

SUMMARY OF 2007  
WEED CONTROL EXPERIMENTS

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Fargo, North Dakota

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Some of this material is based upon work supported by the U. S. Department of Agriculture, under Agreement 2002-34361-11781, 2003-34361-13002, 2005-34361-15578. Any opinions, findings, conclusion, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U. S. Department of Agriculture.



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CLIMATIC DATA, 2007, 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
	1	0.02	0.00	0.08	0.02	0.04	0.00	39	33	64	35	64	52	81	63	80	54	91
2	0.00	0.00	0.04	0.00	0.00	0.00	36	19	68	38	75	55	85	58	81	51	77	51
3	0.00	0.00	0.00	0.12	1.70	0.00	20	12	74	49	80	55	82	63	80	53	89	58
4	0.00	0.05	0.14	0.00	0.00	0.00	24	12	64	52	70	47	82	61	72	61	87	52
5	0.00	1.09	0.00	0.00	0.01	0.01	25	9	58	50	72	40	81	59	83	58	86	59
6	0.00	0.00	0.02	0.00	0.06	0.00	25	12	75	54	74	57	85	54	77	55	70	49
7	0.00	0.00	1.24	0.00	0.00	0.00	31	11	73	48	61	45	96	67	83	58	69	41
8	0.00	0.00	0.00	0.00	1.24	0.94	35	11	80	49	73	42	76	59	72	60	53	40
9	0.00	0.00	0.07	0.72	0.00	0.00	35	18	85	55	79	54	80	51	89	57	64	36
10	0.00	0.00	0.00	0.03	0.03	0.00	32	27	67	50	84	56	68	51	84	61	67	44
11	0.00	0.01	0.00	0.01	0.07	0.00	36	27	60	45	87	64	72	50	76	50	55	36
12	0.00	0.00	0.37	0.00	0.00	0.00	45	24	71	45	83	63	74	48	70	45	69	39
13	0.00	0.00	0.20	0.00	0.00	0.00	53	28	83	53	75	62	85	49	78	55	55	41
14	0.00	0.13	0.00	0.00	0.09	0.00	62	29	63	44	80	57	78	55	69	52	55	35
15	0.00	0.00	0.05	0.00	0.00	0.00	66	32	68	39	71	56	85	53	78	52	70	36
16	0.00	0.00	0.02	0.00	0.00	0.00	62	38	62	31	78	52	76	59	73	44	80	46
17	0.00	0.00	0.34	0.00	0.00	0.00	61	29	76	42	84	61	83	61	69	46	73	52
18	0.00	0.00	0.00	0.00	0.00	0.00	63	32	90	48	65	52	84	58	69	55	59	43
19	0.10	0.00	0.00	0.00	0.00	0.00	64	35	57	39	76	50	79	52	61	57	64	33
20	0.00	0.00	0.00	0.00	0.01	0.02	71	42	53	42	82	52	82	49	72	57	68	49
21	0.00	0.00	0.00	0.00	0.00	0.01	63	46	87	46	81	59	86	60	77	55	65	44
22	0.00	1.56	0.00	0.00	0.00	0.00	65	38	67	52	87	55	96	69	78	54	80	43
23	0.00	0.02	0.00	0.00	0.00	0.28	62	32	64	43	88	67	94	64	67	44	89	58
24	0.02	0.00	0.01	0.00	0.00	0.14	65	42	53	37	88	68	92	70	67	39	63	46
25	0.00	0.33	0.01	0.05	0.00	0.00	72	40	47	34	91	70	97	72	75	40	61	45
26	0.00	0.91	0.00	2.40	0.00	0.00	75	46	50	36	77	55	81	59	91	55	65	44
27	0.00	0.00	0.00	0.00	0.02	0.00	69	44	66	33	55	53	79	55	70	50	63	39
28	0.00	0.00	0.00	0.00	0.05	0.01	81	41	80	52	67	50	82	55	66	47	72	39
29	0.00	0.28	0.00	0.00	0.00	0.00	72	49	70	59	78	51	90	60	74	40	86	58
30	0.19	0.97	0.00	0.00	0.00	0.00	73	46	61	51	81	57	87	67	84	53	64	36
31		0.01		0.00	0.00				68	51			92	68	83	57		
<b>Total/Avg</b>	<b>0.31</b>	<b>5.36</b>	<b>2.59</b>	<b>3.35</b>	<b>3.32</b>	<b>1.41</b>	<b>53</b>	<b>30</b>	<b>68</b>	<b>45</b>	<b>77</b>	<b>55</b>	<b>84</b>	<b>57</b>	<b>76</b>	<b>52</b>	<b>70</b>	<b>45</b>

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CLIMATIC DATA, 2007, Casselton

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
1	0.52	0.00	NR	-	0.43	0.00	39	33	77	39	75	56	85	63	91	67	86	60
2	0.1	0.00	0.34	-	0.00	0.00	41	33	66	36	68	56	85	58	82	55	77	58
3	0.25	0.00	0.00	-	0.00	0.00	35	18	71	36	70	60	89	66	82	56	91	56
4	0.14	0.05	0.03	-	0.00	0.00	18	14	76	49	82	58	87	62	86	60	95	58
5	0.00	1.18	0.00	-	0.03	0.00	23	8	55	51	73	43	84	62	71	63	87	59
6	0.00	1.1	0.21	-	0.00	0.00	24	10	61	53	71	51	84	59	87	58	94	57
7	0.00	0.00	0.33	-	0.09	0.00	24	12	71	53	78	56	86	65	75	60	70	57
8	0.00	0.00	.63	-	0.00	0.8	29	16	72	49	65	45	95	69	84	62	73	47
9	0.00	0.00	0.00	-	0.05	0.95	29	12	79	52	69	55	83	59	78	58	52	39
10	0.00	0.00	0.03	0.33	0.00	0.00	32	16	83	57	75	58	83	60	91	58	63	39
11	0.00	0.00	0.00	0.00	0.1	0.00	37	21	69	46	88	69	72	52	93	67	70	42
12	0.09	0.25	0.00	0.00	0.00	0.00	35	28	62	44	92	69	75	51	87	51	57	34
13	0.00	0.00	0.29	0.00	0.00	0.00	37	32	75	54	89	66	76	51	74	53	72	36
14	0.00	0.00	0.97	0.00	0.00	0.00	47	29	89	60	69	65	86	57	83	58	56	36
15	0.00	0.00	0.21	0.03	0.05	0.00	56	31	74	43	75	65	84	59	71	55	56	32
16	0.00	0.00	0.00	0.51	0.00	0.00	69	39	71	38	75	58	86	60	84	48	76	35
17	0.00	0.00	0.82	0.00	0.00	0.03	51	31	64	38	81	69	79	61	76	7	76	64
18	0.00	0.00	0.22	0.00	0.00	0.21	62	35	74	43	86	63	85	62	72	47	74	53
19	0.00	0.02	0.00	0.00	0.15	0.00	65	33	87	43	70	54	85	57	63	49	62	45
20	0.02	0.00	0.00	0.00	0.05	0.38	66	39	57	43	76	55	80	52	62	58	65	47
21	1.33	0.00	0.00	0.00	0.03	0.8	72	46	60	43	82	57	82	57	65	58	66	54
22	0.12	0.05	0.00	0.00	0.15	0.00	73	51	84	53	82	58	87	69	71	55	66	42
23	0.00	0.42	0.00	0.03	0.00	0.00	68	41	78	57	86	66	90	68	85	57	82	55
24	0.00	0.1	0.00	0.13	0.00	0.00	60	38	72	44	88	67	96	69	75	49	91	64
25	0.00	0.00	0.00	0.00	0.00	0.1	65	39	55	36	91	67	90	72	71	45	68	47
26	0.00	0.45	0.05	0.05	0.00	0.00	71	42	64	45	93	66	95	71	76	58	60	40
27	0.00	0.05	0.00	0.05	0.00	0.04	74	42	56	35	78	54	80	58	89	62	64	41
28	0.00	0.00	0.00	0.00	0.5	0.00	72	42	72	40	69	53	81	54	66	54	65	37
29	0.00	0.00	0.00	0.00	0.00	0.00	29	47	87	57	73	51	85	56	69	48	71	38
30	0.00	0.15	0.00	0.00	0.00	0.51	30	49	79	57	82	58	89	62	73	48	81	51
31		0.3		0.00	0.00				73	52			89	67	81	51		
<b>Total/Avg</b>	<b>2.57</b>	<b>4.3</b>	<b>4.13</b>	<b>1.13</b>	<b>1.63</b>	<b>3.82</b>	<b>48</b>	<b>30.9</b>	<b>71.3</b>	<b>46.6</b>	<b>78.3</b>	<b>58</b>	<b>84.9</b>	<b>60.9</b>	<b>77.8</b>	<b>54</b>	<b>72.2</b>	<b>47.4</b>

CLIMATIC DATA, 2007, Crookston, 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
1	0.39	0.00	0.00	0.00	0.75	0.00	36	29	65	32	74	60	81	66	83	58	87	59
2	0.00	0.00	0.24	0.00	0.00	0.00	30	17	69	44	78	59	87	58	82	49	75	57
3	0.26	0.00	0.00	0.15	0.00	0.00	19	11	77	54	81	57	85	61	83	58	88	54
4	0.00	1.05	0.00	0.15	0.00	0.00	26	9	55	49	71	40	87	57	81	62	83	56
5	0.00	0.25	0.00	0.00	0.00	0.00	24	11	60	51	70	48	82	53	85	51	93	56
6	0.00	0.76	0.45	0.00	0.00	1.1	22	12	68	51	70	57	86	65	75	58	71	57
7	0.00	0.00	0.78	0.00	0.00	0.00	31	13	72	45	70	44	95	64	82	60	67	45
8	0.00	0.00	0.00	0.18	0.22	0.48	32	16	80	46	74	52	80	57	76	57	53	36
9	0.00	0.00	0.05	0.48	0.00	0.00	36	19	84	56	79	58	79	56	88	64	64	39
10	0.00	0.00	0.00	0.41	0.15	0.01	43	27	68	41	86	67	71	50	89	64	70	41
11	0.00	0.00	0.00	0.03	0.5	0.00	44	27	63	43	90	72	73	52	86	48	55	31
12	0.00	0.00	0.00	0.00	0.00	0.00	47	26	75	45	89	65	75	49	73	54	68	45
13	0.00	0.00	0.75	0.05	0.27	0.00	50	28	84	57	71	64	82	56	74	56	54	32
14	0.00	0.00	0.95	0.00	0.00	0.00	54	30	70	40	73	63	76	52	75	53	55	34
15	0.00	0.00	0.15	0.4	0.00	0.00	62	38	68	36	72	52	71	58	80	46	68	36
16	0.00	0.00	0.00	0.00	0.00	0.00	55	27	63	36	80	61	78	59	75	41	76	45
17	0.00	0.00	0.78	0.00	0.00	0.03	62	31	74	57	84	63	84	60	72	49	73	53
18	0.00	0.00	0.45	0.00	0.00	0.00	65	31	86	43	72	52	85	55	74	53	64	46
19	0.01	0.12	0.00	0.00	0.00	0.00	67	45	58	41	74	57	77	48	71	56	65	48
20	0.65	0.00	0.00	0.00	0.04	0.65	72	47	63	45	78	54	81	59	65	58	62	52
21	0.00	0.00	0.00	0.00	0.07	0.1	66	48	80	52	83	56	85	65	77	58	64	42
22	0.00	0.18	0.00	0.00	0.00	0.00	68	36	78	54	85	64	88	66	85	49	78	44
23	0.00	0.14	0.00	0.00	0.00	0.00	60	36	72	44	91	69	95	71	72	50	91	62
24	0.00	0.04	0.00	0.03	0.00	0.16	65	35	51	33	87	70	89	73	70	47	68	45
25	0.00	0.1	0.26	0.00	0.00	0.00	70	42	53	43	89	65	94	69	75	54	57	43
26	0.00	0.75	0.00	0.00	1.3	0.03	75	45	52	36	79	54	83	56	89	58	64	39
27	0.00	0.00	0.00	0.00	0.08	0.00	68	41	66	44	63	54	81	52	66	51	65	33
28	0.00	0.00	0.00	0.00	0.00	0.00	80	50	85	58	70	47	86	52	64	47	70	40
29	0.00	0.09	0.00	0.00	0.00	0.00	72	49	80	53	75	57	91	66	73	49	80	55
30	0.02	0.24	0.00	0.00	0.12	0.00	72	44	75	53	82	65	90	69	79	57	65	36
31		0.00		0.00	0.00				75	54			92	68	84	60		
<b>Total/Avg</b>	<b>1.33</b>	<b>3.72</b>	<b>4.86</b>	<b>1.88</b>	<b>3.5</b>	<b>2.56</b>	<b>52.4</b>	<b>30.7</b>	<b>69.9</b>	<b>46</b>	<b>78</b>	<b>58</b>	<b>83.5</b>	<b>59.4</b>	<b>77.5</b>	<b>54</b>	<b>69.7</b>	<b>45.4</b>

CLIMATIC DATA, 2007, 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
1	0.49	0.00	0.10	0.00	0.44	0.00	40	32	65	44	70	60	84	67	82	60	90	67
2	0.00	0.00	0.74	0.00	0.00	0.00	38	26	69	37	68	59	88	67	82	55	77	59
3	0.00	0.00	0.01	0.00	0.00	0.00	26	15	75	49	80	59	84	69	87	56	95	61
4	0.00	0.40	0.02	0.00	0.00	0.00	23	14	67	53	71	52	88	64	75	64	89	60
5	0.00	0.94	0.00	0.00	0.00	0.00	23	9	61	53	71	41	84	62	86	61	95	66
6	0.00	0.54	0.16	0.00	0.05	0.00	21	12	69	53	75	55	87	59	76	57	72	59
7	0.00	0.00	0.67	0.00	0.00	0.00	29	12	71	54	70	49	98	67	84	60	72	49
8	0.00	0.00	0.00	0.00	0.49	1.06	30	11	77	51	74	45	83	68	81	65	53	46
9	0.00	0.00	0.07	0.39	0.01	0.01	38	15	82	55	82	59	82	58	90	60	64	37
10	0.00	0.00	0.00	0.08	0.00	0.00	40	30	68	53	88	60	72	56	93	69	71	47
11	0.00	0.24	0.00	0.01	0.07	0.00	42	29	60	46	91	69	76	52	87	59	56	39
12	0.00	0.01	0.00	0.00	0.00	0.00	47	27	74	45	89	72	76	50	74	51	71	40
13	0.00	0.00	1.86	0.00	0.04	0.00	50	29	88	60	77	66	87	53	84	56	60	44
14	0.00	0.00	0.76	0.00	0.01	0.00	56	30	76	50	73	65	79	59	73	58	56	36
15	0.00	0.00	0.00	0.60	0.01	0.00	65	31	68	45	78	64	80	57	84	57	69	35
16	0.03	0.00	0.00	0.00	0.00	0.00	54	34	63	39	81	58	79	61	75	48	76	43
17	0.00	0.00	0.78	0.00	0.00	0.08	62	28	74	44	88	63	86	61	70	47	73	58
18	0.00	0.45	0.15	0.00	0.20	0.00	66	36	88	56	72	57	84	62	63	59	63	53
19	0.01	0.14	0.00	0.00	0.00	0.04	67	39	59	45	76	54	78	56	65	59	64	44
20	1.16	0.00	0.00	0.00	0.00	0.53	73	46	57	42	81	59	81	61	67	58	68	53
21	0.79	0.03	0.00	0.00	0.20	0.56	73	56	81	50	84	60	87	61	70	62	66	51
22	0.08	0.38	0.00	0.00	0.00	0.00	66	49	80	62	87	61	90	72	87	59	80	46
23	0.00	0.12	0.00	0.00	0.00	0.00	59	40	73	53	91	68	96	71	76	52	92	61
24	0.00	0.00	0.00	0.07	0.00	0.26	65	38	55	41	90	69	92	72	73	48	77	50
25	0.00	0.00	0.00	0.00	0.00	0.00	69	41	63	36	93	70	96	73	75	46	57	46
26	0.00	0.33	0.00	0.01	0.00	0.01	74	47	61	42	88	62	82	65	90	58	63	43
27	0.00	0.00	0.00	0.00	1.07	0.00	69	47	68	37	68	56	82	57	77	60	66	42
28	0.00	0.00	0.00	0.00	0.00	0.00	79	45	85	57	72	54	86	55	69	50	70	41
29	0.00	0.03	0.00	0.00	0.00	0.00	72	52	79	60	79	56	91	64	73	48	80	62
30	0.00	0.44	0.00	0.00	0.00	0.38	75	56	75	56	85	64	91	65	80	52	72	46
31		0.00		0.00	0.00				77	54			93	71	88	59		
<b>Total/Avg</b>	<b>2.07</b>	<b>4.05</b>	<b>5.32</b>	<b>1.16</b>	<b>2.59</b>	<b>2.94</b>	<b>53</b>	<b>33</b>	<b>71</b>	<b>49</b>	<b>79</b>	<b>60</b>	<b>85</b>	<b>62</b>	<b>79</b>	<b>57</b>	<b>72</b>	<b>49</b>

CLIMATIC DATA, 2007, Grand Forks 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
1	0.35	0.00	0.00	0.00	0.65	0.00	38	32	65	43	75	55	83	65	79	58	86	67
2	0.00	0.00	0.46	0.00	0.00	0.00	35	22	69	33	77	60	86	65	79	56	76	56
3	0.00	0.00	0.00	0.00	0.00	0.00	23	14	77	46	81	59	85	58	81	50	86	56
4	0.00	0.54	0.00	0.00	0.00	0.00	24	13	66	52	70	50	86	60	78	60	83	55
5	0.00	1.27	0.00	0.00	0.00	0.51	23	12	59	50	71	42	81	57	84	61	90	59
6	0.00	0.40	0.46	0.00	0.00	0.01	23	13	68	52	71	55	85	55	76	52	69	55
7	0.00	0.00	2.03	0.00	0.00	0.00	30	14	73	50	60	49	93	65	82	61	69	47
8	0.00	0.00	0.00	0.00	0.19	0.29	33	15	80	47	74	45	79	60	74	61	54	41
9	0.00	0.00	0.08	0.58	0.00	0.01	35	21	86	54	81	57	79	55	87	56	65	35
10	0.00	0.00	0.00	0.22	0.19	0.01	41	28	67	50	86	60	70	54	85	64	69	45
11	0.00	0.00	0.00	0.01	0.03	0.00	42	30	62	45	91	63	71	51	83	55	55	36
12	0.00	0.00	0.00	0.00	0.00	0.00	46	28	75	42	89	72	74	51	72	47	68	32
13	0.00	0.00	0.54	0.07	0.13	0.00	51	31	85	54	74	66	84	50	76	51	58	40
14	0.00	0.00	0.12	0.00	0.00	0.00	55	29	68	49	73	64	77	59	74	57	56	33
15	0.00	0.00	0.00	0.62	0.00	0.00	63	31	69	41	73	60	71	58	78	54	69	34
16	0.10	0.00	0.00	0.01	0.00	0.00	57	37	62	36	80	54	78	58	73	42	76	43
17	0.00	0.00	0.78	0.00	0.00	0.00	60	29	75	42	84	62	82	58	71	41	72	52
18	0.00	0.10	0.04	0.00	0.00	0.00	62	33	87	47	70	55	82	58	73	46	60	50
19	0.02	0.00	0.00	0.00	0.00	0.00	64	33	59	42	74	54	76	53	69	54	65	47
20	0.14	0.00	0.00	0.00	0.01	0.17	69	46	61	44	79	56	79	49	65	59	61	50
21	0.00	0.00	0.00	0.00	0.00	0.00	64	48	81	49	84	56	83	56	79	63	65	49
22	0.00	0.16	0.00	0.00	0.00	0.00	67	45	76	57	87	57	91	72	82	54	80	38
23	0.00	0.27	0.00	0.00	0.00	0.00	59	36	72	51	91	65	92	66	71	51	91	60
24	0.00	0.00	0.00	0.10	0.00	0.06	65	37	52	39	90	68	89	73	70	49	77	47
25	0.00	0.50	0.03	0.00	0.00	0.00	70	34	50	35	92	69	92	73	75	44	58	44
26	0.00	1.48	0.00	0.13	1.40	0.00	77	44	49	43	80	62	81	61	89	53	65	44
27	0.00	0.00	0.00	0.00	0.02	0.00	68	44	68	38	62	54	78	56	67	55	65	38
28	0.00	0.00	0.00	0.00	0.01	0.00	80	39	87	49	70	55	84	53	66	50	69	34
29	0.00	0.34	0.00	0.00	0.00	0.00	71	47	79	60	76	47	89	57	73	46	81	61
30	0.00	0.03	0.00	0.00	0.14	0.00	73	48	72	53	82	56	88	64	80	48	72	41
31		0.00		0.00	0.00				75	54			90	69	82	60		
<b>Total/Avg</b>	<b>0.26</b>	<b>5.09</b>	<b>4.54</b>	<b>1.74</b>	<b>2.77</b>	<b>1.06</b>	<b>52</b>	<b>31</b>	<b>70</b>	<b>46</b>	<b>78</b>	<b>57</b>	<b>82</b>	<b>59</b>	<b>76</b>	<b>53</b>	<b>70</b>	<b>46</b>

CLIMATIC DATA, 2007, Hettinger, 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
1	0.00	0.00	0.21	0.00	0.01	0.00	46	25	64	34	59	51	93	65	84	59	92	57
2	0.08	0.00	0.00	0.00	0.00	0.00	38	24	75	47	73	50	88	63	88	52	84	56
3	0.00	0.13	0.16	0.13	0.00	0.00	26	13	73	51	78	51	85	60	88	67	100	59
4	0.00	0.00	0.00	0.00	0.05	0.00	24	10	66	46	70	50	91	55	93	63	94	62
5	0.00	1.02	0.00	0.00	0.00	0.00	25	12	57	48	75	46	83	59	90	65	83	56
6	0.00	0.21	0.28	0.00	0.26	0.00	25	12	63	44	76	55	97	55	87	60	70	48
7	0.00	0.00	1.90	0.00	0.03	0.01	28	7	69	40	57	41	101	60	95	55	75	47
8	0.00	0.00	0.00	0.17	0.00	0.42	34	8	76	42	70	38	73	62	88	61	56	41
9	0.00	0.00	0.00	0.09	0.03	0.00	43	17	80	48	78	47	88	54	97	56	56	38
10	0.00	0.00	0.00	0.00	0.00	0.00	40	29	65	48	83	53	71	48	98	66	72	38
11	0.00	0.64	0.00	0.00	0.00	0.00	32	26	70	45	87	56	79	42	81	55	67	43
12	0.00	0.00	0.29	0.00	0.65	0.00	37	26	73	42	72	55	82	51	81	53	86	44
13	0.00	0.01	0.01	0.00	0.00	0.00	53	30	82	55	77	53	92	54	94	66	55	29
14	0.00	0.00	0.00	0.00	0.02	0.00	64	24	57	45	81	56	89	55	84	61	61	23
15	0.00	0.00	0.06	0.00	0.00	0.00	73	39	63	34	69	53	95	59	84	50	79	36
16	0.00	0.00	0.00	0.00	0.00	0.00	61	33	66	33	73	49	97	60	82	51	87	45
17	0.00	0.00	0.08	1.27	1.62	0.00	61	31	78	45	79	51	95	63	65	54	82	43
18	0.00	0.01	0.00	0.40	0.00	0.01	70	37	88	51	68	46	79	64	68	57	63	44
19	0.29	0.00	0.00	0.00	0.00	0.00	51	39	63	42	77	44	84	61	66	58	66	36
20	0.00	0.12	0.00	0.00	0.01	0.00	62	35	70	46	83	46	91	63	79	53	77	45
21	0.13	0.01	0.05	0.00	0.00	0.00	61	45	83	56	80	60	103	71	80	51	65	39
22	0.00	0.05	0.00	0.00	0.02	0.00	64	39	59	48	90	52	100	69	79	48	92	46
23	0.00	0.00	0.00	0.00	0.02	0.01	62	32	52	38	96	63	105	70	73	51	83	56
24	0.00	0.00	0.00	0.00	0.48	0.00	61	40	61	33	87	65	102	72	55	46	57	44
25	0.00	2.40	0.00	0.00	0.00	0.00	66	33	71	40	81	66	95	70	74	43	68	33
26	0.01	0.03	0.00	0.00	0.00	0.01	68	40	59	36	74	49	84	65	92	55	67	38
27	0.00	0.00	0.00	0.00	0.00	0.00	67	34	66	40	76	41	82	55	71	55	66	41
28	0.00	0.14	0.00	0.00	0.08	0.00	82	40	75	52	83	46	90	59	67	51	84	45
29	0.00	0.05	0.00	0.00	0.00	0.00	74	41	65	49	92	57	93	64	74	43	89	54
30	0.00	0.44	0.00	0.00	0.00	0.00	72	44	54	48	93	62	96	66	87	55	64	40
31		0.92		0.15	0.00				59	46			101	72	89	61		
<b>Total/Avg</b>	<b>0.43</b>	<b>6.18</b>	<b>3.04</b>	<b>2.21</b>	<b>3.28</b>	<b>0.46</b>	<b>52</b>	<b>29</b>	<b>68</b>	<b>44</b>	<b>78</b>	<b>52</b>	<b>90</b>	<b>61</b>	<b>82</b>	<b>56</b>	<b>75</b>	<b>44</b>

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CLIMATIC DATA, 2007, Langdon, ND

Date	Precipitation						April		May		June		July		August		Sept	
	April	May	June	July	August	Sept	Max	Min	Max	Min	Max	Min	Max	Min	Ma	Min	Max	Min
1	0.37	0.00	0.01	0.00	0.01	0.00	37	31	62	39	77	52	79	62	75	59	85	64
2	0.00	0.00	0.00	0.00	0.00	0.00	31	16	65	36	76	54	83	61	79	55	73	51
3	0.00	0.00	0.00	0.00	0.00	0.00	16	9	72	46	80	53	81	62	77	49	76	53
4	0.00	0.03	0.02	0.01	0.00	0.00	21	9	64	50	67	43	80	59	74	61	78	48
5	0.00	0.70	0.00	0.00	0.00	0.00	23	7	53	47	70	36	78	58	78	55	82	58
6	0.00	0.01	0.00	0.00	0.00	0.00	23	9	61	47	66	54	84	56	65	53	66	48
7	0.00	0.00	0.78	0.00	0.00	0.00	28	10	72	47	55	43	92	65	81	52	66	42
8	0.00	0.00	0.00	0.00	0.05	0.00	32	11	81	43	72	39	76	57	71	61	56	36
9	0.00	0.00	0.43	0.95	0.00	0.02	35	18	86	52	78	52	74	51	86	60	66	32
10	0.00	0.00	0.01	1.18	0.49	0.01	36	23	66	44	83	53	67	51	72	62	63	42
11	0.00	0.01	0.00	0.00	0.00	0.00	41	26	56	42	84	61	69	49	77	52	53	33
12	0.00	0.00	0.22	0.00	0.00	0.00	45	25	70	37	86	63	71	49	69	44	67	36
13	0.00	0.00	0.74	0.00	0.00	0.00	52	27	78	49	76	62	80	52	75	54	52	36
14	0.00	0.34	0.00	0.00	0.00	0.00	58	27	59	43	76	57	76	59	73	51	54	30
15	0.00	0.00	0.00	0.29	0.00	0.00	66	34	63	38	74	58	71	56	76	51	68	35
16	0.00	0.00	0.07	0.00	0.00	0.00	59	36	60	31	77	53	73	55	70	42	80	39
17	0.00	0.00	0.43	0.00	0.00	0.00	61	33	75	40	66	59	80	58	69	40	80	51
18	0.00	0.11	0.02	0.01	0.00	0.00	62	35	65	38	63	50	79	59	72	46	59	43
19	0.02	0.00	0.00	0.00	0.00	0.00	61	36	56	34	71	48	73	51	69	50	64	35
20	0.05	0.04	0.00	0.00	0.00	0.00	69	42	53	37	75	52	79	55	62	55	58	47
21	0.00	0.77	0.00	0.00	0.01	0.07	65	43	82	46	80	56	81	58	79	53	64	38
22	0.00	1.53	0.07	0.00	0.00	0.00	64	39	62	48	86	57	91	67	77	49	81	35
23	0.00	0.05	0.00	0.00	0.00	0.50	60	33	64	44	89	62	90	66	65	49	85	55
24	0.00	0.02	0.00	0.03	0.00	0.21	57	35	47	37	83	66	90	70	65	50	59	42
25	0.00	0.29	1.08	1.79	0.00	0.00	74	33	51	33	72	62	92	67	72	39	58	41
26	0.00	1.24	0.10	0.21	0.00	0.00	74	42	46	33	71	54	79	61	87	54	66	43
27	0.00	0.00	0.00	0.00	0.07	0.00	66	43	64	34	56	48	78	56	61	49	58	37
28	0.00	0.01	0.00	0.00	0.02	0.00	79	41	68	49	60	49	79	55	65	47	66	38
29	0.00	0.14	0.05	0.00	0.00	0.00	69	47	71	51	69	47	88	60	72	41	82	53
30	0.01	0.22	0.00	0.00	0.00	0.00	71	42	54	48	76	58	86	64	84	49	62	37
31		0.03		0.25	0.00				70	52			88	67	73	52		
<b>Total/Avg</b>	<b>0.08</b>	<b>5.54</b>	<b>4.03</b>	<b>4.72</b>	<b>0.65</b>	<b>0.81</b>	<b>51</b>	<b>29</b>	<b>64</b>	<b>42</b>	<b>74</b>	<b>53</b>	<b>80</b>	<b>58</b>	<b>73</b>	<b>51</b>	<b>68</b>	<b>43</b>

CLIMATIC DATA, 2007, Minot, ND

Date	Precipitation						April		May		June		July		August		Sept	
	April	May	June	July	August	Sept	Max	Min	Max	Min	Max	Min	Max	Min	Ma	Min	Max	Min
1	0.03	0.00	0.31	0.00	0.00	0.00	42	32	65	32	67	51	84	62	81	60	94	66
2	0.00	0.00	0.00	0.00	0.00	0.00	36	19	73	49	76	51	86	64	84	47	77	53
3	0.00	0.00	0.00	0.45	0.01	0.00	27	14	79	56	83	53	84	61	90	57	86	55
4	0.00	0.00E	0.01	0.00	0.00	0.00	29	11	68	51	74	51	85	59	83	62	87	50
5	0.00	1.30E	0.00	0.00	0.00	0.00	29	9	56	51	77	45	82	59	83	60	71	54
6	0.00	1.52E	0.13	0.00	0.00	0.02	30	9	63	52	73	52	90	61	84	60	65	48
7	0.00	0.00	0.34	0.00	0.08	0.00	33	9	74	45	60	44	95	72	93	54	68	49
8	0.00	0.00	0.00	0.00	0.00	0.30	37	10	81	49	76	43	75	61	81	62	59	42
9	0.00	0.00	0.04	0.52	0.00	0.01	41	15	87	52	80	55	81	54	93	57	66	39
10	0.00	0.00	0.00	0.00	0.01	0.00	32	24	63	42	86	56	70	51	85	61	71	45
11	0.00	0.02	0.00	0.00	0.04	0.00	40	24	58	43	91	62	76	50	71	47	59	38
12	0.00	0.00	2.16	0.00	0.00	0.00	45	17	73	39	81	62	76	52	77	43	79	45
13	0.00	0.00	0.00	0.00	0.00	0.00	56	28	80	49	79	60	89	56	91	58	48	41
14	0.00	0.65	0.08	0.00	0.00	0.00	64	32	62	43	80	59	83	63	74	52	58	29
15	0.00	0.00	0.00	0.00	0.00	0.00	72	41	65	39	72	56	93	60	81	49	78	41
16	0.00	0.00	0.00	0.04	0.00	0.00	63	37	64	33	78	52	70	58	79	43	86	51
17	0.01	0.00	1.09	0.01	0.00	0.00	65	38	83	46	67	59	82	60	73	46	86	49
18	0.00	0.27	0.04	0.00	0.00	0.00	71	36	87	44	65	51	86	63	79	54	60	39
19	0.25	0.00	0.00	0.00	0.00	0.00	67	37	55	36	77	50	83	58	65	58	66	38
20	0.00	0.00	0.00	0.00	0.02	0.00	66	39	58	44	82	52	90	50	80	56	74	47
21	0.00	1.18	0.00	0.00	0.00	0.23	65	34	79	49	82	60	94	66	83	56	66	46
22	0.00	0.20E	0.00	0.00	0.00	0.00	64	37	55	47	90	63	98	70	80	53	84	48
23	0.00	0.13E	0.00	0.00	0.00	0.00	63	34	57	41	91	65	108	71	64	43	79	50
24	0.00	0.00E	0.06	0.00	0.00	0.02	69	41	56	40	80	64	103	75	67	41	61	46
25	0.00	0.56E	0.26	0.09	0.00	0.00	74	40	45	38	74	60	89	69	77	43	65	44
26	0.00	0.22E	0.02	0.00	0.00	0.00	77	47	59	35	75	56	85	59	92	59	68	48
27	0.00	0.00E	0.00	0.00	0.00	0.00	70	43	68	39	57	50	83	53	68	51	65	38
28	0.00	0.00E	0.00	0.00	0.39	0.00	82	42	70	47	69	52	90	63	69	48	75	41
29	0.00	0.00E	0.00	0.00	0.00	0.00	74	49	72	56	85	53	99	69	76	42	87	50
30	0.02	1.73E	0.00	0.00	0.00	0.00	71	41	61	48	85	63	97	67	91	60	63	39
31		0.29E		0.00	0.00				65	51			101	73	90	53		
Total/Avg	0.02	2.12	4.54	1.11	0.55	0.58	55	30	67	45	77	55	87	62	80	53	72	46

CLIMATIC DATA, 2007, Oakes 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
1	0.14	0.00	1.13	0.20	0.10	0.00	40	33	66	41	65	56	84	62	82	59	88	67
2	0.00	0.00	0.91	0.38	0.00	0.00	39	24	71	41	67	56	84	67	84	54	80	57
3	0.00	0.00	0.37	0.00	0.00	0.00	24	15	75	47	78	58	83	67	85	58	94	61
4	0.00	1.40	0.00	0.00	0.00	0.00	22	10	65	53	71	54	85	65	67	61	89	60
5	0.00	3.63	0.00	0.00	0.00	0.00	23	7	60	53	72	45	85	63	85	62	93	69
6	0.00	1.25	0.05	0.00	0.31	0.01	22	8	75	56	82	60	86	58	73	61	73	57
7	0.00	0.00	0.06	0.00	0.00	0.00	28	9	70	53	70	50	98	66	83	58	72	47
8	0.00	0.00	0.00	0.00	0.93	0.69	31	6	77	50	75	45	79	67	81	62	53	44
9	0.00	0.00	0.00	0.00	0.00	0.02	33	8	82	53	82	52	82	63	91	59	62	39
10	0.00	0.00	0.00	0.00	0.08	0.00	32	30	71	54	90	58	71	56	88	66	69	42
11	0.00	0.00	0.00	0.00	0.18	0.00	33	28	67	49	92	70	76	51	86	57	58	37
12	0.00	0.00	0.05	0.00	0.00	0.00	40	21	74	47	87	68	76	49	70	52	73	36
13	0.00	0.00	1.64	0.00	0.00	0.00	44	18	91	56	70	65	86	49	90	55	59	46
14	0.00	0.00	0.34	0.00	0.00	0.00	60	25	72	49	75	64	81	60	73	57	56	35
15	0.00	0.00	0.00	0.04	0.00	0.00	67	28	67	45	80	64	84	55	83	56	69	35
16	0.00	0.00	0.00	0.04	0.00	0.00	58	36	62	37	80	58	80	64	76	51	77	39
17	0.00	0.00	0.42	0.00	0.07	0.14	61	30	72	41	87	65	83	64	64	52	73	54
18	0.00	0.00	0.01	0.00	0.70	0.06	66	33	88	57	69	56	81	67	60	55	57	46
19	0.08	0.01	0.00	0.00	0.02	0.02	67	36	66	45	78	52	78	57	61	57	65	41
20	0.92	0.00	0.00	0.00	0.02	0.70	73	42	69	45	84	60	82	54	77	58	83	52
21	0.19	0.00	0.00	0.00	0.12	0.00	74	52	86	56	79	63	88	59	70	57	67	45
22	0.06	0.26	0.00	0.73	0.00	0.00	67	46	79	61	83	61	91	72	81	54	82	41
23	0.00	0.23	0.00	0.00	0.01	0.00	61	38	70	49	87	65	93	71	75	53	91	64
24	0.00	0.00	0.00	0.00	0.07	0.05	64	38	56	43	90	69	89	70	71	46	76	49
25	0.00	0.09	0.00	0.00	0.01	0.00	68	38	71	40	93	73	94	75	72	48	61	45
26	0.00	0.38	0.20	1.02	0.00	0.00	73	42	58	40	82	58	79	64	86	57	68	40
27	0.00	0.00	0.00	0.00	0.01	0.00	70	43	68	35	71	50	79	58	71	60	66	38
28	0.00	0.00	0.00	0.00	0.00	0.00	81	43	83	57	71	50	84	58	68	49	78	33
29	0.00	0.03	0.00	0.00	0.00	0.00	77	47	73	60	81	54	87	62	74	47	82	66
30	0.00	1.08	0.00	0.00	0.00	0.75	78	51	71	53	85	59	88	64	79	50	71	46
31		0.00		0.00	0.00				72	51			90	71	87	56		
<b>Total/Avg</b>	<b>1.25</b>	<b>8.36</b>	<b>5.18</b>	<b>2.41</b>	<b>2.63</b>	<b>2.44</b>	<b>53</b>	<b>30</b>	<b>72</b>	<b>49</b>	<b>79</b>	<b>59</b>	<b>84</b>	<b>62</b>	<b>77</b>	<b>56</b>	<b>73</b>	<b>48</b>

CLIMATIC DATA, 2007, Prosper ND

Date	Precipitation						April		May		June		July		August		Sept	
	April	May	June	July	August	Sept	Max	Min	Max	Min	Ma	Min	Max	Min	Max	Min	Max	Min
1	0.24	0.00	0.13	0.00	0.26	0.00	41	33	66	41	68	57	85	66	80	56	86	
2	0.00	0.00	0.00	0.00	0.00	0.00	38	26	69	36	70	59	88	66	80	53	77	65
3	0.00	0.00	0.00	0.14	0.00	0.00	26	15	75	48	83	60	83	65	84	51	91	54
4	0.00	0.73	0.02	0.00	0.02	0.00	22	13	66	52	74	52	87	65	72	58	86	56
5	0.00	1.89	0.00	0.00	0.01	0.00	22	9	60	52	72	43	85	61	84	60	94	58
6	0.00	0.33	0.86	0.00	0.07	0.00	22	12	70	53	74	54	86	57	74	55	70	63
7	0.00	0.00	0.42	0.00	0.00	0.00	28	13	71	53	67	47	95	61	82	60	72	57
8	0.00	0.00	0.00	0.00	0.01	1.42	29	14	79	49	75	45	82	65	78	61	52	44
9	0.00	0.00	0.22	0.39	0.00	0.01	35	19	85	48	83	55	82	58	88	57	65	42
10	0.00	0.00	0.01	0.03	0.00	0.00	37	29	69	51	89	58	71	55	90	59	71	36
11	0.00	0.17	0.00	0.00	0.13	0.00	39	29	59	46	95	67	74	50	84	57	58	40
12	0.00	0.01	0.00	0.00	0.00	0.00	45	30	74	43	91	69	75	48	72	50	71	33
13	0.00	0.00	1.31	0.00	0.08	0.00	49	30	87	54	76	66	84	48	80	49	59	32
14	0.00	0.00	0.07	0.00	0.04	0.00	56	32	76	50	74	65	78	57	71	55	57	42
15	0.00	0.00	0.01	1.05	0.00	0.00	63	32	69	44	76	62	81	56	81	53	72	30
16	0.03	0.00	0.00	0.00	0.00	0.00	53	37	64	40	81	57	78	60	74	47	78	38
17	0.00	0.00	1.06	0.00	0.00	0.12	60	30	76	36	86	62	84	61	69	44	74	56
18	0.00	0.80	0.05	0.00	0.09	0.00	63	33	90	53	70	56	82	61	62	53	61	53
19	0.01	0.03	0.00	0.00	0.00	0.06	64	34	61	43	77	53	76	55	64	58	66	42
20	1.16	0.00	0.00	0.00	0.03	1.62	70	44	56	42	82	58	79	49	65	58	64	51
21	0.04	0.00	0.00	0.00	0.11	0.13	72	52	79	47	83	56	84	58	70	55	67	49
22	0.01	0.27	0.00	0.06	0.00	0.00	66	49	78	63	88	56	88	71	83	51	83	40
23	0.00	0.04	0.00	0.00	0.01	0.00	59	41	73	50	91	67	95	67	73	49	94	59
24	0.00	0.00	0.00	0.25	0.00	0.12	64	38	55	39	92	67	88	70	72	47	76	50
25	0.00	0.01	0.00	0.00	0.00	0.00	71	38	58	36	95	70	91	72	75	42	57	42
26	0.00	0.40	0.00	0.02	0.00	0.00	75	41	56	41	84	62	80	65	88	53	65	41
27	0.00	0.00	0.00	0.00	1.04	0.00	70	47	68	36	68	53	81	59	76	59	67	37
28	0.00	0.00	0.00	0.00	0.00	0.00	80	40	88	56	72	54	85	54	68	47	72	33
29	0.00	0.00	0.00	0.00	0.00	0.00	73	51	82	63	80	48	87	56	74	45	82	60
30	0.00	0.16	0.00	0.00	0.00	0.35	76	48	73	55	85	57	87	59	79	43	69	42
31		0.00		0.00	0.00				76	53			89	67	85	58		
<b>Total/Avg</b>	<b>1.25</b>	<b>4.84</b>	<b>4.16</b>	<b>1.94</b>	<b>1.9</b>	<b>3.83</b>	<b>52</b>	<b>32</b>	<b>71</b>	<b>48</b>	<b>80</b>	<b>58</b>	<b>83</b>	<b>60</b>	<b>77</b>	<b>53</b>	<b>72</b>	<b>46</b>

CLIMATIC DATA, 2007, St Thomas ND

Date	Precipitation						April		May		June		July		August		Sept	
	April	May	June	July	August	Sept	Max	Min	Max	Min	Ma	Min	Max	Min	Max	Min	Max	Min
1	0.32	0.00	0.33	0.00	0.16	0.00	38	32	65	44	79	53	80	66	78	60	85	64
2	0.00	0.00	0.00	0.00	0.00	0.00	33	21	68	32	80	60	86	64	81	59	75	57
3	0.00	0.00	0.00	0.00	0.00	0.00	21	14	76	47	83	59	86	61	82	51	82	56
4	0.00	0.72	0.00	0.12	0.00	0.00	24	13	63	51	71	46	86	61	78	65	80	50
5	0.00	1.16	0.00	0.00	0.00	0.00	24	13	57	49	71	41	81	60	82	60	82	57
6	0.00	0.15	0.03	0.00	0.03	0.00	23	12	67	50	68	54	87	57	68	56	73	55
7	0.00	0.00	1.20	0.00	0.00	0.00	29	14	75	51	58	49	95	64	81	57	69	49
8	0.00	0.00	0.00	0.42	0.22	0.00	32	17	83	52	74	45	79	61	75	63	57	39
9	0.00	0.00	0.66	0.64	0.01	0.08	36	23	89	53	80	57	77	55	88	58	68	37
10	0.00	0.00	0.00	1.65	0.30	0.01	42	26	69	48	85	55	70	55	75	63	67	46
11	0.00	0.00	0.00	0.00	0.00	0.00	44	29	58	46	88	63	71	53	82	57	56	35
12	0.00	0.00	0.41	0.00	0.00	0.00	47	31	73	38	91	67	73	55	71	49	68	34
13	0.00	0.00	0.91	0.50	0.01	0.01	54	31	81	51	72	63	82	54	74	52	58	38
14	0.00	0.28	0.00	0.00	0.00	0.00	55	32	61	46	75	61	77	60	75	57	57	35
15	0.00	0.00	0.00	0.32	0.00	0.00	65	33	68	43	79	63	69	57	80	55	70	33
16	0.00	0.00	0.00	0.00	0.00	0.00	60	38	62	39	80	56	77	54	73	46	79	38
17	0.00	0.00	0.43	0.00	0.00	0.00	61	31	77	41	69	61	82	60	72	43	71	47
18	0.00	0.08	0.01	0.00	0.00	0.00	64	32	68	45	68	55	83	61	78	45	59	48
19	0.01	0.00	0.00	0.00	0.00	0.00	65	35	61	40	74	53	77	55	74	54	67	47
20	0.01	0.00	0.00	0.00	0.01	0.08	67	46	58	41	77	55	81	53	65	60	59	50
21	0.10	0.00	0.00	0.00	0.00	0.04	60	48	82	49	83	57	85	57	79	56	67	48
22	0.00	2.15	0.00	0.00	0.00	0.00	68	43	72	53	89	56	93	70	80	56	78	37
23	0.00	0.21	0.00	0.00	0.00	0.17	60	36	70	49	94	65	92	65	70	51	89	53
24	0.00	0.00	0.03	0.04	0.02	0.32	57	38	51	41	89	70	90	73	65	56	60	45
25	0.00	1.01	0.79	2.80	0.00	0.00	73	32	50	35	79	67	92	69	76	44	58	42
26	0.00	1.71	1.65	0.64	0.95	0.00	76	43	45	40	74	60	82	63	88	53	68	42
27	0.00	0.00	0.00	0.00	0.03	0.00	68	44	66	38	60	50	79	60	63	54	64	38
28	0.00	0.06	0.00	0.00	0.01	0.00	80	42	79	49	66	53	82	57	65	50	69	34
29	0.00	0.88	0.09	0.00	0.00	0.00	71	51	75	56	73	49	91	60	75	49	82	57
30	0.00	0.04	0.00	0.00	0.02	0.00	71	44	63	51	80	59	89	65	82	48	65	44
31		0.00		0.21	0.00				74	54			91	69	78	54		
<b>Total/Avg</b>	<b>0.12</b>	<b>8.45</b>	<b>6.54</b>	<b>7.34</b>	<b>1.77</b>	<b>0.72</b>	<b>52</b>	<b>31</b>	<b>68</b>	<b>46</b>	<b>77</b>	<b>57</b>	<b>83</b>	<b>60</b>	<b>76</b>	<b>54</b>	<b>69</b>	<b>45</b>

CLIMATIC DATA, 2007, Tappen ND

Date	Precipitation						April		May		June		July		August		Sept	
	April	May	June	July	August	Sept	Max	Min	Max	Min	Ma	Min	Max	Min	Max	Min	Max	Min
1	0.01	0.00	0.56	0.07	0.00	0.00	41	32	63	34	66	53	85	64	80	57	91	65
2	0.00	0.00	0.10	0.00	0.00	0.00	37	20	70	42	74	54	86	62	83	51	80	53
3	0.00	0.00	0.02	0.00	0.00	0.06	20	10	75	50	80	53	84	63	89	58	96	58
4	0.00	0.13	0.02	0.00	0.00	0.00	22	9	72	54	70	45	84	61	70	61	87	57
5	0.00	0.65	0.00	0.00	0.04	0.00	24	4	59	51	73	40	83	60	83	60	90	61
6	0.00	0.01	1.16	0.00	0.15	0.00	24	6	75	51	73	56	87	56	79	58	68	54
7	0.00	0.00	1.13	0.00	0.03	0.00	28	6	72	48	60	44	96	69	89	54	70	45
8	0.00	0.00	0.00	0.00	0.39	1.20	34	5	78	47	74	38	80	65	77	63	54	40
9	0.00	0.00	0.00	0.19	0.00	0.01	35	12	82	54	79	50	83	53	91	57	63	39
10	0.17	0.00	0.00	0.01	0.20	0.00	31	27	67	49	84	57	69	52	89	64	58	40
11	0.00	0.11	0.00	0.02	0.62	0.00	32	27	61	44	86	65	74	47	78	52	74	42
12	0.00	0.00	0.28	0.00	0.00	0.00	44	21	72	41	83	63	75	49	72	47	55	42
13	0.00	0.00	0.24	0.00	0.00	0.00	53	24	82	51	75	61	87	52	85	59	55	32
14	0.00	0.10	0.00	0.00	0.00	0.00	62	28	65	46	79	57	82	56	68	57	71	38
15	0.00	0.00	0.07	0.00	0.02	0.00	71	38	66	39	67	57	88	55	79	55	80	38
16	0.00	0.00	1.27	0.01	0.00	0.00	62	36	61	31	79	50	79	62	75	46	73	51
17	0.00	0.00	1.16	0.00	0.00	0.00	61	25	75	41	84	61	86	64	64	50	58	42
18	0.00	0.25	0.00	0.00	0.00	0.04	64	33	89	57	64	52	83	66	63	56	64	33
19	0.23	0.00	0.00	0.00	0.03	0.00	65	38	60	40	76	47	81	56	59	57	74	50
20	0.00	0.00	0.00	0.00	0.00	0.00	72	40	64	43	83	53	85	55	74	57	66	45
21	0.00	0.00	0.00	0.00	0.01	0.00	59	46	83	49	83	60	92	65	79	55	82	43
22	0.00	0.73	0.00	0.00	0.00	0.33	65	37	69	54	87	56	97	72	83	54	89	61
23	0.00	0.00	0.00	0.00	0.12	0.15	62	32	63	42	87	64	100	70	71	48	63	47
24	0.00	0.00	0.00	0.00	0.00	0.00	65	40	56	39	90	65	96	76	67	40	62	46
25	0.00	0.38	0.00	0.00	0.00	0.00	70	38	52	34	93	72	102	73	74	43	58	40
26	0.00	0.54	0.00	0.53	0.10	0.00	74	41	53	37	76	56	81	61	92	59	65	46
27	0.00	0.00	0.00	0.00	0.06	0.00	70	42	67	35	64	48	80	55	71	55	64	41
28	0.00	0.00	0.00	0.00	0.00	0.00	81	39	81	53	71	48	86	57	65	51	74	40
29	0.00	1.24	0.00	0.00	0.00	0.00	74	44	68	59	82	55	93	67	74	43	87	58
30	0.02	2.51	0.00	0.00	0.00	0.00	76	46	61	50	85	62	91	67	85	55	64	40
31		0.01		0.00	0.00				67	49			95	72	87	58		
<b>Total/Avg</b>	<b>0.25</b>	<b>6.66</b>	<b>6.01</b>	<b>0.83</b>	<b>1.77</b>	<b>1.79</b>	<b>53</b>	<b>28</b>	<b>69</b>	<b>46</b>	<b>78</b>	<b>54</b>	<b>86</b>	<b>61</b>	<b>77</b>	<b>54</b>	<b>71</b>	<b>46</b>

CLIMATIC DATA, 2007, Wahpeton ND

Date	Precipitation						April		May		June		July		August		Sept	
	April	May	June	July	August	Sept	Max	Min	Max	Min	Ma	Min	Max	Min	Max	Min	Max	Min
1	0.52	0.00	0.88	0.00	0.15	0.00	40	32	65	43	67	58	84	66	82	58	91	66
2	0.00	0.00	2.24	0.02	0.00	0.00	38	27	70	39	66	56	85	67	81	53	78	54
3	0.00	0.00	0.00	0.00	0.00	0.00	27	14	75	47	77	57	85	66	85	52	96	56
4	0.00	0.30	0.02	0.00	0.03	0.00	22	12	65	52	70	53	89	62	67	62	93	60
5	0.00	1.29	0.00	0.00	0.00	0.00	20	8	60	53	69	43	86	60	79	61	94	65
6	0.00	0.17	0.10	0.00	0.11	0.18	20	11	70	54	79	56	86	57	77	57	70	59
7	0.00	0.00	0.27	0.00	0.00	0.01	26	11	67	51	70	49	97	65	85	61	72	45
8	0.00	0.00	0.00	0.01	0.03	0.54	28	10	76	47	74	46	82	67	82	59	53	44
9	0.00	0.00	0.00	0.01	0.01	0.00	35	14	83	49	81	53	83	60	89	62	63	44
10	0.00	0.00	0.00	0.30	0.01	0.00	36	31	71	52	90	57	72	55	90	62	71	42
11	0.00	0.02	0.00	0.00	0.06	0.00	39	29	66	48	93	65	76	50	85	59	57	34
12	0.00	0.00	0.00	0.00	0.00	0.00	44	29	76	47	91	69	77	47	73	50	74	32
13	0.00	0.00	0.70	0.02	0.00	0.00	48	29	91	58	77	66	86	47	85	55	59	43
14	0.00	0.00	0.27	0.00	0.00	0.00	55	32	79	50	81	65	79	57	73	56	55	33
15	0.00	0.00	0.00	0.73	0.00	0.00	63	31	69	46	80	65	83	54	84	52	70	31
16	0.00	0.00	0.00	0.00	0.00	0.00	58	37	64	39	81	60	79	62	74	48	77	41
17	0.00	0.00	0.35	0.00	0.00	0.05	61	30	76	38	90	64	87	62	71	44	74	57
18	0.00	0.12	0.03	0.00	0.22	0.01	63	35	91	55	72	57	84	63	62	58	63	52
19	0.00	0.16	0.00	0.00	0.02	0.00	64	34	60	47	79	53	78	54	62	58	65	47
20	0.76	0.00	0.00	0.00	0.01	0.92	70	45	60	41	83	60	80	51	66	58	71	51
21	0.72	0.07	0.00	0.00	0.06	0.01	70	53	83	51	83	60	85	59	71	55	67	48
22	0.08	1.55	0.00	0.61	0.00	0.00	61	48	84	60	86	59	88	70	82	51	82	43
23	0.00	0.15	0.00	0.00	0.00	0.00	59	42	71	52	89	67	95	68	72	51	93	59
24	0.00	0.00	0.00	0.00	0.00	0.16	65	39	53	41	90	67	88	72	72	45	75	51
25	0.00	0.00	0.00	0.00	0.00	0.00	66	40	69	38	93	67	92	71	75	46	57	43
26	0.00	0.06	0.03	0.49	0.00	0.02	72	44	59	40	81	58	80	63	88	56	64	41
27	0.00	0.00	0.00	0.00	0.38	0.00	70	45	68	36	73	54	80	57	77	61	68	37
28	0.00	0.45	0.00	0.00	0.00	0.00	79	42	83	50	71	54	85	58	68	48	72	35
29	0.00	0.49	0.00	0.00	0.00	0.00	75	52	77	62	79	53	87	61	72	44	80	59
30	0.00	0.24	0.00	0.00	0.00	0.08	76	51	77	55	84	60	87	61	80	44	73	43
31		0.00		0.00	0.00				76	52			89	69	87	55		
<b>Total/Avg</b>	<b>1.56</b>	<b>5.07</b>	<b>4.89</b>	<b>2.19</b>	<b>1.09</b>	<b>1.98</b>	<b>52</b>	<b>32</b>	<b>72</b>	<b>48</b>	<b>80</b>	<b>58</b>	<b>84</b>	<b>61</b>	<b>77</b>	<b>54</b>	<b>73</b>	<b>47</b>

CLIMATIC DATA, 2007, Williston ND

Date	Precipitation						April		May		June		July		August		Sept	
	April	May	June	July	August	Sept	Max	Min	Max	Min	Ma	Min	Max	Min	Max	Min	Max	Min
1	0.00	0.00	0.00	0.00	0.00	0.01	44	29	64	33	72	51	86	63	81	59	91	64
2	0.00	0.00	0.00	0.49	0.00	0.00	37	25	77	52	76	51	87	62	86	53	85	53
3	0.00	0.01	0.01	0.04	0.03	0.00	30	17	82	58	81	54	83	60	96	67	93	58
4	0.00	0.05	0.00	0.00	0.00	0.00	31	15	66	46	74	57	87	58	93	66	93	57
5	0.00	0.15	0.00	0.00	0.00	0.00	31	15	57	46	79	50	83	55	83	64	77	52
6	0.00	0.61	0.11	0.00	0.02	0.00	30	10	52	45	77	52	97	60	77	57	63	53
7	0.00	0.00	0.07	0.00	0.00	0.06	34	10	74	41	61	46	91	66	98	55	67	44
8	0.00	0.00	0.05	0.01	0.00	0.12	39	14	79	48	75	43	75	58	88	65	62	46
9	0.00	0.00	0.16	0.07	0.00	0.00	44	20	88	50	77	54	80	53	97	57	68	39
10	0.00	0.00	0.00	0.00	0.34	0.00	33	25	61	39	85	54	70	52	89	59	73	44
11	0.00	0.00	0.03	0.00	0.00	0.00	38	26	69	47	90	62	78	49	68	51	71	38
12	0.00	0.00	0.02	0.00	0.00	0.00	41	18	77	46	71	57	79	55	85	48	76	44
13	0.00	0.21	0.08	0.00	0.00	0.00	56	25	81	48	78	52	89	56	91	61	48	37
14	0.00	0.70	0.01	0.00	0.00	0.00	68	31	53	42	71	55	88	60	72	55	63	26
15	0.00	0.00	0.00	0.00	0.00	0.00	74	40	65	43	73	49	95	61	81	52	80	39
16	0.00	0.00	0.00	0.04	0.00	0.00	62	38	67	36	78	50	90	63	81	48	92	44
17	0.00	0.00	1.10	0.00	0.00	0.00	69	38	84	48	70	51	87	62	76	58	81	48
18	0.00	0.00	0.02	0.00	0.00	0.00	74	41	88	43	65	49	91	66	81	57	65	43
19	0.05	0.00	0.00	0.00	0.00	0.00	66	43	51	37	76	48	89	66	77	60	66	43
20	0.00	0.08	0.00	0.00	0.00	0.21	61	36	69	45	86	50	96	65	80	59	69	49
21	0.01	0.51	0.04	0.00	0.00	0.03	65	39	61	52	83	61	102	70	80	59	67	46
22	0.00	0.20	0.00	0.00	0.00	0.00	64	32	55	45	91	65	101	68	76	55	85	44
23	0.00	0.42	0.00	0.33	0.00	0.00	67	35	47	38	94	64	101	71	71	45	72	55
24	0.00	0.00	0.00	0.00	0.00	0.12	67	44	59	38	80	60	108	71	67	43	55	36
25	0.00	0.49	0.84	0.00	0.00	0.00	74	40	48	41	78	56	90	69	81	44	66	30
26	0.04	0.00	0.00	0.00	0.00	0.03	63	39	62	35	74	51	84	62	84	56	66	46
27	0.00	0.00	0.00	0.00	0.00	0.00	71	37	73	42	64	46	89	57	74	53	65	40
28	0.00	0.00	0.00	0.00	0.07	0.00	82	43	75	51	75	44	95	62	69	49	80	45
29	0.08	0.00	0.00	0.00	0.00	0.00	72	45	67	51	89	58	102	67	80	43	72	46
30	0.00	0.97	0.01	0.00	0.00	0.00	63	43	57	43	83	65	103	69	91	55	62	36
31		0.61		0.00	0.00				63	50			102	71	98	62		
<b>Total/Avg</b>	<b>0.18</b>	<b>5.01</b>	<b>2.55</b>	<b>0.98</b>	<b>0.46</b>	<b>0.58</b>	<b>55</b>	<b>30</b>	<b>67</b>	<b>44</b>	<b>78</b>	<b>53</b>	<b>90</b>	<b>62</b>	<b>82</b>	<b>55</b>	<b>72</b>	<b>45</b>



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	1.6	6.7			
Buffalo, ND (Zollinger)	Loam	6.3	7.8			
Cavalier, ND	Silty Clay Loam	5.7	6.5	217	39	475
Casselton, ND	Silty clay	4.0	7.9	Fertilized by test		
Crookston, MN	Silty clay loam	4.3	6.9	110	22	350
Dawson, MN	Sandy loam	7.7	2.6			
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			
Hillsboro, ND	Loam	4.1	7.7	132	7	210
Hawley, MN	Loam	2.2	8.5	3	4	105
Hettinger, ND	Silty loam	2.9	6.7	Fertilized by test		
Jamestown, ND (Pipestream Dam)	Loam	6.8	6.8	28	5	290
Kindred, ND	Loam	4.6	7.8			
Kindred, ND (Dexter)	Silty clay	5.8	7.1	62	8	360
Kindred, ND (Zollinger)	Silty clay	6.6	6.8			
Leonard, ND (Zollinger)	Loamy sand	1.9	5.6			
Mapleton, ND	Silty clay loam	7.6-7.7	4.4-4.9			
Mayville, ND	Sandy loam	1.7	7.9			
Minot, ND	Loam	2.7	7.0	Fertilized by test		
Milan, MN	Silty clay loam	4.3	6.5	65	19	155
Moorhead, MN	Silty loam	4.5	6.1	140	22	350
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 (Dexter)	Clay loam	3.7	7.7	115	15	200
Prosper, ND (Zollinger)	Clay loam	3.6	6.1			
St. Thomas, ND	Silty loam	3.2	8.1	300	31	160
Tappen, ND	Sandy loam	1.8	7.6			
Thompson, ND (Zollinger)	Silty loam	4.5	7.9			
Valley City, ND	Fine loam	8.2	6.7	11	15	640
Valley City, ND (wheat)	Sandy loam	7.3	6.1			
Valley City, ND (Zollinger, corn)	Loam	3.5	6.4			
Valley City, ND (Zollinger, sunflower)	Loam	5.3	5.5			
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	Poam = Powell amaranth
Cano = Canola	Pota = Potato
Cocb = Common cocklebur	Powe = Pondweed
Colq = Common lambsquarters	Prle = Prickley lettuce
Coma = Common mallow	Prmi = Proso millet (tame)
Copu = Common purslane	Prpw = Prostrate pigweed
Corw = Common ragweed	Prsp = Prostrate spurge
Cram = Crambe	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 = Sheperdspurse
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, Sufi = 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	Wht = Volunteer wheat
KOCZ = Kochia	Wibw = Wild buckwheat
Lath = Ladysthumb	Wigr = witchgrass
Lent = Lentils	Wimu = Wild mustard
Llsa = Lanceleaf sage	Wioa = Wild oat
Mael = marshelder	Wipm = Wild-proso millet
Mesa = Meadow salsify	Yeft = Yellow foxtail
Mlgf = Mapleleaf goosefoot	

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## METHODS

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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

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## FORMULATION

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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

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## MISCELLANEOUS

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

## Herbicide Spray Adjuvants

Surfactants				Basic pH Blend			
ivate Plus	Winfield	\$19.50 gal	0.25 to 0.5% v/v	Linkage	West Central	\$16.50 gal	1% v/v
ivator 90	Loveland	\$17.00 gal	0.25 to 0.5% v/v	Mycrimix Plus	J.R. Simplot	\$18.00 gal	1% v/v
SA-80	Amway	\$26.00 gal	0.25 to 0.5% v/v	Quad 7	Loveland	\$17.00 gal	1% v/v
emSurf 90	Unit. Suppliers	\$20.00 gal	0.25 to 0.5% v/v	Transactive	Helena	\$15.75 gal	1% v/v
iblt Premier 90	West Central	\$19.00 gal	0.25 to 0.5% v/v				
erate LechiTech	Loveland	\$26.50 gal	0.25 to 0.5% v/v				
tryx	Precision Labs	\$79.95 gal	0.25% v/v				
r-A-trate II	Precision Labs	\$19.25 gal	0.25 to 0.5% v/v				
ference	Winfield	\$19.50 gal	0.25 to 0.5% v/v				
ity 100	Rosens	\$21.00 gal	0.25 to 0.5% v/v				
1	Wilbur-Ellis	\$19.00 gal	0.25 to 0.5% v/v				
dition 93	Rosens	\$19.00 gal	0.25 to 0.5% v/v				
nslate	Unit. Suppliers	\$24.95 gal	0.25 to 0.5% v/v				
it-Sol 99	Schaeffers	\$24.75 gal	0.25 to 0.5% v/v				

**NIS Approved for use in Water**

Surfactants approved for use in bodies of water are:

ivate Plus	Agridex	Class Act NG	
uce	Liberate L-Tech	LI-700 Lechi-Tech	
ference	R-11	Widespread	X-77

**Surfactants & Silicone**

etic	Helena	\$95.00 gal	0.75 to 2 pt/100 gal
cin	Winfield	\$95.50 gal	0.75 to 2 pt/100 gal
net L-77	Loveland	\$41.50 qt	0.38 to 1 pt/100 gal
eed	Precision Labs	\$90.95 gal	0.25 to 2 pt/100 gal
r-Plus	Unit. Suppliers	\$80.00 gal	0.5 to 2 pt/100 gal
gard 309	Wilbur-Ellis	\$90.00 gal	0.75 to 2 pt/100 gal

**Surfactants & Fertilizer**

ISurf	Unit. Suppliers	\$0.75 lb	20 lb/100 gal
onc PlusDryEDT	Wilbur-Ellis	\$0.50 lb	10 lb/100 gal
ss Act NG	Winfield	\$7.25 gal	2.5% v/v
liver	Precision Labs	\$8.40 gal	2.5% v/v
ressive DB	Rosens	\$0.70 lb	2.25 lb/A
erhouse	Rosens	\$6.70 gal	5 to 10 qt/100 gal
lis	Precision Labs	\$0.56 lb	20 to 22 lb/100 gal
rfate	Loveland	\$16.00 gal	1% v/v
ra Surf AMS	Unit. Suppliers	\$6.90 gal	2.5% v/v

**Surfactants & Water Conditioning Agents**

onc Total	Wilbur-Ellis	\$21.20 gal	0.75% v/v
act	Rosens	\$18.00 gal	0.25 to 0.5% v/v
track	Unit. Suppliers	\$17.25 gal	0.75% v/v
ime	Loveland	\$33.00 gal	0.25 to 0.5% v/v
Tense	West Central	\$24.00 gal	0.25 to 0.75% v/v

**AMS Replacements / Water Conditioning Agents**

iance	Winfield	\$9.00 gal	1.25% v/v
onc Max	Wilbur-Ellis	\$17.95 gal	0.5% v/v
oice W-master	Loveland	\$17.50 gal	0.5% v/v
ron	Farm Direct	\$2.25 lb	2.2 lb/100 gal
t-Rate	Wilbur-Ellis	\$1.25 lb	4 lb/100 gal
est/Request	Helena	\$20.00 gal	0.5% v/v
eedway	Unit. Suppliers	\$17.25 gal	0.5% v/v
nsport	Precision Labs	\$19.50 gal	0.5% v/v

**Oil Based Surfactants**

ophy Gold	West Central	\$28.00 gal	1 qt/100 gal
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**Petroleum Oil Concentrates**

Agri-Dex	Helena	\$7.00 gal	2 to 4 pt/A
Exchange	Precision Labs	\$12.50 gal	2 to 4 pt/A
Herbimax	Loveland	\$8.50 gal	2 to 4 pt/A
Ortech	Rosens	\$7.00 gal	2 to 4 pt/A
Premium Crop Oil	Unit. Suppliers	\$7.00 gal	2 to 4 pt/A
Premium COC	West Central	\$7.00 gal	2 to 4 pt/A
Prime Oil	Winfield	\$7.50 gal	2 to 4 pt/A
ROC Crop Oil	Wilbur-Ellis	\$8.00 gal	2 to 4 pt/A
R-Way	Rosens	\$7.00 gal	2 to 4 pt/A
Vigor	Precision Labs	\$7.25 gal	2 to 4 pt/A

**High Surfactant Oil Concentrates**

Between (PO)	Unit. Suppliers	\$ - gal	1 to 2 pt/A
Diplomat	Rosens	\$11.50 gal	3 to 4 pt/100
Superb HC (PO)	Winfield	\$12.00 gal	1 to 2 pt/A
Destiny HC (MSO)	Winfield	\$ - gal	0.75 to 2 pt/A

**Methylated Seed Oils (MSO)**

Adigor	Syngenta	w/Axial	9.6 fl oz/A
Destiny	Winfield	\$15.00 gal	1 to 2 pt/A
MSO Lechi-Tech	Loveland	\$15.00 gal	1 to 2 pt/A
Persist Ultra	J.R. Simplot	\$18.00 gal	1 to 2 pt/A
Scoil	AGSCO	\$16.00 gal	1 to 2 pt/A
Soy-Stik	West Central	\$16.00 gal	1 to 2 pt/A
Succeed	Unit. Suppl.	\$16.00 gal	1 to 2 pt/A
Sundance II	Rosens	\$16.00 gal	1 to 2 pt/A
Superspread MSO	Wilbur-Ellis	\$15.00 gal	1 to 2 pt/A

**MSO Basic pH Blend**

Base	West Central	\$17.00 gal	1 to 2 pt/A
Entro	Winfield	\$17.00 gal	1 to 2 pt/A
Renegade	Wilbur-Ellis	\$19.00 gal	1 to 2 pt/A
Z-64	AGSCO	\$17.00 gal	1 to 2 pt/A

**MSO & Water Conditioning Agent**

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

Air Force	Unit. Suppliers	\$33.00 gal	4 to 6 fl oz/A
Dyne-Amic	Helena	\$43.00 gal	4 to 6 fl oz/A
Rivet	Winfield	\$44.00 gal	4 to 6 fl oz/A
Syl-tac	Wilbur-Ellis	\$49.50 gal	4 to 6 fl oz/A

**Fertilizer**

AMS (Dry)	Various	\$0.25 lb	2 to 4 lb/A
AMS (liquid)	Various	\$3.50 gal	2 to 4 qt/A
28% UAN	Various	\$3.50 gal	2 to 4 qt/A
28% UAN (bulk)	Various	\$3.50 gal	2 to 4 qt/A

**AMS & Drift Retardant**

AMS 20/10	Unit. Suppliers	\$0.90 lb	10 lb/100 gal
Corral AMS Dry	Winfield	\$1.50 lb	10 to 17 lb/100 gal

**AMS & Defoamer**

Am-Stik	West Central	\$4.00 gal	2 to 4 qt/100 gal
Omnix LDF	Precision Labs	\$4.60 gal	2.5 to 5% v/v

AMS & Deposition & Water Conditioner			
Bronc Max EDT	Wilbur-Ellis	\$28.25 gal	2 to 4 qt/100 gal

AMS & Deposition & Defoamer			
AMS 2000	Unit. Suppliers	\$0.75 lb	10 to 17 lb/100 gal
AmSol Plus	Unit. Suppliers	\$5.00 gal	2.5 gal/100 gal
Arrow Four	Winfield	\$16.50 gal	2 to 4 qt/100 gal
Cornbelt Dri-Gard	West Central	\$1.25 lb	9 lb/100 gal
Cornbelt Gardian Plus	West Central	\$5.50 gal	2.5 gal/100 gal
Double Down	Unit. Suppliers	\$6.00 gal	2.5 gal/100 gal
Drift Guard	Rosens	\$1.32 lb	9 lb/100 gal

AMS & Deposition & Retention & Defoamer			
Array	Rosens	\$1.60 lb	9 to 14 lbs/100 gal
Border Xtra DF	Precision Labs	\$1.10 lb	18 lb/100 gal
Border Xtra 4L	Precision Labs	\$4.70 gal	5% v/v
Border Xtra 8L	Precision Labs	\$7.25 gal	2.5% v/v

AMS & Surfactant & Deposition & Retention & Defoamer			
One-Ap XL	West Central	\$1.50 lb	9 to 15 lbs/100 gal
Pay Off Plus	Unit. Suppliers	\$1.10 lb	10 to 13 lb/100 gal
Zenith	Rosens	\$1.25 lb	1.5 to 2.25 lbs/A

Water Conditioning & Deposition & Defoamer			
Cornbelt Gardian	West Central	\$22.00 gal	1 to 3 qt/100 gal
Formula 1	Unit. Suppliers	\$22.00 gal	1 to 3 qt/100 gal
Transport Plus	Precision Labs	\$21.90 gal	1 to 3 qt/A

Water Conditioning & Deposition & Defoamer & Surfactant			
Weather-Gard	Loveland	\$30.00 gal	1 to 2 qt/100 gal
Complete			

#### Deposition - Drift Retardants

Affect GC	Unit. Suppliers	\$24.00 qt	1 to 2 fl oz/100 gal
Border EG 250	Precision Labs	8.80/10 oz	10 oz/100 gal
Corral Poly	Winfield	\$25.00 qt	4 to 12 fl oz/100 gal
Direct	Precision Labs	\$19.25 qt	1 to 4 oz/100 gal
Drift Down	Rosens	\$13.00 qt	4 to 8 fl oz/100 gal
In-Place	Wilbur-Ellis	\$32.00 gal	4 fl oz/pt-lb herbicide
InterLock	Winfield	\$42.00 gal	4 to 6 fl oz/A
Placement	Winfield	\$36.00 gal	4 fl oz/pt-lb herbicide
Shroud II	Unit. Suppliers	\$9.00 qt	10 to 12 oz/100 gal
Syndetic	West Central	\$13.00 qt	2 to 8 oz/100 gal

#### Deposition & Drift Retardant & Surfactant

Powerlock	Winfield	\$36.00 gal	5 to 8 oz/AI
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#### Drift Retardant & Defoamer

Compadre	Loveland	\$45.00 gal	1 pt/100 gal
Sedate	West Central	\$45.00 gal	1 pt/100 gal

#### Acidifying Agents

Complete	Winfield	\$35.00 gal	1 to 3 pt/100 gal
Indicate 5	Unit. Supplier	\$28.00 gal	2 to 4 pt/100 gal
LI-700 Lechi-Tech	Loveland	\$24.00 gal	2 to 4 pt/100 gal
New Balance	Precision Lab	\$28.00 gal	2 to 4 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	\$31.50 gal	1 to 6 pt/100 gal
Embrace	Wilbur-Ellis	\$32.00 gal	1 to 4 pt/100 gal
EZ-Mix	Loveland	\$30.00 gal	1 to 4 pt/100 gal
Mix-All	Rosens	\$33.00 gal	1 to 4 pt/100 gal
U.S. Compat. Plus	Unit. Suppliers	\$30.00 gal	1 to 2 pt/100 gal

#### Spray Tank Cleaners

Tank Cleaner	Various	\$22-35 gal	1 to 2 qt/100 gal
Tank Cleaner	Various	\$5-7.00 lb	to 2 lb/100 gal

LIST OF HERBICIDES TESTED IN 2007				
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
Acifluorfen	Acif	BASF	2 E, S	Ultra Blazer
Ambicarbazon		Bayer	70 DF	
Aminopyralid + 2, 4-D	GF-1004 GF-750	Dow	0.33 + 2.67	Forefront
Aminopyralid	DE750	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 + Flur	Dow		Starane NXT
Bromoxynil & Pyrasulfotole	Pyst	Bayer		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
Clethodim	Clet	Valent Valent Agsco 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 + Flur	Dow/UAP		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

Dicamba + Nicosulfuron + Diflufenzopyr	Dica + Nico + Difl	BASF	42.7 + 17 + 10.6 WDG	Celebrity Plus
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
Ethametsulfuron		DuPont	75 DF	Muster
Ethofumesate	Etho	Various	4 F	Several
Fenoxaprop-P	Fenx-P	Bayer	1 EC	Puma
Fluazifop-P + Fenoxaprop-P	Flfp + Fenx	Syngenta	2-0.66 EC	Fusion
Fluazifop-P	Flfp-P	Syngenta	2 EC	Fusilade DX
Flucarbazone-NA	Flcz	Bayer	70 WDG	Everest
Flufenacet		Bayer	60 WDG	Define
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
Fluroxypyr	Flox	Dow	1.5 EC	Starane
Fluroxypyr + 2, 4-Dioe		Dow	0.75 + 3 lb/gal EC	Starane + Salvo
Fluroxypyr + MCPAioe		Dow	0.71 + 2.84 EC	Starane + Sword
Fluroxypyr + 2, 4-Ddma		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		Syngenta		
Fomesafen		Syngenta	2 EC	Reflex
Fomesafen + Adjuvant		Syngenta	1.88 EC	Flexstar
Foramsulfuron + Safener		Bayer	70 WDG	Option
Fosamine		DuPont	4 S	Krenite
Glufosinate	Gluf, Lbrty	Bayer	1 EC	Liberty/Rely
Glyphosate + AMADS	Glyt + AMADS	UAP Platte Chem. Co.	1.23 SL + 9.1 AMADS	Engame
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 <sub>3</sub> ) <sub>2</sub>	Glyt	Syngenta	3 ae/gal S	Touchdown
Glufosinate		Bayer	1.67 SL	Liberty 200
Halosulfuron	Halo, Prmt	Monsanto	75 DF	Permit, Sandea

Imazamethabenz	Immb	BASF	2.5 EC	Assert
Imazamox	Imam	BASF	1 S	Raptor/Beyond
Imazapic		BASF	2 EC	Plateau
Imazapyr		BASF	2 L	Arsenal
Imazethapyr + Glyphosate		BASF	0.17 + 2SL	Extreme
Imazethapyr + Pendimethalin	Imep + Pend	BASF	2.9 EC	Pursuit Plus
Imazethapyr	Imep, Prst	BASF	2 S	Pursuit
Isoxaflutole		Bayer	4 SC	BalancePro
MCPA	MCPA	Various	4 EC, S	Several
Mesosulfuron + safener	Mess	Bayer	2 WG	Silverado
Mesosulfuron + Propoxycarbazone	Mess + Prop	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
Metamitron	Meta	Makhteshim-Agan	5.83 FL	Goltix
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 + Dicamba + Diflufenzopyr		BASF	0.6 + 42.4 + 17	Celebrity Plus
Nicosulfuron + Rimsulfuron		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 <sub>2</sub> O Acumen
Picloram	Picl	Dow	2 S	Tordon 22K
Pinoxaden	Pxdn	Syngenta	0.83 EC	Axial
Propoxycarbazone	Prcz	Bayer	70 WDG	Olympus
Pyroxasulfone	KIH - 485	Kumiai	85 WG	KIH - 485
Pyraflufen	pyff	Nichino	0.21 EC	Ecopart, ET Herbicide
Quinclorac	Quin	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		DuPont	25 DF	Matrix, Resolve
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		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	Harmony Extra
Thifensulfuron + Tribenuron		Dupont	25 + 25 SP	Affinity Broad Spectrum
Thifensulfuron + Tribenuron		Dupont	40 + 10 SP	Affinity Tankmix
Thifensulfuron	Thif, Pinn ,Pncl	DuPont	75 DF	Harmony GT
Topramezone		AmVac	2.8 SC	Impact
Tralkoxydim	Tral	Syngenta	40 DF	Achieve
Triallate	GWN 3040	Gowan	4EC	Far-Go
Tribenuron	Trib	DuPont	75 DF	Express
Triclopyr	Trecp	Dow	4 EC	Garlon, Remedy
Trifluralin	Trif	Dow	4 EC, 10 G	Several
Triflusulfuron	Tfsu	DuPont	50 DF	UpBeet
2, 4-D	2, 4-D	Various	Various EC, S, WSP	Several
2, 4-DB	2, 4-DB	Various	2	Several

\*Abbreviations 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.

