July		August		Sept													
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min														
1	0.33	0.02	0.03	0.00	0.00	0.03	0.00	0.12	0.48	52	39	53	42	63	47	90	67	84	62	84	62	79	46																									
2	0.12	0.08	0.00	0.00	0.00	0.00	0.00	0.02	0.94	42	33	50	36	73	43	88	69	88	60	88	60	64	53																									
3	0.06	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	53	33	48	34	72	48	89	72	87	62	87	62	65	50																									
4	0.00	0.81	0.02	0.00	0.00	0.00	0.00	0.00	0.00	60	34	53	34	71	52	80	58	80	59	80	59	68	44																									
5	0.00	0.09	0.34	0.04	0.00	0.00	0.00	0.00	0.00	59	35	44	37	70	50	82	55	80	58	80	58	68	45																									
6	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	51	34	45	34	70	53	77	52	79	52	79	52	68	43																									
7	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49	28E	43	37	77	49	79	55	86	56	86	56	60	43																									
8	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	54	30	54	33	70	55	75	56	94	64	94	64	66	35																									
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.28	55	35	60	32	60	46	84	51	98	61	98	61	68	46																									
10	0.00	0.06	0.25	0.00	0.00	0.00	0.00	0.50	1.16	57	32	56	44	55	44	91	57	88	65	88	65	62	56																									
11	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	56	32	51	43	63	54	73	52	91	63	91	63	68	52																									
12	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.33	0.00	53	36	56	40	67	57	78	46	83	66	83	66	72	47																									
13	0.31	0.03	0.00	0.99	0.00	0.00	0.00	0.00	0.04	63	42	56	45	72	53	82	58	81	63	81	63	62	43																									
14	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.03	70	53	75	41	73	47	78	59	75	60	75	60	62	48																									
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	61	43	79	46	73	57	78	55	71	52	71	52	62	47																									
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	61	35	74	52	80	53	81	58	72	45	72	45	65	42																									
17	0.00	0.00	0.74	0.00	0.00	0.00	0.00	0.00	0.00	65	31	79	47	75	62	81	53	85	41	85	41	53	41																									
18	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00	68	38	83	46	64	56	82	57	71	44	71	44	60	34																									
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	73	36	83	50	71	54	80	59	78	46	78	46	62	45																									
20	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.01	68	39	84	50	82	59	80	56	85	62	85	62	57	50																									
21	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	62	33	81	53	74	60	81	55	86	64	86	64	55	43																									
22	0.00	0.18	0.00	1.54	0.00	0.00	1.54	0.00	0.35	71	33	75	59	81	61	73	57	94	63	94	63	49	38																									
23	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	1.39	75	39	74	53	77	59	79	56	86	61	86	61	51	45																									
24	0.00	2.27	0.03	0.01	0.00	0.03	0.01	0.01	0.25	64	51	64	49	79	56	81	60	71	56	71	56	60	46																									
25	0.00	0.01	0.47	0.00	0.00	0.00	0.00	0.00	0.05	64	42	69	53	80	59	83	57	75	50	75	50	63	48																									
26	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	66	46	73	49	81	59	90	65	86	48	86	48	74	47																									
27	0.00	0.00	0.05	0.04	0.00	0.00	0.04	0.00	0.00	70	40	77	49	75	54	83	60	90	58	90	58	72	53																									
28	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68	41	78	60	69	52	80	57	75	60	75	60	69	45																									
29	0.69	0.68	0.00	0.01	0.00	0.00	0.01	0.25	0.00	61	48	90	62	72	46	79	53	86	58	86	58	72	54																									
30	0.03	0.55	0.00	0.01	0.00	0.00	0.01	1.44	0.00	54	46	65	49	79	54	87	63	74	58	74	58	70	48																									
31		0.00		0.74			0.74	0.00				72	47			89	59	67	50																													
Total/Avg	1.54	5.01	3.33	3.54	2.68	5.10	61	39	66	45	72	53	82	57	82	58	82	57	82	57	82	57	64	45																								

CLIMATIC DATA, 2010, Tappen, ND

Date	Precipitation												April						May						June						July						August						Sept					
	April		May		June		July		August		Sept		Max		Min		Max		Min		Max		Min		Max		Min		Max		Min		Max		Min		Max		Min									
1	0.42	0.08	0.00	0.00	0.00	0.00	0.00	0.57	0.04	50	39	45	36	64	43	93	68	81	65	75	50																											
2	0.53	0.01	0.00	0.00	0.00	0.35	0.12	39	33	43	34	43	34	70	41	93	72	86	65	68	50																											
3	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	59	28	56	37	67	51	85	66	82	61	67	45																											
4	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57	29	58	40	76	51	80	58	76	55	74	41																											
5	0.00	0.01	0.15	0.00	0.00	0.00	0.00	0.00	0.00	59	29	45	36	77	56	82	55	76	51	72	49																											
6	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	3.17	59	29	41	32	73	49	73	51	82	53	56	49																											
7	0.00	0.35	0.01	0.00	0.00	0.11	0.00	0.11	0.00	57	22	40	29	77	47	79	53	86	64	64	43																											
8	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	62	25	52	26	78	58	82	53	90	62	68	41																											
9	0.00	0.04	0.00	0.00	0.00	0.00	0.42	0.00	0.42	55	31	52	32	70	53	87	51	93	65	62	55																											
10	0.00	0.02	0.16	0.00	0.00	0.00	0.09	0.00	0.09	58	25	53	40	60	54	93	57	89	61	73	50																											
11	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	61	23	48	38	65	54	74	55	92	61	71	47																											
12	0.00	0.28	0.00	0.00	0.00	0.56	0.00	0.56	0.00	60	40	48	37	62	53	78	50	79	61	71	44																											
13	0.09	0.38	0.00	0.53	0.00	0.22	0.00	0.22	0.00	79	46	49	39	69	46	83	64	79	58	73	41																											
14	0.00	0.00	0.00	1.36	0.00	0.00	0.00	0.00	0.00	70	39	70	36	71	42	76	55	72	55	64	46																											
15	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.37	53	38	74	49	75	47	82	53	71	50	58	41																											
16	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.30	59	29	67	48	81	49	87	58	71	49	69	38																											
17	0.00	0.00	1.07	0.00	0.00	0.00	0.14	0.00	0.14	63	29	74	45	78	57	86	60	85	47	52	34																											
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65	37	75	50	66	52	82	52	71	49	54	32																											
19	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00	69	37	76	44	75	52	80	58	72	52	58	46																											
20	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	71	34	76	47	81	53	80	57	91	61	60	47																											
21	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64	30	73	51	78	58	76	56	86	52	57	41																											
22	0.00	1.21	0.63	0.00	0.00	0.00	0.00	0.00	0.00	70	33	71	57	78	57	75	55	102	69	59	40																											
23	0.00	0.01	0.00	0.04	0.00	0.00	0.53	0.00	0.53	71	44	70	50	75	59	71	52	79	55	47	44																											
24	0.01	0.47	0.18	0.00	0.00	0.00	0.10	0.00	0.10	64	41	71	50	83	58	78	55	74	48	62	41																											
25	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	61	34	66	48	85	62	83	57	77	39	68	40																											
26	0.21	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	58	37	74	45	84	62	92	70	85	57	77	50																											
27	0.00	0.00	0.00	0.95	0.00	0.00	0.00	0.00	0.00	62	36	81	55	75	58	79	57	100	59	72	46																											
28	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	69	47	87	69	74	49	80	52	76	59	78	39																											
29	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57	37	83	54	77	52	81	61	91	59	71	45																											
30	0.06	0.10	0.00	0.38	0.00	0.13	0.00	0.13	0.00	60	31	68	49	90	62	83	63	76	59	69	37																											
31		0.06		0.03		0.00		0.00				73	50			87	61	70	51																													
Total/Avg	1.51	3.53	2.97	3.75	1.95	5.28	61	34	63	44	74	53	82	58	82	57	66	44																														

CLIMATIC DATA, 2010, Wahpeton ND

Date	Precipitation												April						May						June						July						August						Sept					
	April			May			June			July			August			Sept			Max			Min			Max			Min			Max			Min			Max			Min								
	April	May	June	July	August	Sept	April	May	June	July	August	Sept	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min														
1	0.00	0.01	0.00	0.00	0.62	0.19	0.00	0.00	0.00	0.67	0.41	56	45	69	48	95	69	85	67	85	67	85	67	74	47																							
2	0.00	0.05	0.00	0.00	0.01	0.02	0.00	0.00	0.00	55	38	50	39	72	43	93	71	86	66	86	66	86	66	69	54																							
3	0.00	0.00	0.36	0.05	0.00	0.00	0.00	0.36	0.05	60	36	54	41	82	48	94	77	85	68	85	68	85	66	66	46																							
4	0.02	0.00	0.00	0.89	0.00	0.00	0.00	0.00	0.89	62	38	62	40	82	55	83	64	83	63	83	63	83	71	40																								
5	0.00	0.09	0.03	0.00	0.00	0.00	0.00	0.03	0.00	61	36	50	40	77	56	82	61	79	56	79	56	79	72	48																								
6	0.00	0.04	0.00	0.13	0.00	1.45	0.00	0.00	0.13	62	36	49	40	78	52	79	60	82	54	82	54	82	62	50																								
7	0.00	0.73	0.00	0.12	0.01	0.08	0.00	0.00	0.12	52	30	44	36	81	50	78	61	90	65	90	65	90	62	42																								
8	0.00	0.00	0.16	0.14	0.00	0.00	0.00	0.16	0.14	58	23	52	34	76	57	84	59	85	64	85	64	85	68	37																								
9	0.00	0.00	0.00	0.00	0.00	0.82	0.00	0.00	0.00	64	35	58	32	73	57	86	59	92	62	92	62	92	59	54																								
10	0.00	0.26	0.26	0.00	0.01	0.34	0.00	0.26	0.00	65	32	57	43	67	55	89	67	80	70	80	70	80	59	54																								
11	0.00	0.22	0.10	0.02	0.00	0.00	0.00	0.10	0.02	69	27	46	42	73	62	78	56	91	68	91	68	91	72	49																								
12	0.00	0.10	0.23	0.00	1.17	0.00	0.00	0.23	0.00	68	46	51	42	66	60	79	52	80	66	80	66	80	74	46																								
13	1.00	0.16	0.00	0.02	0.02	0.00	0.00	0.00	0.02	68	49	49	43	67	53	84	62	82	66	82	66	82	73	42																								
14	0.00	0.00	0.26	1.18	0.20	0.00	0.00	0.26	1.18	76	53	73	43	75	50	81	60	75	59	75	59	75	67	49																								
15	0.00	0.00	0.84	0.00	0.00	0.53	0.00	0.84	0.00	59	46	77	45	73	59	84	57	74	54	74	54	74	56	47																								
16	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	60	36	74	54	80	56	89	62	73	52	73	52	73	64	37																								
17	0.00	0.00	0.26	0.03	0.00	0.00	0.00	0.26	0.03	65	31	79	51	87	62	91	64	82	47	82	47	82	61	42																								
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	69	35	81	52	77	58	81	60	74	56	74	56	74	59	38																								
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72	43	82	54	79	60	82	59	76	58	76	58	76	62	46																								
20	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.03	75	37	83	50	85	60	83	63	81	59	81	59	81	72	54																								
21	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00	0.63	66	36	76	54	87	65	84	60	81	54	81	54	81	59	43																								
22	0.00	0.58	0.02	0.30	0.00	0.00	0.00	0.02	0.30	70	40	78	58	87	61	82	64	89	67	89	67	89	63	40																								
23	0.00	0.00	0.00	0.06	0.09	0.90	0.00	0.00	0.06	75	42	79	64	80	62	77	62	86	58	86	58	86	56	47																								
24	0.21	0.73	0.00	0.00	0.00	0.10	0.00	0.00	0.00	58	50	90	58	87	58	78	60	75	52	75	52	75	64	45																								
25	0.30	0.02	0.59	0.00	0.00	0.27	0.00	0.59	0.00	62	47	77	57	81	64	82	56	73	44	73	44	73	62	48																								
26	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	62	45	78	51	77	66	88	66	79	49	79	49	79	72	42																								
27	0.00	0.00	0.25	0.29	0.00	0.00	0.00	0.25	0.29	68	37	88	57	81	62	87	62	93	61	93	61	93	76	51																								
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71	44	94	63	77	55	79	55	88	61	88	61	88	72	46																								
29	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62	51	95	65	77	50	81	57	90	69	90	69	90	74	49																								
30	0.55	0.09	0.00	0.00	1.27	0.00	0.00	0.00	0.00	60	46	71	53	86	59	82	63	89	69	89	69	89	73	41																								
31		0.00		0.00	0.01		0.00		0.00			81	49			88	62	72	53																													
Total/Avg	2.77	3.08	3.37	3.89	3.41	4.74	3.89	3.37	3.89	65	40	69	48	78	57	84	62	82	60	82	60	82	66	46																								

CLIMATIC DATA, 2010, Williston, ND

Date	Precipitation						April						May						June						July						August						Sept					
	April	May	June	July	August	Sept	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min						
1	0.00	0.27	0.00	0.01	1.08	0.00	54	37	43	32	64	43	86	64	81	61	68	50																								
2	0.00	0.03	0.00	0.10	0.01	0.01	53	35	43	31	72	51	91	61	84	61	67	48																								
3	0.00	0.00	0.35	0.05	0.01	0.00	55	26	62	31	69	55	76	57	78	57	72	41																								
4	0.00	0.23	0.00	0.00	0.00	0.00	54	31	51	39	71	47	77	51	76	54	83	50																								
5	0.00	0.02	0.01	0.02	0.00	0.00	59	30	40	32	73	54	71	56	78	53	76	58																								
6	0.00	0.19	0.00	0.00	0.00	0.14	61	26	41	34	74	48	70	52	86	54	59	51																								
7	0.00	0.05	0.53	0.00	0.42	0.00	57	30	46	32	74	53	76	50	87	63	70	41																								
8	0.00	0.00	0.04	0.00	0.00	0.00	67	31	54	27	66	51	79	53	93	59	70	49																								
9	0.00	0.00	0.00	0.00	0.00	0.48	51	33	47	35	70	46	87	57	89	62	62	55																								
10	0.00	0.00	0.08	0.00	0.26	0.01	52	30	63	29	70	54	88	57	86	67	60	48																								
11	0.00	0.03	0.00	0.00	0.00	0.00	51	23	62	36	60	51	74	58	89	61	70	47																								
12	0.00	0.00	0.00	0.16	0.00	0.00	47	36	58	40	61	47	84	54	86	63	69	42																								
13	0.24	0.00	0.00	0.03	0.00	0.00	59	41	66	38	71	47	77	61	74	58	74	47																								
14	0.01	0.00	0.00	0.00	0.04	0.01	48	34	72	42	74	48	73	54	71	56	64	43																								
15	0.00	0.00	0.00	0.00	0.00	0.01	53	37	78	45	75	48	85	57	73	52	59	49																								
16	0.00	0.00	0.19	0.00	0.00	0.00	62	27	79	49	82	59	91	55	75	49	64	46																								
17	0.00	0.00	0.16	0.00	0.00	0.00	66	35	80	49	68	49	79	57	83	53	48	34																								
18	0.00	0.00	0.24	0.00	0.00	0.00	70	44	83	54	63	48	84	50	76	51	53	27																								
19	0.00	0.00	0.02	0.01	0.00	0.00	70	42	83	57	70	54	77	55	85	58	59	44																								
20	0.00	0.10	0.12	0.00	0.00	0.00	70	41	78	51	80	51	77	54	86	59	62	47																								
21	0.00	0.06	0.09	0.00	0.00	0.02	69	40	68	47	79	59	83	54	95	58	54	43																								
22	0.00	0.39	0.00	0.18	0.01	0.14	74	39	66	46	73	55	76	60	95	69	49	44																								
23	0.21	0.00	0.05	0.32	0.36	0.05	67	41	66	41	78	56	72	58	74	55	50	42																								
24	0.00	1.76	0.01	0.00	0.00	0.00	66	34	56	46	85	56	78	54	72	47	63	39																								
25	0.10	0.06	0.00	0.00	0.00	0.00	55	35	54	42	86	61	89	59	83	50	73	38																								
26	0.00	0.04	0.04	0.00	0.00	0.00	45	31	71	39	78	62	96	64	98	56	88	47																								
27	0.00	0.50	0.00	0.00	0.00	0.00	62	25	67	52	78	55	77	58	85	59	75	51																								
28	0.03	0.00	0.00	0.00	0.07	0.00	69	42	59	49	81	53	82	55	74	56	87	50																								
29	0.00	0.64	0.00	1.23	0.07	0.00	74	37	60	45	88	61	93	63	63	54	71	48																								
30	0.33	0.04	0.02	0.01	0.76	0.00	46	37	66	38	91	70	88	60	57	52	73	40																								
31		0.00		0.00	0.00				65	46			89	65	68	51																										
Total/Avg	0.92	4.41	1.95	2.12	3.09	0.87	60	34	62	41	74	53	81	57	81	57	66	45																								

Soil Test Results at Various Weed Experiment Locations

	Soil Texture	Organic Matter	pH	lb/A N	PPM	
					P	K
A. K. Eckre Grassland Preserve (ND)	Loamy sand	2.9	6.8	3	3	70
Absaraka, ND	Loam	2.0	7.2			
Bathgate, ND	Silty loam	6.5	7.9	242	38	550
Buffalo, ND (Zollinger, Soybean)	Loam	3.4-4.5	6.7-8.0			
Buffalo, ND (Zollinger, carryover)	Loam	3.9	7.9			
Casselton, ND	Silty clay	4.0	7.9	Fertilized by test		
Casselton, ND (Stachlerr)	Silty loam	4.3	7.7	61	17	285
Crookston, MN	Silty clay loam	4.7	8.2	124	6	146
Eckelson, ND	Loam	8.0	7.3	20	5	515
Fargo, ND (campus)	Silty clay	6.8	7.2	Fertilized by test		
Fargo, ND (section 22)	Silty clay	4.5-6.0	7.5	Fertilized by test		
Geneseo, ND	Loam	6.0	4.0			
Glyndon, MN		4.6	8.1	Fertilized by test		
Hillsboro, ND	Loam	4.1	7.7	132	7	210
Hawley, MN	Loam	2.2	8.5	3	4	105
Hector, MN	Silty clay loam	6.5	7.8	166	7	190
Hettinger, ND	Silty loam	2.9	6.7	Fertilized by test		
Hutchinson, MN	Loam	2.8	7.6	85	5	125
Inkster, ND	Loamy sand	2.1	6.0			
Jamestown, ND (Pipestream Dam)	Loam	6.8	6.8	28	5	290
Mayville, ND (Stachler)	Sandy loam	2.1	7.0	16	16	110
Minot, ND	Loam	2.7	7.0	Fertilized by test		
Oakes, ND	Sandy loam	2.0	6.8			
Oriska, ND	Silty clay	4.1	7.4	Fertilized by test		
Oriska, ND (sunflower)	Sandy loam	5.9	3.2			
Prosper, ND	Clay loam	3.5	7.5	90	23	315
Prosper, ND (Stachler)	Clay loam	3.9	6.8	122	56	310
Prosper, ND (Zollinger)	Silt loam - loam	4.4-4.5	5.6-7.2			
Tappen, ND	Sandy loam	1.8	7.6			
Thompson, ND (Zollinger)	Silt loam	4.0	8.1			
Valley City, ND	Fine loam	8.2	6.7	11	15	640
Valley City, ND (wheat)	Sandy loam	7.3	6.1			
Walcott, ND	Loamy sand	2.6	6.7			
Williston, ND	Loam	2.3	6.8	Fertilized by test		
Wyndmere, ND	Loamy sand	1.9	5.7	Fertilized by test		

KEY TO ABBREVIATIONS AND EVALUATIONS

Crop injury, crop stand and weed control ratings are based on a visual estimate using a scale of 0 = no effect to 100 = complete kill.

Alfa = Alfalfa	Nabe = Navy bean
Amar = Amaranth	Nfcf = Nightflowering catchfly
Barl, Bar = Barley	Oats = Tame oats
Bdlf = Broadleaf	Pagf = Pale goosefoot
Biww = Biennial wormwood	Pest = Perennial sowthistle
Bubu = Buffalobur	Pesw = Pennsylvania smartweed
Bygr = Barnyardgrass	Pibe = Pinto bean
Cath = Canada thistle	Pigw = Pigweed
Cano = Canola	Poam = Powell amaranth
Cocb = Common cocklebur	Pota = Potato
Colq = Common lambsquarters	Powe = Pondweed
Coma = Common mallow	Prle = Prickley lettuce
Copu = Common purslane	Prmi = Proso millet (tame)
Corw = Common ragweed	Prpw = Prostrate pigweed
Cram = Crambe	Prsp = Prostrate spurge
Cudo = Curly dock	Quin = Quinoa (chenopodium quinoa)
Dali = Dandelion	Qugr = Quackgrass
Dobr = Downy brome	Rrpw = Redroot pigweed
Drbe = Dry bean	Ruth = Russian thistle
Duru = Durum wheat	Safl, Saff = Safflower
Ebns = Eastern black nightshade	Shpu = Sheperdspurge
Fach = False chamomile	Smwe = Annual smartweed
Fibw = Field bindweed	Soyb, Sobe = Soybean
Fipc = Field pennycress	Spsp = Spotted spurge (prostrate spurge)
Fisb = Field sandbur	Sugb, Sgbt = Sugarbeet
Flwe = Flixweed	Snfl, Sufl = Sunflower
Foba = Foxtail barley, Forage Barley	Swcl = Sweet clover
Fomi, Ftmi = Foxtail millet	Tabw = Tame buckwheat
Fota, Fxtl = Foxtail species	Tamu = Tansy mustard
Girw = Giant ragweed	Tumu = Tumble mustard
Grft = Green foxtail	Tymu = Tame yellow mustard
Gsft = Goosefoot	Vowh = Volunteer wheat
HNS, Hans = Hairy nightshade	Vele = Velvetleaf
Howe = Horseweed	Vema = Venice mallow
HRSW = Hard red spring wheat	Wahe = Waterhemp
KOCZ = Kochia	Wht = Volunteer wheat
Lath = Ladysthumb	Wibw = Wild buckwheat
Lent = Lentils	Wigr = witchgrass
Llsa = Lanceleaf sage	Wimu = Wild mustard
Mael = marshelder	Wioa = Wild oat
Mlgf = Mapleleaf goosefoot	Wipm = Wild-proso millet
Nabe = Navy bean goosefoot	Yeft = Yellow foxtail

METHODS

EPP = Early preplant	MPOST = Mid postemergence
PPI = Preplant incorporated	LPOST = Late postemergence
PEI = Preemergence incorporated	LLPOST = Late-late postemergence
PRE, PE = Preemergence	P, PO, POST = Postemergence
EPOST = Early postemergence	POSTDIR = Postemergence Directed

FORMULATION

ACS = Aqueous capsule suspension	WBF = Water-based flowable
DF = Dry Flowable	WP = Wettable powder
E, EC = Emulsifiable concentrate	WG, WDG = Water dispersible granules
FL, F = Flowable	WSP, SP = Water Soluble powder
L = Liquid flowable	G = Granules or gallon/A
ME = Micro-encapsulated	S = Solution
	SG = Soluble granules

MISCELLANEOUS

F = Fall	AMS = ammonium sulfate
S = Spring	bee = butoxyethyl ester
Inc., I = Incorporation	dea = diethanolamine salt
Applic = Application	dga = diglycolamine
Cntl = Control	dma = dimethylamine salt
Inju = Injury	ioe = isooctyl ester
%ir, inju = Percent injury rating	MSO, MVO = methylated vegetable oil
%sr, %std, strd = Percent stand reduction	NIS = nonionic surfactant
HT = Plant height	PO, OC = Petroleum oil concentrate (17% emulsifier)
SPK = Spike stage	SURF, S = Surfactant
Tswt, TW = Test weight	TMS = trimethylsulfonium salt
Yld = Yield	28N, UAN = 28% liquid nitrogen fertilizer
alk = alkanolamine salt	
AMN = ammonium nitrate	

Herbicide Spray Adjuvants

Fertilizer

AMS (Dry)	Various	\$0.35 lb	4 to 8.5 lb/A
AMS (liquid)	Various	\$6.00 gal	2 to 4 qt/A
28% UAN	Various	\$10.00 gal	2 to 4 qt/A
28% UAN (bulk)	Various	\$3.00 gal	2 to 4 qt/A

Surfactant

Activator 90	Loveland	\$28.00 gal	0.25 to 0.5% v/v
APSA-80	Amway	\$32.00 gal	0.25 to 0.5% v/v
ChemSurf 90	United Suppl.	\$27.00 gal	0.25 to 0.5% v/v
Crnblt Premier 90	West Central	\$25.00 gal	0.25 to 0.5% v/v
Induce	Helena	\$25.00 gal	0.25 to 0.5% v/v
Liberate LeciTech	Loveland	\$32.00 gal	0.25 to 0.5% v/v
Pen-A-trate II	Precision Labs	\$30.00 gal	0.25 to 0.5% v/v
Prefer 90	West Central	\$28.00 gal	0.25 to 0.5% v/v
Preference	Winfield	\$28.00 gal	0.25 to 0.5% v/v
Protix	Precision Labs	\$96.00 gal	0.125% v/v
Purity 100	Rosens	\$21.00 gal	0.25 to 0.5% v/v
R-11	Wilbur-Ellis	\$27.00 gal	0.25 to 0.5% v/v
Translate	United Suppl.	\$30.00 gal	0.25 to 0.5% v/v
Wet-Sol 99	Schaeffers	\$30.00 gal	0.25 to 0.5% v/v

NIS Approved for use in Water

Surfactants approved for use in bodies of water are:

Activate Plus	Agridex	BroncPlusDryEDT
Class Act NG	Induce	Level 7
Liberate L-Tech	Preference	R-11
Top Surf	X-77	

Surfactant & Silicone

Freeway	Loveland	\$95.00 gal	0.75 to 2 pt/100 gal
Kinetic	Helena	\$121.00 gal	0.75 to 2 pt/100 gal
Silkin	Winfield	\$96.00 gal	0.75 to 2 pt/100 gal
Speed	Precision Labs	\$96.00 gal	0.25 to 2 pt/100 gal
Sur-Plus	United Suppl.	\$87.00 gal	0.5 to 2 pt/100 gal
Sylgard 309	Wilbur-Ellis	\$120.00 gal	0.75 to 2 pt/100 gal

Surfactant & AMS

Bronc PlusDryEDT	Wilbur-Ellis	\$1.85 lb	10 lb/100 gal
Class Act NG	Winfield	\$11.00 gal	2.5% v/v
Deliver	Precision Labs	\$10.00 gal	2.5% v/v
Impressive DB	Rosens	\$0.90 lb	2.25 lb/A
Powerhouse	Rosens	\$7.25 gal	5 to 10 qt/100 gal
Surfate	Loveland	\$14.50 gal	1% v/v
Ultra Surf AMS	United Suppl.	\$10.00 gal	2.5% v/v

AMS Replacement / Water Conditioning Agent (WCA)

Citron	Farm Direct	\$3.25 lb	2.2 lb/100 gal
Cut-Rate	Wilbur-Ellis	\$1.25 lb	4 lb/100 gal
Quest/Request	Helena	\$20.00 gal	0.5% v/v
Speedway	United Suppl.	\$32.00 gal	0.5% v/v

AMS & WCA (AMS Replacement)

Alliance	Winfield	\$14.00 gal	1.25% v/v
Bronc Max	Wilbur-Ellis	\$24.00 gal	0.5% v/v
Choice W-Master	Loveland	\$20.00 gal	0.5% v/v
Enact	Rosens	\$18.00 gal	0.5% v/v
Sequester	Hefty	\$24.00 gal	0.25 to 0.5% v/v

Surfactant & AMS Replacement (WCA)

Fastrack	United Suppl.	\$25.00 gal	0.75% v/v
Flame	Loveland	\$40.00 gal	0.5% v/v
N-Tense	West Central	\$25.00 gal	0.25 to 0.75% v/v
Transport Ultra	Precision Labs	\$25.00 gal	0.25 to 0.75% v/v

Surfactant & AMS & AMS Replacement (WCA)

Bronc Total	Wilbur-Ellis	\$30.00 gal	0.75 to 1% v/v
Transport	Precision Labs	\$34.00 gal	0.5% v/v

Acidic AMS Replacement (WCA)

AMADS - Monocarbamide dihydrogen sulfate or urea + sulfuric acid

Brimstone	Wilbur-Ellis	\$34.00 gal	3 pt/100 gal
CT-301	Cheltec	\$ - gal	4-8 fl oz/100 gal
ET-4000	MK Ag Service	\$31.00 gal	4 pt/100 gal
Gun Smoke	Loveland	\$35.00 gal	3 to 4 pt/100 gal
Hel-Fire	Helena	\$35.00 gal	3 to 4 pt/100 gal
Import	Precision Labs	\$34.00 gal	3 to 4 pt/100 gal
N Go/N Tank	Adjuvants Plus	\$34.00 gal	3 to 4 pt/100 gal

Basic pH Blend

Linkage	West Central	\$19.00 gal	1% v/v
Mycrimix Plus	J.R. Simplot	\$19.00 gal	1% v/v
Quad 7	Loveland	\$15.50 gal	1% v/v

Petroleum Oil Concentrate

Agri-Dex	Helena	\$16.00 gal	2 to 4 pt/A
Crop Oil Concen.	Helena	\$ - gal	2 to 4 pt/A
Herbimax	Loveland	\$12.00 gal	2 to 4 pt/A
Ortech	Rosens	\$7.50 gal	2 to 4 pt/A
Premium Crop Oil	United Suppl.	\$10.00 gal	2 to 4 pt/A
Premium COC	West Central	\$10.00 gal	2 to 4 pt/A
Prime Oil	Winfield	\$10.00 gal	2 to 4 pt/A
Protix Aerial	Precision Labs	\$22.00 gal	0.5 pt/A
ROC Crop Oil	Wilbur-Ellis	\$12.00 gal	2 to 4 pt/A

Methylated Seed Oil (MSO)

Adigor	Syngenta	w/Axial	9.6 fl oz/A
MSO Leci-Tech	Loveland	\$18.00 gal	1 to 2 pt/A
MSO Ultra	Precision Labs	\$20.00 gal	1 to 2 pt/A
Persist Ultra	J.R. Simplot	\$20.00 gal	1 to 2 pt/A
Premium MSO	Helena	\$18.00 gal	1 to 2 pt/A
Soy-Stik	West Central	\$18.00 gal	1 to 2 pt/A
Succeed	United Suppl.	\$17.00 gal	1 to 2 pt/A
Sundance II	Rosens	\$16.00 gal	1 to 2 pt/A
Superspread MSO	Wilbur-Ellis	\$21.00 gal	1 to 2 pt/A
Upland MSO	West Central	\$20.00 gal	1 to 2 pt/A

High Surfactant Oil Concentrate

Between (PO)	United Suppl.	\$15.00 gal	1 to 2 pt/A
Destiny HC (MSO)	Winfield	\$34.00 gal	1 to 2 pt/A
Diplomat (PO)	Rosens	\$11.50 gal	1 to 2 pt/A
Exchange (PO)	Precision Labs	\$22.00 gal	1 to 2 pt/A
Hi-Load (PO)	Simplot	\$ - gal	1 to 2 pt/A
High Load (PO)	Wilbur-Ellis	\$20.00 gal	1 to 2 pt/A
Kixyt (MSO)	Precision Labs	\$32.50 gal	1 to 2 pt/A
Savvy (MSO)	West Central	\$29.00 gal	1 to 2 pt/A
Stake (PO)	West Central	\$16.50 gal	1 to 2 pt/A
Superb HC (PO)	Winfield	\$20.00 gal	1 to 2 pt/A

Oil Based Surfactant

Trophy Gold	West Central	\$32.00 gal	0.5 pt/A
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Base Oil, Surfactant & WCA

Simplyx	Precision Labs	\$ - gal	0.5 pt/A
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MSO & Basic pH Blend

Base	West Central	\$26.00 gal	1 to 2 pt/A
Entro	Various	\$26.00 gal	1 to 2 pt/A
Renegade	Wilbur-Ellis	\$23.00 gal	1 to 2 pt/A

MSO & AMS Replacement (WCA)

SuperCharge	Syngenta	w/Achieve	0.5% v/v
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MSO & Organosilicone Surfactant

Air Force	United Suppl.	\$44.00 gal	4 to 6 fl oz/A
Dyne-Amic	Helena	\$51.50 gal	4 to 6 fl oz/A
Rivet	Winfield	\$44.00 gal	4 to 6 fl oz/A
Syl-tac	Wilbur-Ellis	\$59.00 gal	4 to 6 fl oz/A

AMS & Drift Retardant

AMS 20/10	United Suppl.	\$1.60 lb	10 lb/100 gal
Corral AMS Dry	Winfield	\$1.60 lb	10 to 17 lb/100 gal

AMS & Defoamer

Omnix LDF	Precision Labs	\$4.60 gal	2.5 to 5% v/v
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AMS & Deposition & Defoamer

AMS 2000	United Suppl.	\$1.25 lb	10 to 17 lb/100 gal
AmSol Plus	United Suppl.	\$6.00 gal	2.5 gal/100 gal
Arrow Four	Winfield	\$22.00 gal	2 to 4 qt/100 gal
Cornbelt Dri-Gard	West Central	\$1.50 lb	9 lb/100 gal
Crnbt Gardian Pls	West Central	\$6.50 gal	2.5 gal/100 gal
Double Down	United Suppl.	\$8.00 gal	2.5 gal/100 gal

AMS & Deposition/Retention & Defoamer

Array	Rosens	\$1.60 lb	9 to 14 lbs/100 gal
Border Xtra DF	Precision Labs	\$1.60 lb	18 lb/100 gal
Border Xtra 4L	Precision Labs	\$5.00 gal	5% v/v
Border Xtra 8L	Precision Labs	\$8.00 gal	2.5% v/v
Vector	Rosens	\$5.20 lb	2 lb/100 gal

AMS & Surfactant & Deposition/Retention & Defoamer

One-Ap XL	West Central	\$1.85 lb	9 to 15 lb/100 gal
BroncPlus DryEDT	Wilbur-Ellis	\$1.8560 lb	10 lb/100 gal
Bronc Triple	Wilbur-Ellis	\$34.00 gal	2 qt/100 gal
Pay Off Plus	United Suppl.	\$2.00 lb	10 to 13 lb/100 gal
Zenith	Rosens	\$1.25 lb	1.5 to 2.25 lb/A

AMS & AMS Replacement (WCA) & Deposition

Bronc Max EDT	Wilbur-Ellis	\$36.00 gal	2 to 3 qt/100 gal
Cornbelt Gardian	West Central	\$22.00 gal	2 to 3 qt/100 gal
Transport Plus	Precision Labs	\$30.00 gal	2 to 4 qt/100 gal

AMS & AMS Replacement (WCA) & Surfactant & Deposition/Retention & Defoamer

Veracity	West Central	\$23.00 gal	3 qt/100 gal
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AMS Replacement (WCA) & Surfactant & Deposition/Retention & Defoamer

Weather-Gard	Loveland	\$50.00 gal	1 to 2 qt/100 gal
Complete Leci-Tec			

AMS Replacement (WCA) & Deposition/Retention & Defoamer

Formula 1	United Suppl.	\$30.00 gal	1 to 3 qt/100 gal
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Deposition/Retention - Drift Retardants

Affect GC	United Suppl.	\$40.00 qt	1 to 2 fl oz/100 gal
Border EG 250	Precision Labs	\$1.00 oz	10 oz/100 gal
Corral Poly	Winfield	\$25.00 qt	4 to 12 fl oz/100 gal
Coverage G-20	Wilbur-Ellis	\$32.00 gal	2 to 4 fl oz/A
Direct	Precision Labs	\$25.00 qt	1 to 4 oz/100 gal
Drift Down	Rosens	\$15.00 qt	4 to 8 fl oz/100 gal
In-Place	Wilbur-Ellis	\$36.00 gal	4 fl oz/pt-lb herbicide
InterLock	Winfield	\$45.00 gal	4 to 6 fl oz/A
Placement	Winfield	\$38.00 gal	4 fl oz/pt-lb herbicide
Shroud II	United Suppl.	\$15.00 qt	10 to 12 oz/100 gal

Deposition/Retention & Surfactant & Drift Retardant

Powerlock	Winfield	\$44.00 gal	5 to 8 oz/AI
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Drift Retardant & Defoamer

Compadre Leci-Tc	Loveland	\$55.00 gal	1 pt/100 gal
Sedate	West Central	\$35.00 gal	1 pt/100 gal

Acidifying Agents

Complete	Winfield	\$35.00 gal	1 to 3 pt/100 gal
Indicate 5	United Suppl.	\$48.00 gal	2 to 4 pt/100 gal
LI-700 Leci-Tech	Loveland	\$28.00 gal	2 to 4 pt/100 gal
New Balance	Precision Lab	\$32.00 gal	2 to 4 pt/100 gal
SuperSpread 7000	Wilbur-Ellis	\$32.00 gal	0.5 to 2 pt/100 gal
Tri-Fol	Wilbur-Ellis	\$30.00 gal	0.5 to 2 pt/100 gal

Compatibility Agents

CompatibilityAgent	West Central	\$30.00 gal	1 to 3 pt/100 gal
Complete	Winfield	\$35.00 gal	1 to 3 pt/100 gal
Convert	Precision Labs	\$35.00 gal	1 to 6 pt/100 gal
Embrace	Wilbur-Ellis	\$36.00 gal	1 to 4 pt/100 gal
EZ-Mix	Loveland	\$30.00 gal	1 to 4 pt/100 gal
Mix-All	Rosens	\$35.00 gal	1 to 4 pt/100 gal
Compatibility Plus	United Suppl.	\$41.50 gal	1 to 2 pt/100 gal

Spray Tank Cleaners

Tank Cleaner	Various	\$15-35 qt	1 to 2 qt/100 gal
Tank Cleaner	Various	\$5-7.00 lb	1 to 2 lb/100 gal

LIST OF HERBICIDES TESTED IN 2010

Common Name	Abbreviation	Company	Formulation	Trade Name
Acetochlor + Dichlormid	Acet + Dcmd	Dow	6.4 EC 3.2 ME	Surpass, Volley, TopNotch
Acetochlor + Clopyralid + Flumetsulam		Dow	4.25SE	Sure Start
Acetochlor + MON 4660	Acet + 4660	Monsanto	7 EC	Harness
Acetochlor		Monsanto	3.0 SE	Warrant
Acifluorfen	Acif	BASF	2 E, S	Ultra Blazer
Ambicarbazon		Bayer	70 DF	
Aminocyclopyrachlor	DPX KJM44	Dupont	60 DF	
Aminopyralid + 2, 4-D	GF-1004 GF-750	Dow	0.33 + 2.67	Forefront
Aminopyralid	Amino	Dow	2SL	Milestone
Atrazine	Atra	Various	90 DF	Several
Bentazon	Bent, Bsgn	BASF	4 1 S	Basagran
Bentazon + Sethoxydim	Bent + Seth	BASF	5 SL 1 EC	Rezult
Bromoxynil	Brox	Bayer	2 EC	Buctril, Several
Bromoxynil & 2, 4-D	Brox + 2, 4-D	Wilbur Ellis	5 EC	Weco Max
Bromoxynil & MCPA	Brox + MCPA (5lb)	Bayer	5 EC	Bronate Advanced
Bromoxynil & fluroxypyr	Brox + Flox	Dow	2.9 EC	Starane NXT
Bromoxynil & Pyrasulfotole	Brox + Pyst	Bayer	2.8 EC	Huskie
Carfentrazone	Carf	FMC	40 WG	Aim, Quick Silver
Carfentrazone & 2,4-D	Carf + 2,4-D	FMC	0.13 + 3.9	Rage D-Tech
Carfentrazone + Halosulfuron	Priority	Tenkoz	12.5 + 50 WDG	Priority
Chlorsulfuron		DuPont	75 WG	Telar / Glean
Clethodim	Clet	Valent Valent Agasco Tenkoz	2 EC 1 EC 2 EC 2 EC	Select Select Max Clethodim Volunteer
Clodinafop	Clfp	Syngenta	2 EC	Discover
Clopyralid	Clpy	Dow	3 S	Stinger, ClopyrAg, Transline
Clopyralid + 2, 4-D	Clpy + 2,4-D	Dow	0.38 + 2 S	Curtail
Clopyralid & fluroxypyr	Clpy + Flox	Dow/UAP	0.75 + 0.75	Widematch/Colt
Clopyralid + Triclopyr	Clpy + Tric	Dow	0.75 + 2.25 EC	Redeem
Cloransulam	Clor, FrstRt	Dow	84 DF	Amplify, FirstRate
Cycloate	Cycl	Syngenta	6 EC	Ro-Neet
Desmedipham + Phenmedipham + Ethofumesate	De & Ph & Et, DPE	Various	0.6 + 0.6 + 0.6 E	Several
Desmedipham	Desm	Various	1.3 EC	Several
Desmedipham + Phenmedipham	Desm + Phen	Various	0.65 + 0.65 E	Several
Dicamba	Dica	Various	4 S	Banvel, Several

Dicamba + diflufenzopyr + isoxadifin safener	BAS799	BASF	40 + 16 WDG	Status
Diflufenzopyr + Dicamba	Difl + Dica	BASF	50+ 20 WDG	Distinct, Overdrive
Difenzoquat	Dife	AMVAC	2 S	Avenge
Diflufenzopyr	Difl	BASF	70 WG	None
Dimethenamid-P	Dime	BASF, Rosens	6 EC	Outlook / Propel
Diquat	Diqu	Syngenta	2 S	Diquat
EPTC		Gowen	7 EC	Eptam
Ethalfuralin	Etha	Dow	3 EC, 10 G	Sonalan
Ethofumesate	Etho	Various	4 F	Several
Fenoxaprop-P	Fenx	Bayer	1 EC	Puma
Fluazifop-P	Flfp-P	Syngenta	2 EC	Fusilade DX
Flucarbazone-NA	Flcz	Bayer	70 WDG	Everest / PRE-PARE
Flumiclorac		Valent	0.86SL	Resource
Flumetsulam + Clopyralid	Flms + Clpy	Dow	18.5 + 50 WDG	Hornet WDG
Flumetsulam	Flms	Dow	80 WG	Python
Flumioxazin	Flum	Valent, Tenkoz	50 WP	Valor / Encompass
Flumioxazin + pyroxasulfone		Valent	33.5 + 42.5 WDG	Fierce
Fluroxypyr	Flox	Dow	1.5 EC	Starane
Fluroxypyr + 2, 4-Dioe	Flox + 2,4D	Dow	0.75 + 3 lb/gal EC	Starane + Salvo
Fluroxypyr + MCPAioe	Flox + MCPA	Dow	0.71 + 2.84 EC	Starane + Sword
Fluroxypyr + 2, 4-Ddma	Flox + 2,4Da	Dow	0.5 + 2 EC	Starane + Saber
Fluroxypyr + 2, 4-De		Dow	3.75 EC	Starane + Esteron
Fluroxypyr + MCPAe		Dow	3.55 EC	Starane + MCPA
Florasulam	Flas	Syngenta		not commercial
Florasulam + MCPA	Flas + MCPA	Syngenta	2.373L	Orion
Fluthiacet-methyl		FMC	0.91 EC	Cadet
Fomesafen		Syngenta	2 EC	Reflex
Fomesafen + Adjuvant		Syngenta	1.88 EC	Flexstar
Fomesafen + glyphosate + adjuvants		Syngenta	0.66 + 2.63 SL	Flexstar GT
Fomesafen + glyphosate + adjuvants		Syngenta	0.56 + 2.26 SL	Flexstar GT 3.5
Foramsulfuron + Safener		Bayer	70 WDG	Option
Fosamine		DuPont	4 S	Krenite
Glufosinate	Gluf, Lbrty	Bayer	1.67 SL ,2.33 SL	Liberty/Ignite 280
Glyphosate-ipa	Glyt	Various	3 ae/gal S	Several
Glyphosate-K	Mon 78270 Touchdown KPMG	Monsanto, Syngenta	4.5 S 4.175	RU Weathermax, Touchdown Total
Glyphosate-(NH ₃) ₂	Glyt	Syngenta	3 ae/gal S	Touchdown
Halosulfuron	Halo, Prmt	Gowan	75 DF	Permit / Sandea
Imazamethabenz	Immb	BASF	2.5 EC	Assert
Imazamox	Imam Immx	BASF	1 S	Raptor / Beyond

Imazapic		BASF	2 EC	Plateau
Imazapyr		BASF	2 L	Arsenal
Imazethapyr + Glyphosate		BASF	0.17 + 2SL	Extreme / Tackle
Imazethapyr + Pendimethalin	Imep + Pend	BASF	2.9 EC	Pursuit Plus
Imazethapyr	Imep, Prst	BASF	2 S	Pursuit
Isoxaflutole		Bayer	4 SC, 2 SC	BalancePro / Balance Flexx
Isoxaflutole + thiencazone + Safener		Bayer	2.63 SC	Corus
MCPA	MCPA	Various	4 EC, S	Several
Mesosulfuron + safener	Mess	Bayer	2 WG	Silverado
Mesosulfuron + Propoxycarbazone	Mess + Precz	Bayer	8.14 + 2.03 WDG	Rimfire
Mesotrione	Mest	Syngenta	4 SC	Callisto
Mesotrione + s-metolachlor		Syngenta	0.33 + 3.3 SC	Camix
Mesotrione + s-metolachlor + Atrazine		Syngenta	0.27 + 2.68 + 1 SC	Lumax
S-metolachlor	Meto	Syngenta	7.62 EC	Dual Magnum, Cinch
S-metolachlor + Benoxacor (active isomer)		Syngenta	7.6 E	Dual/II/Magnum
S-metolachlor + Atrazine		Syngenta	2.4 + 3.1 L 3.23 + 2.67L	Bicep II Magnum Bicep Lite II Magnum, Cinch ATZ
S-meto + mesotrione + glyt		Syngenta	4.38 SC	Halex GT
Metribuzin	Metr	Bayer	4 F, 75 DF	Sencor
Metsulfuron	Mets	DuPont	60 DF	Ally, Escort, Cimarron
Nicosulfuron	Nico	DuPont	75 DF	Accent
Nicosulfuron + Rimsulfuron	Nico + Rims	DuPont	50 + 25 DF	Steadfast
Oxyfluorfen	Oxyf	Dow	2 EC/4 WBF	Goal/Goal Tender
Paraquat	Para	Syngenta	2.5 S	Several
Pendimethalin	Pend	BASF Tenkoz	3.8 ACS 3.3 EC	Prowl / H ₂ O Acumen
Picloram		Dow	2 S	Tordon 22K
Pinoxaden	Pxdn	Syngenta	0.83 EC	Axial
Propoxycarbazone	Prcz	Bayer	70 WDG	Olympus
Pyrasulfotole + bromoxynil +Safener + Fenoxaprop	Pyst + Brox + Renx	Bayer	1.32 EC	Wolverine
Pyroxasulfone	KIH - 485, Pxsf	Kumiai	85 WG	KIH - 485
Pyraflufen	pyff	Gowan	0.21 EC	ET/Vida
Pyroxsulam	Pxlm	Dow	7.5 WG	PowerFlex
Pyroxsulam + Florasulam + Fluroxypyr	Pxlm + Flas + Flox	Dow	0.838L	Goldsky
Quinclorac		BASF	75 WP	Paramount
Quizalofop-P	Qufp-P	DuPont, Gowan	0.88 EC	Assure II, Targa
Rimsulfuron + Thifensulfuron	Rims + Thif, Bsis	DuPont	75 DF	Basis
Rimsulfuron	Rims	DuPont	25 DF	Matrix / Resolve
Saflufenacil	BAS 800 04, Saff	BASF	2.85 SC	Sharpen

Saflufenacil + dimethenamid	BAS 78102 H	BASF	5.57 EC	Integrity
Sethoxydim	Seth	BASF	1.5 EC	Poast
Sulfentrazone	Suen	DuPont/FMC	75 DF	Authority, Spartan, Payload
Sulfentrazone + Cloransulam		FMC	70 WDG	Authority First, Sonic
Sulfometuron	Sume	DuPont	75 DF	Oust
Sulfosulfuron	Sulf	Monsanto	75 WG	Maverick, Outrider
Tebuthiuron		Dow	20 WG	Spike
Tembotrione + isoxadifen safener	AE172747	Bayer	(2:1) 3.5 SL	Laudis
Thifensulfuron + Tribenuron	Thif + Trib	DuPont	50 + 25 DF	Several
Thifensulfuron + Tribenuron		Dupont	25 + 25 SP	Affinity Broad Spectrum
Thifensulfuron + Tribenuron		Dupont	40 + 10 SP	Affinity Tankmix
Thifensulfuron	Thif, Pinn ,Pncl	DuPont	75 DF	Several
Topramezone		AmVac	2.8 SC	Impact
Tralkoxydim	Tral	Syngenta	40 DF	Achieve
Triallate	GWN 3040	Gowan	4EC	Far-Go
Tribenuron	Trib	DuPont	75 DF	Several
Triclopyr	Trcp	Dow	4 EC	Garlon / Remedy
Trifluralin	Trif	Dow	4 EC, 10 G	Several
Triflurosulfuron	Tfsu	DuPont	50 DF	UpBeet
2,4-D	2,4-D	Various	Various EC, S, WSP	Several
2,4-DB	2,4-DB	Various		Several

^aAbbreviations in the tables may consist of only the first one, two, or three listed letters when space was limited. Abbreviations of numbered compounds vary with available space, but usually use the first letters and numbers.