

**SURVEY OF WEED CONTROL AND PRODUCTION PRACTICES
ON SUGARBEET IN EASTERN NORTH DAKOTA AND MINNESOTA - 2004**

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Other portions of the survey are published in the
Entomology and Plant Pathology sections.

The thirty-sixth annual weed control and production practices questionnaire was mailed in September, 2004 to sugarbeet growers producing sugarbeet for the American Crystal Sugar Company, the Minn-Dak Farmers Cooperative, and the Southern Minnesota Beet Sugar Cooperative. Growers were requested to evaluate weed control and sugarbeet injury from specific herbicides, and to list the most important weed and production problems. In addition, growers were requested to list insecticide use, fungicide use, total acreage, acres of hand-weeded sugarbeet, herbicide application methods and cost of hand thinning and hand weeding. Insecticide use and fungicide use portions of the survey can be found in the Entomology and Plant Pathology sections.

Sugarbeet growers planted 721,672 acres of sugarbeet in the Red River Valley and West Central Minnesota in 2004. Growers representing 28 percent of the total acres responded to the survey. The responses to the questionnaire are reported in Tables 1 to 27.

Table 1 gives a summary of herbicide use and performance averaged over all counties. The number of growers reporting the use of a herbicide treatment is listed and the acres treated is expressed as a percentage of the total acreage reported on the survey. Multiple herbicide treatments are tabulated for each grower, thus the number of growers reporting in Table 1 exceeds the total number of survey responses. Also, multiple herbicide treatments on the same acreage are listed separately in the tables, thus acres treated exceeds 100%. The ratings of weed control and sugarbeet injury are presented as the percentage of growers who judged weed control or sugarbeet injury as belonging in the listed categories. Data for individual counties are in Tables 2 through 17.

The trade names listed in the tables for the herbicides are the original trade names. These old trade names also represent the generic formulations of the same active ingredient. Thus Nortron represents Etho SC and Ethotron; Betamix represents D-P Mix and Phen-Des; Betanex represents Des and Alphanex; Progress represents Des-Phen-Etho; Stinger represents ClopyrAg; and Select represents Prism and Arrow.

Total sugarbeet acreage treated with herbicides in 2004 was 427%, which compares to 437% in 2003, 428% in 2002, 368% in 2001 and 348% in 2000. The acres treated does not include "other weed control methods" which were non-herbicidal methods. Eptam, Ro-Neet, Dual and Nortron, used in combination as well as used alone, were the soil applied herbicides reported in 2004. Soil applied herbicide use was 47% in 1989, 32% in 1993, 11% in 1998, 4% in 1999, 4% in 2001, 4% in 2002, 29% in 2003 and 31% in 2004. Postemergence herbicide use was 379% in 2004, 380% in 2003, 388% in 2002, 342% in 2001 and 338% in 2000. The use of soil applied herbicides increased from 4% in 2002 to 29% in 2003 and 31% in 2004 primarily due to the new label for Dual Magnum and increased use of Nortron. Postemergence herbicide use only dropped from 388% in 2002 to 380% in 2003 and 379% in 2004. The increased use of soil applied herbicides did not significantly reduce postemergence herbicide use. Sugarbeet injury from PRE or PPI Dual Magnum declined from 53% of the survey respondents indicating moderate or severe sugarbeet injury in 2003 to 22% indicating moderate or severe injury in 2004.

The usage of postemergence grass control herbicides was 226% of the acreage in 2004 as compared to 214% in 2003, 209% in 2002, 214% in 2001, and 235% in 2000. Assure II was used on 15% of the acreage in 2001, 13% in 2002, 15% in 2003 and 9% in 2004. Prism/Select was used on 163% of the acreage in 2001, 190% in 2002, 180% in 2003 and 198% in 2004. Poast was used on 36% of the acreage in 2001, 17% in 2002, 19% in 2003 and 20% in

2004. Most of the grass herbicides were applied in combination with the micro-rate which included an oil adjuvant. About 41% of the acres treated with a grass herbicide were treated with a grass herbicide used alone.

Betanex use was 149% of the acreage in 2000, 107% in 2001, 112% in 2002, 100% in 2003 and 71% in 2004. Betamix use was 107% of the acreage in 2000, 116% in 2001, 139% in 2002, 115% in 2003 and 125% in 2004. Progress use was 54% of the acreage in 2000, 81% in 2001, 97% in 2002, 122% in 2003 and 137% in 2004. Progress use is increasing due to the increase in kochia in sugarbeet. UpBeet use was 301% of the acreage in 2000, 278% in 2001, 332% in 2002, 324% in 2003 and 306% in 2004. Stinger use was 138% of the acreage in 1997, 291% in 1999, 298% in 2000, 274% in 2001, 304% in 2002, 305% in 2003 and 310% in 2004. The most common herbicide treatment in 2004 was Progress + UpBeet + Stinger + Select + Oil adjuvant on 46% of the acreage. Combination treatments that included an oil generally would be micro-rate treatments. Treatments including oil were applied to 273% of the acreage in 2004, 297% in 2003, 301% in 2002, 265% in 2001, and 285% in 2000.

The rotary hoe or harrow were used on 64% of the acres in 2004 compared to 65% in 2003, 42% in 2002, 63% in 2001, 62% in 2000 and 48% in 1999. The electrical discharge system, weed pullers, mowing or swathing were used on 7.6% of the acreage in 1995, 1.6% in 1997, less than 1% in 1999, 1.7% in 2000, 2.4% in 2001, 3.1% in 2002, 2% in 2003 and 0.5% in 2004.

Pigweed species were NOT named most often as “worst weed” in sugarbeet in 2004 for the third time in 27 years (Table 18). Kochia was the most common “worst weed” choice in 2004, 2003 and 2000. “Pigweed (all types)” was listed as a choice rather than redroot pigweed on the survey. Waterhemp was left as a choice on the survey even though waterhemp is a pigweed. The percentage of respondents indicating redroot pigweed as their worst weed was 51% in 1998, 40% in 1999, 18% in 2000, 43% in 2001, 44% in 2002, 25% in 2003 and 21% in 2004. Kochia was named the worst weed problem by 41% of the survey respondents in 2004 compared to 46% in 2003, 26% in 2002, 32% in 2001, 43% in 2000, 33% in 1999 and 13% in 1998. The widespread occurrence of kochia that is resistant to UpBeet may explain the prevalence of kochia being named as worst weed. Common lambsquarters was the second most named “worst weed” in sugarbeet in 2004 with 25% of the respondents naming it the worst weed problem. Common lambsquarters has only surpassed redroot pigweed in 2000 and 2004 as the worst weed problem listed and 2004 was the first time ever common lambsquarters was listed as the worst weed problem by more than 20% of respondents.

Weeds were named as the most serious production problem by 47% of the survey respondents in 2004 compared to 61% in 2003, 53% in 2002, 52% in 2001 and 48% in 2000. (Table 19). The percentage of respondents who named emergence and stand as their worst problem was 10% in 2000, 5% in 2001, 19% in 2002, 1% in 2003 and 21% in 2004. The percentage of respondents who named Cercospora leaf spot (CLS) as their worst problem was 36% in 1998, 6% in 1999, 3% in 2000, 1% in 2001, 1% in 2002, 1% in 2003 and was not listed as the worst production problem by a single grower in 2004. The Section 18 label for Eminent in 1999, 2000, 2001, 2002, 2003 and 2004 and the new label for Headline in 2003 probably explain the reduction in Cercospora being identified as the worst problem. Rhizoctonia/aphanomyces was named as worst problem by 9% of the respondents in 1999, 18% in 2000, 16% in 2001, 9% in 2002, 11% in 2003 and 8% in 2004. Soil moisture and soil temperature have a very large influence on sugarbeet injury caused by rhizoctonia and aphanomyces.

Rhizomania was listed as a “worst problem” choice for the first time in 1997 (Table 19). Rhizomania caused identifiable yield loss only in the Southern Minnesota Beet Sugar Cooperative in 1998 but it was identified in the Red River Valley in 1999. Rhizomania was named as worst problem by 3% of the respondents in 1998, by 2% in 1999 and 2000, by 3% in 2001 and 2002 and by 2% in 2003 and by 1% in 2004.

The percentage of acreage hand weeded was 62% in 1996, 45% in 1997, 28% in 1998, 25% in 2000, 23% in 2001, 32% in 2002, 30% in 2003 and 28% in 2004 (Table 22). Weed problems were worse in 2002, 2003 and 2004 than in several previous years and this is reflected in the increase of hand weeding.

Averaged over all herbicides, herbicides were band applied to 34%, broadcast applied with a ground sprayer to 58% and broadcast applied by air to 8% of the sugarbeet acreage in 2004 (Table 23). In 1998, 40% of the acreage was band treated, 37% was band treated in 2000 and 38% in 2002. Herbicides were applied by air to 14% of the acreage in 2002, 9% in 2000, and 17% in 1998.

The cost of hand weeding and hand thinning varied from zero to over \$80/A in 2004 (Table 24). The most common cost was zero dollars for 47% of the respondents. Zero cost responses were 55% in 1999, 56% in 2000, 57% in 2001 and 48% in 2002 and 41% in 2003. The average cost of hand weeding as calculated from Table 22 was \$12.61/A in 2004 as compared to \$13.75/A in 2003, \$15.95/A in 2002, \$11.15/A in 2001, \$11.90/A in 2000, \$11.20/A in 1999, \$18.50/A in 1997 and \$34/A in 1995. The percentage of respondents who used no hand labor varied by county from 15% in Renville county to 85% in Kittson County.

Sugarbeet acreage operated by respondents to the survey in 2004 varied from less than 50 acres to over 2,000 acres (Table 25). The most common acreage was 400 to 599 acres for 19% of the respondents. Other common acreages were 100 to 199 acres at 13%, 200 to 299 acres at 13%, 300 to 399 acres at 17% and 600 to 799 acres at 12%. Fourteen percent of the respondents reported over 1,000 acres and 20% had over 800 acres. In 1998, 5% reported over 1,000 acres and 11% had over 800 acres.

Survey respondents were asked to identify what they used to make decisions on the timing of postemergence herbicides (Table 26). The options listed to choose from were spraying every 5 days, spraying every 7 days, use 5 to 10 days between sprays depending on the environment, use agriculturist recommendations, use field scouting and used growing degree days. Spraying every 5 to 10 days depending on the environment was the most common response with 35% of responses. This was followed by the use of field scouting with 30%, agriculturist recommendations with 18% and spraying every 7 days with 12% of the responses.

American Crystal growers only were asked to evaluate the usefulness and value of the bimonthly Ag Notes from American Crystal (Table 27). Seventy-three percent of the respondents said the Ag Notes were extremely or very useful or valuable.

TABLE 1. SUMMARY OF ALL HERBICIDES USED IN SUGARBEET REPORTED IN 2004.
372 GROWERS REPORTED ON 202,064 ACRES.

HERBICIDES (IN ORDER OF ACRES TREATED)	NUMBER GROWERS RPTG.	ACRES TREATED % OF TOTAL	Avg no. of appl	% GROWERS REPORTING WEED CONTROL					% GROWERS REPORTING CROP INJURY				
				-----					-----				
				*NR	EXC	*GD	*FR	PR	NR	None	Slt	Mod	Sev
A. SOIL APPLIED HERBICIDES:													
NORTRON(PRE/PPI)	99	14.8	1.1	8	21	56	10	5	12	67	19	1	1
DUAL(PRE/PPI)	55	14.5	1.1	5	15	53	25	2	7	33	38	20	2
EPTAM	3	0.9	1.7	0	0	67	33	0	33	33	33	0	0
EPTAM+RO-NEET	3	0.4	1.0	0	0	100	0	0	0	100	0	0	0
RO-NEET	1	0.3	2.0	100	0	0	0	0	100	0	0	0	0
TOTAL-PPI&PRE	161	30.9	1.1	7	18	55	16	4	11	55	25	7	1
B. POSTEMERGENCE HERBICIDES:													
PROG+STING+UPBEET+SELCT+OIL	78	46.3	2.1	15	21	59	5	0	23	37	35	4	1
BMIX+STING+UPBEET+SELCT+OIL	86	40.9	2.0	13	22	51	12	2	16	30	49	3	1
SELECT/PRISM	118	37.8	1.3	6	56	32	4	2	7	88	5	0	0
BETAMIX+STINGER+UPBEET+OIL	60	29.1	1.9	15	10	63	12	0	18	30	50	0	2
BNEX+STING+UPBT+SELECT+OIL	64	25.8	1.6	11	23	56	9	0	16	38	45	0	2
PROGRESS+STINGER+UPBEET+OIL	56	22.0	1.8	11	13	61	16	0	14	27	54	5	0
PROGRESS+STINGER	33	20.7	1.7	0	12	45	42	0	0	30	67	3	0
BMIX+STNG+UPBT+SLCT+NORT+OIL	40	20.4	2.2	13	30	50	8	0	13	40	43	5	0
BNEX+STINGER+UPBEET+OIL	26	13.1	1.7	23	15	54	4	4	23	35	35	8	0
PROG+STING+UPBT+NORTRON+OIL	23	10.4	1.9	13	17	65	4	0	17	39	43	0	0
BMIX+STING+UPBT+NORTRON+OIL	27	9.8	2.1	11	7	59	19	4	11	26	52	7	4
BMIX+STING+UP+POAST+OIL	11	9.5	2.4	0	9	82	9	0	0	36	55	9	0
PROGRESS+STINGER+UPBEET	28	9.5	1.9	14	21	54	11	0	14	29	57	0	0
BNX+STNG+UPBT+SLCT+NORT+OIL	25	9.4	1.7	8	28	44	20	0	4	48	44	0	4
BETX+STINGER+UPBEET	25	8.2	1.9	16	24	40	20	0	16	24	56	4	0
PROGRESS+UPBEET	22	8.0	1.6	0	14	59	23	5	0	41	45	14	0
PROGRESS+UPBEET+SELECT+OIL	12	5.9	1.9	8	17	58	17	0	8	58	33	0	0
PROG+STING+UPB+SLCT+NORT+OIL	11	5.7	2.0	18	27	55	0	0	18	36	45	0	0
BETAMIX+STINGER+UPBEET	16	5.4	1.8	13	13	44	25	6	13	31	56	0	0
OTHER COMBINATIONS	25	5.0	1.5	8	24	52	12	4	12	40	40	8	0
PROG+STING+UPBT+POAST+OIL	9	4.7	1.9	22	0	78	0	0	22	22	56	0	0
BNEX+STING+UPBT+POAST+OIL	11	3.8	1.5	18	0	73	9	0	18	27	45	9	0
BMIX+STING+UPBT+ASSURE+OIL	7	3.5	2.0	14	29	57	0	0	29	43	14	14	0
BNEX+STING+UPBT+ASSURE+OIL	5	2.8	1.6	20	0	60	20	0	20	80	0	0	0
BETANEX+UPBT+SELECT+OIL	9	2.7	1.3	0	22	78	0	0	0	89	11	0	0
BETAMIX+UPBT+SELECT+OIL	7	2.6	1.6	14	14	71	0	0	14	57	29	0	0
BNEX+STING+UPBT+NORTRON+OIL	10	2.4	1.3	10	30	60	0	0	10	40	50	0	0
BETANEX+STINGER	10	2.3	1.4	30	10	50	0	10	30	40	30	0	0
PROGRESS	16	2.3	1.6	0	19	63	19	0	0	19	81	0	0
BETAMIX+STINGER	12	2.1	1.3	0	17	50	33	0	0	42	58	0	0
BETAMIX+UPBEET	6	2.0	1.3	0	17	67	17	0	0	33	67	0	0
PROG+STING+UPBT+ASSURE+OIL	4	1.7	3.0	0	50	25	0	25	0	50	50	0	0
POAST	10	1.7	1.2	0	30	60	0	10	0	100	0	0	0
ASSURE II	15	1.2	1.0	7	53	20	7	13	7	93	0	0	0
BETANEX+UPBEET	4	0.4	1.0	25	0	25	25	25	25	25	50	0	0
TOTAL-POST	921	379.2	1.8	11	24	52	11	2	13	44	40	3	1

TABLE 1. SUMMARY OF ALL HERBICIDES USED IN SUGARBEET REPORTED IN 2004.
 372 GROWERS REPORTED ON 202,064 ACRES.

HERBICIDES (IN ORDER OF ACRES TREATED)	NUMBER GROWERS RPTG.	ACRES TREATED % OF TOTAL	Avg no. of appl	% GROWERS REPORTING WEED CONTROL					% GROWERS REPORTING CROP INJURY				
				NR	EXC*	GD*	FR*	PR	NR	None	Slt	Mod	Sev
C. PREEMERGE & LAY-BY HERBICIDES:													
DUAL (LAY-BY)	73	9.9	1.0	8	21	45	22	4	11	51	25	12	1
ROUNDUP (PRE)	30	4.7	1.0	13	67	17	3	0	13	83	0	0	3
TREFLAN (LAY-BY)	9	2.3	1.0	22	33	44	0	0	22	33	44	0	0
TOTAL-PRE&LAY-BY	116	17.3	1.0	10	33	38	16	3	12	58	21	8	2
D. OTHER WEED CONTROL METHODS:													
ROTARY HOE	162	57.6	1.5	27	11	35	26	1	31	17	48	4	0
HARROW	31	6.3	1.0	26	10	45	19	0	32	10	55	3	0
SWATH/FLAIL/MOW	4	0.2	1.0	0	25	25	25	25	0	25	50	25	0
ELECTRICAL (EDS)	2	0.2	1.0	0	50	50	0	0	0	50	50	0	0
WEED PULLER	3	0.1	1.0	33	0	0	67	0	67	0	33	0	0
TOTAL-OTHER	202	64.4	1.4	26	11	36	25	1	31	16	49	4	0
TOTAL TREATMENTS	1400	491.9	1.6	13	22	49	14	2	2	1	4	0	0

*NR=NO RESPONSE; EXC=EXCELLENT; GD=GOOD; FR=FAIR; PR=POOR.

TABLE 2. CASS COUNTY: 19 GROWERS REPORTED ON 10,333 ACRES.

TREATMENT	NO. RPTG.	ACRES TRTED	% OF TOTAL	Ave # App	NO. OF GROWERS REPORTING									
					WEED CONTROL					CROP INJURY				
					NR*EXC	GD	FR	PR	NR	None	Slt	Mod	Sev	
A. SOIL APPLIED HERBICIDES:														
NORTRON (PRE/PPI)	3	838	8.1	1.0	1	1	0	0	1	1	2	0	0	0
TOTAL-PPI&PRE	3	838	8.1	1.0	1	1	0	0	1	1	2	0	0	0
B. POSTEMERGENCE HERBICIDES:														
BMIX+STING+UPBEET+OIL	8	10794	104.5	2.4	0	0	8	0	0	1	0	7	0	0
BMIX+STING+UPB+SLCT+OIL	6	6183	59.8	2.2	1	1	4	0	0	1	1	4	0	0
PROG+STING+UPB+SLCT+OIL	6	5340	51.7	1.8	1	2	3	0	0	1	2	3	0	0
SELECT/PRISM	5	5290	51.2	1.6	0	2	2	0	1	1	2	2	0	0
BMX+STG+UPB+SLT+NORT+OIL	4	3345	32.4	2.5	0	3	1	0	0	0	3	1	0	0
BNEX+STING+UPBT+SLCT+OIL	5	2532	24.5	1.4	1	1	3	0	0	1	2	2	0	0
BNX+STG+UPB+SLT+NORT+OIL	2	1689	16.3	2.0	0	0	1	1	0	0	0	2	0	0
PROG+UPBT+SELECT+OIL	2	1182	11.4	1.5	0	1	1	0	0	0	2	0	0	0
PROG+STG+UP+SLT+NORT+OIL	1	722	7.0	1.0	1	0	0	0	0	1	0	0	0	0
BNEX+STING+UPBEET+OIL	1	700	6.8	1.0	0	1	0	0	0	0	1	0	0	0
PROG+STING+UPBEET+OIL	2	486	4.7	1.5	0	0	1	1	0	0	1	1	0	0
BETAMIX+UPBEET	1	400	3.9	1.0	0	0	1	0	0	0	0	1	0	0
BNEX+STING+UPB+POAST+OIL	1	333	3.2	3.0	1	0	0	0	0	1	0	0	0	0
BETX+STINGER+UPBEET	1	190	1.8	1.0	0	0	0	1	0	0	1	0	0	0
TOTAL-POST	45	39186	379.2	1.9	5	11	25	3	1	7	15	23	0	0
C. PREEMERGE & LAY-BY HERBICIDES:														
ROUNDUP (PRE)	4	1249	12.1	1.0	1	3	0	0	0	1	3	0	0	0
DUAL (LAY-BY)	2	376	3.6	1.0	0	1	1	0	0	1	1	0	0	0
TOTAL-PRE&LAY-BY	7	1825	17.7	1.0	1	4	2	0	0	2	5	0	0	0
D. OTHER WEED CONTROL METHODS:														
ROTARY HOE	2	2012	19.5	2.0	0	0	2	0	0	0	0	2	0	0
HARROW	1	302	2.9	1.0	0	0	0	1	0	0	0	1	0	0
TOTAL-OTHER	3	2314	22.4	1.7	0	0	2	1	0	0	0	3	0	0
TOTAL TREATMENTS	58	44163	427.4	1.7	7	16	29	4	2	10	22	26	0	0

*NR=NO RESPONSE; EXC=EXCELLENT; GD=GOOD; FR=FAIR; PR=POOR.

TABLE 3. CHIPPEWA, KANDIYOHI AND SWIFT COUNTY: 32 GROWERS REPORTED ON 11,990 ACRES.

TREATMENT	NO. RPTG.	ACRES TRTED	% OF TOTAL	Ave # App	NO. OF GROWERS REPORTING									
					WEED CONTROL					CROP INJURY				
					NR	EXC*	GD*	FR*	PR	NR	None	SlT	Mod	Sev
A. SOIL APPLIED HERBICIDES:														
DUAL (PRE/PPI)	17	5643	47.1	1.0	1	1	9	5	1	1	8	8	0	0
NORTRON (PRE/PPI)	5	770	6.4	1.0	1	1	3	0	0	1	3	1	0	0
EPTAM+RO-NEET	1	120	1.0	1.0	0	0	1	0	0	0	1	0	0	0
EPTAM	1	80	0.7	1.0	0	0	0	1	0	0	0	1	0	0
TOTAL-PPI&PRE	24	6613	55.2	1.0	2	2	13	6	1	2	12	10	0	0
=====														
B. POSTEMERGENCE HERBICIDES:														
BMIX+STING+UPBEET+OIL	10	7336	61.2	1.9	0	0	6	4	0	0	4	6	0	0
PROGRESS+STINGER	10	6669	55.6	1.8	0	3	2	5	0	0	4	5	1	0
PROG+STING+UPBEET+OIL	11	6278	52.4	1.8	1	0	5	5	0	1	5	5	0	0
BMIX+STINGER+UPBEET	4	3768	31.4	1.5	0	0	0	4	0	0	1	3	0	0
SELECT/PRISM	13	3162	26.4	1.0	0	9	3	1	0	0	13	0	0	0
BETX+STINGER+UPBEET	1	2700	22.5	3.0	0	0	1	0	0	0	0	1	0	0
BMIX+STG+UPB+NORT+OIL	2	2560	21.4	2.5	0	0	2	0	0	0	1	1	0	0
PROG+STG+UPB+NORT+OIL	3	1744	14.5	2.0	0	0	2	1	0	0	2	1	0	0
OTHER COMBINATIONS	3	1650	13.8	1.7	0	2	1	0	0	0	2	1	0	0
BETAMIX+STINGER	2	1340	11.2	1.0	0	0	1	1	0	0	1	1	0	0
BMIX+STING+UPB+SLCT+OIL	4	1194	10.0	1.8	0	0	2	1	1	0	3	1	0	0
BETANEX+STINGER	2	1000	8.3	1.5	1	1	0	0	0	1	1	0	0	0
BNEX+STING+UPBEET+OIL	1	745	6.2	1.0	0	0	0	1	0	0	0	1	0	0
BNEX+STING+UPBT+SLCT+OIL	1	657	5.5	1.0	0	0	0	1	0	0	1	0	0	0
PROG+STINGER+UPBEET	3	626	5.2	1.0	1	1	1	0	0	1	1	1	0	0
ASSURE II	2	560	4.7	1.0	0	2	0	0	0	0	2	0	0	0
PROGRESS+UPBEET	1	520	4.3	2.0	0	0	1	0	0	0	1	0	0	0
PROGRESS	2	500	4.2	1.0	0	1	1	0	0	0	1	1	0	0
BMX+STG+UPB+SLT+NORT+OIL	3	343	2.9	1.0	0	2	1	0	0	0	2	1	0	0
BNX+STG+UPB+SLT+NORT+OIL	1	197	1.6	1.0	0	1	0	0	0	0	1	0	0	0
BNEX+STING+UPB+NORT+OIL	2	195	1.6	1.0	0	0	2	0	0	0	1	1	0	0
BETANEX+UPBEET	1	154	1.3	1.0	0	0	0	1	0	0	0	1	0	0
TOTAL-POST	82	43898	366.1	1.5	3	22	31	25	1	3	47	31	1	0
=====														
C. PREEMERGE & LAY-BY HERBICIDES:														
DUAL (LAY-BY)	5	1049	8.7	1.0	0	1	3	1	0	0	4	0	1	0
ROUNDUP (PRE)	2	495	4.1	1.0	0	1	0	1	0	0	2	0	0	0
TOTAL-PRE&LAY-BY	8	1650	13.8	1.0	0	2	4	2	0	0	7	0	1	0
=====														
D. OTHER WEED CONTROL METHODS:														
ROTARY HOE	15	10350	86.3	1.7	3	2	5	5	0	3	2	10	0	0
HARROW	4	1315	11.0	1.0	0	1	2	1	0	1	1	2	0	0
ELECTRICAL (EDS)	1	150	1.3	1.0	0	1	0	0	0	0	1	0	0	0
TOTAL-OTHER	20	11815	98.5	1.6	3	4	7	6	0	4	4	12	0	0
=====														
TOTAL TREATMENTS	134	63976	533.6	1.4	8	30	55	39	2	9	70	53	2	0

*NR=NO RESPONSE; EXC=EXCELLENT; GD=GOOD; FR=FAIR; PR=POOR.

TABLE 4. CLAY AND BECKER COUNTY: 26 GROWERS REPORTED ON 20,997 ACRES.

TREATMENT	NO. RPTG.	ACRES TRTED	% OF TOTAL	Ave # App	NO. OF GROWERS REPORTING									
					WEED CONTROL					CROP INJURY				
					*NR	*EXC	*GD	*FR	*PR	NR	None	Slt	Mod	Sev
A. SOIL APPLIED HERBICIDES:														
NORTRON (PRE/PPI)	4	3065	14.6	1.0	0	1	3	0	0	2	2	0	0	0
DUAL (PRE/PPI)	1	1700	8.1	1.0	0	0	1	0	0	0	0	1	0	0
EPTAM	1	1290	6.1	3.0	0	0	1	0	0	1	0	0	0	0
TOTAL-PPI&PRE	6	6055	28.8	1.3	0	1	5	0	0	3	2	1	0	0
B. POSTEMERGENCE HERBICIDES:														
PROG+STING+UPBT+SLCT+OIL	9	17523	83.5	1.8	3	1	4	1	0	6	2	1	0	0
BMIX+STING+UPBT+SLCT+OIL	7	11404	54.3	2.1	2	1	4	0	0	2	0	5	0	0
BMIX+STINGER+UPBEET+OIL	10	11144	53.1	1.8	5	0	5	0	0	6	2	2	0	0
PROG+STINGER+UPBEET+OIL	5	8855	42.2	2.4	1	0	4	0	0	1	0	4	0	0
BNEX+STING+UPBT+SLCT+OIL	5	7940	37.8	1.4	0	1	4	0	0	2	2	1	0	0
SELECT/PRISM	7	6687	31.8	1.7	1	3	3	0	0	1	6	0	0	0
BNEX+STING+UPBEET+OIL	6	5644	26.9	1.3	3	0	3	0	0	3	2	1	0	0
PROG+STING+UPB+NORT+OIL	2	2431	11.6	1.5	2	0	0	0	0	2	0	0	0	0
BETX+STINGER+UPBEET	3	1724	8.2	2.3	0	1	2	0	0	0	1	2	0	0
BETAMIX+UPBEET	1	1700	8.1	1.0	0	0	1	0	0	0	0	1	0	0
BMX+STG+UPB+SLT+NORT+OIL	4	1690	8.0	1.8	0	1	3	0	0	0	1	3	0	0
BMIX+STG+UPBT+NORT+OIL	2	1400	6.7	2.0	0	0	2	0	0	0	0	2	0	0
PROG+STG+UPB+SLT+NOR+OIL	1	1000	4.8	2.0	0	0	1	0	0	0	1	0	0	0
BNX+STG+UPB+SLT+NORT+OIL	1	860	4.1	2.0	0	0	1	0	0	0	1	0	0	0
BNEX+UPBEET+SELECT+OIL	1	600	2.9	1.0	0	0	1	0	0	0	1	0	0	0
BMIX+UPBEET+SELECT+OIL	1	500	2.4	1.0	1	0	0	0	0	1	0	0	0	0
PROGRESS+STINGER+UPBEET	1	300	1.4	1.0	1	0	0	0	0	1	0	0	0	0
BMIX+STNG+UPB+ASSURE+OIL	1	300	1.4	2.0	0	0	1	0	0	1	0	0	0	0
PROGRESS+UPBEET	1	290	1.4	2.0	0	0	1	0	0	0	0	0	1	0
BETAMIX+STINGER+UPBEET	1	222	1.1	1.0	0	1	0	0	0	0	1	0	0	0
ASSURE II	1	144	0.7	1.0	1	0	0	0	0	1	0	0	0	0
BNEX+STING+UPB+NORT+OIL	1	95	0.5	1.0	0	1	0	0	0	0	0	1	0	0
BNEX+STING+UPB+ASSUR+OIL	1	90	0.4	1.0	1	0	0	0	0	1	0	0	0	0
TOTAL-POST	72	82543	393.1	1.7	21	10	40	1	0	28	20	23	1	0
C. PREEMERGE & LAY-BY HERBICIDES:														
DUAL (LAY-BY)	7	1190	5.7	1.0	1	4	2	0	0	1	4	1	1	0
TOTAL-PRE&LAY-BY	7	1190	5.7	1.0	1	4	2	0	0	1	4	1	1	0
D. OTHER WEED CONTROL METHODS:														
ROTARY HOE	23	26547	126.4	1.7	5	3	10	4	1	8	1	13	1	0
HARROW	6	3930	18.7	1.0	2	0	3	1	0	3	0	3	0	0
SWATH/FLAIL/MOW	1	20	0.1	1.0	0	0	0	0	1	0	0	0	1	0
TOTAL-OTHER	30	30497	145.2	1.6	7	3	13	5	2	11	1	16	2	0
TOTAL TREATMENTS	115	12E4	572.9	1.6	29	18	60	6	2	43	27	41	4	0

*NR=NO RESPONSE; EXC=EXCELLENT; GD=GOOD; FR=FAIR; PR=POOR.

TABLE 5. GRAND FORKS COUNTY: 20 GROWERS REPORTED ON 9,305 ACRES.

TREATMENT	NO. RPTG.	ACRES TRTED	% OF TOTAL	Ave # App	NO. OF GROWERS REPORTING									
					WEED CONTROL					CROP INJURY				
					*NR	*EXC	*GD	*FR	*PR	NR	None	Slt	Mod	Sev
A. SOIL APPLIED HERBICIDES:														
NORTRON(PRE/PPI)	2	120	1.3	1.0	0	0	2	0	0	0	2	0	0	0
TOTAL-PPI&PRE	2	120	1.3	1.0	0	0	2	0	0	0	2	0	0	0
B. POSTEMERGENCE HERBICIDES:														
BMIX+STING+UPB+SLCT+OIL	7	7411	79.6	2.6	0	1	5	1	0	0	2	4	1	0
BNX+STG+UPB+SLT+NORT+OIL	5	2965	31.9	1.6	1	2	2	0	0	1	2	2	0	0
BMIX+STING+UP+POAST+OIL	1	2800	30.1	4.0	0	0	1	0	0	0	1	0	0	0
BNEX+STING+UPBT+SLCT+OIL	4	2671	28.7	1.8	0	1	3	0	0	0	1	3	0	0
PROG+STING+UPB+POAST+OIL	1	2150	23.1	2.0	0	0	1	0	0	0	1	0	0	0
BMIX+UPBEET+SELECT+OIL	1	2000	21.5	4.0	0	0	1	0	0	0	0	1	0	0
BMX+STG+UPB+SLT+NORT+OIL	3	1816	19.5	2.3	0	0	2	1	0	0	0	3	0	0
BNEX+STING+UPBEET+OIL	2	1780	19.1	1.5	0	1	1	0	0	0	2	0	0	0
BMIX+STING+UPBEET+OIL	3	1605	17.2	1.3	0	1	2	0	0	0	3	0	0	0
BNEX+UPBEET+SELECT+OIL	1	1440	15.5	4.0	0	0	1	0	0	0	0	1	0	0
PROG+STING+UPB+SLCT+OIL	1	1248	13.4	3.0	0	0	1	0	0	0	1	0	0	0
BMIX+STING+UPB+ASSUR+OIL	1	920	9.9	1.0	0	1	0	0	0	0	1	0	0	0
BNEX+STING+UPB+NORT+OIL	2	805	8.7	1.0	0	2	0	0	0	0	1	1	0	0
PROGRESS+STINGER+UPBEET	1	600	6.4	2.0	0	1	0	0	0	0	0	1	0	0
PROG+STING+UPBEET+OIL	2	520	5.6	1.0	0	0	2	0	0	0	1	1	0	0
BETANEX+STINGER+UPBEET	1	150	1.6	1.0	0	1	0	0	0	0	0	1	0	0
BETAMIX+STINGER+UPBEET	1	150	1.6	1.0	0	1	0	0	0	0	0	1	0	0
SELECT/PRISM	1	90	1.0	1.0	0	1	0	0	0	0	1	0	0	0
PROGRESS+UPBEET	1	57	0.6	1.0	0	0	1	0	0	0	0	1	0	0
BMIX+STING+UPBT+NORT+OIL	1	20	0.2	1.0	1	0	0	0	0	1	0	0	0	0
TOTAL-POST	40	31198	335.3	1.9	2	13	23	2	0	2	17	20	1	0
C. PREEMERGE & LAY-BY HERBICIDES:														
DUAL (LAY-BY)	3	1039	11.2	1.0	0	1	1	0	1	0	2	0	1	0
TREFLAN (LAY-BY)	1	920	9.9	1.0	0	1	0	0	0	0	1	0	0	0
ROUNDUP (PRE)	2	399	4.3	1.0	0	1	1	0	0	0	2	0	0	0
TOTAL-PRE&LAY-BY	6	2358	25.3	1.0	0	3	2	0	1	0	5	0	1	0
D. OTHER WEED CONTROL METHODS:														
ROTARY HOE	7	2775	29.8	1.3	2	1	2	2	0	3	0	3	1	0
HARROW	3	905	9.7	1.0	1	1	1	0	0	1	0	2	0	0
TOTAL-OTHER	10	3680	39.5	1.2	3	2	3	2	0	4	0	5	1	0
TOTAL TREATMENTS	58	37356	401.5	1.7	5	18	30	4	1	6	24	25	3	0

*NR=NO RESPONSE; EXC=EXCELLENT; GD=GOOD; FR=FAIR; PR=POOR.

TABLE 6. KITTSON COUNTY: 13 GROWERS REPORTED ON 6,847 ACRES.

TREATMENT	NO. RPTG.	ACRES TRTED	% OF TOTAL	Ave # App	NO. OF GROWERS REPORTING									
					WEED CONTROL					CROP INJURY				
					*NR	*EXC	*GD	*FR	*PR	NR	None	Slt	Mod	Sev
A. SOIL APPLIED HERBICIDES:														
NORTRON(PRE/PPI)	4	524	7.7	1.0	0	4	0	0	0	0	2	2	0	0
TOTAL-PPI&PRE	4	524	7.7	1.0	0	4	0	0	0	0	2	2	0	0
B. POSTEMERGENCE HERBICIDES:														
PROG+STING+UPB+SLCT+OIL	6	6466	94.4	2.2	2	1	3	0	0	2	2	2	0	0
BMIX+STING+UPB+SLCT+OIL	3	3908	57.1	2.7	0	2	1	0	0	0	1	2	0	0
PROG+STING+UPBT+NORT+OIL	4	3400	49.7	1.5	1	1	2	0	0	1	1	2	0	0
PROG+STING+UPB+ASUR+OIL	2	2320	33.9	3.0	0	2	0	0	0	0	0	2	0	0
PROGRESS+STINGER+UPBEET	3	2008	29.3	1.7	0	1	2	0	0	0	1	2	0	0
PROG+STING+UPBEET+OIL	4	1070	15.6	1.5	0	1	3	0	0	0	2	2	0	0
PROG+STING+UPB+POAST+OIL	1	1011	14.8	3.0	1	0	0	0	0	1	0	0	0	0
PROG+UPBEET+SELECT+OIL	2	1006	14.7	1.5	0	1	0	1	0	0	0	2	0	0
SELECT/PRISM	2	476	7.0	1.5	0	0	1	1	0	0	1	1	0	0
PROGRESS+STINGER	1	340	5.0	2.0	0	0	1	0	0	0	1	0	0	0
PROGRESS+UPBEET	1	340	5.0	2.0	0	0	1	0	0	0	1	0	0	0
BNEX+UPBEET+SELECT+OIL	1	287	4.2	1.0	0	0	1	0	0	0	1	0	0	0
BNEX+STING+UPBEET+OIL	1	237	3.5	1.0	0	0	1	0	0	0	0	1	0	0
OTHER COMBINATIONS	1	136	2.0	1.0	0	0	0	1	0	0	0	1	0	0
BNEX+STING+UPBT+SLCT+OIL	1	100	1.5	1.0	0	0	1	0	0	0	0	1	0	0
TOTAL-POST	33	23105	337.4	1.8	4	9	17	3	0	4	11	18	0	0
C. PREEMERGE & LAY-BY HERBICIDES:														
ROUNDUP (PRE)	1	155	2.3	1.0	1	0	0	0	0	1	0	0	0	0
TOTAL-PRE&LAY-BY	1	155	2.3	1.0	1	0	0	0	0	1	0	0	0	0
D. OTHER WEED CONTROL METHODS:														
ROTARY HOE	4	2586	37.8	1.0	2	0	1	1	0	1	1	2	0	0
WEED PULLER	1	100	1.5	1.0	0	0	0	1	0	0	0	1	0	0
TOTAL-OTHER	5	2686	39.2	1.0	2	0	1	2	0	1	1	3	0	0
TOTAL TREATMENTS	43	26470	386.6	1.7	7	13	18	5	0	6	14	23	0	0

*NR=NO RESPONSE; EXC=EXCELLENT; GD=GOOD; FR=FAIR; PR=POOR.

TABLE 7. MARSHALL COUNTY: 19 GROWERS REPORTED ON 14,186 ACRES.

TREATMENT	NO. RPTG.	ACRES TRTED	% OF TOTAL	Ave # App	NO. OF GROWERS REPORTING									
					WEED CONTROL					CROP INJURY				
					*NR	*EXC	*GD	*FR	*PR	NR	None	SlT	Mod	Sev
A. SOIL APPLIED HERBICIDES:														
NORTRON(PRE/PPI)	3	610	4.3	1.0	0	0	2	1	0	0	2	1	0	0
TOTAL-PPI&PRE	3	610	4.3	1.0	0	0	2	1	0	0	2	1	0	0
B. POSTEMERGENCE HERBICIDES:														
PROG+STING+UPB+SLCT+OIL	11	13918	98.1	2.2	1	2	8	0	0	1	3	7	0	0
BNEX+STING+UPBT+SLCT+OIL	7	5348	37.7	1.4	1	1	4	1	0	1	1	5	0	0
PROGRESS+UPBEET	1	5000	35.2	2.0	0	0	1	0	0	0	0	1	0	0
BMIX+STING+UPB+SLCT+OIL	5	4875	34.4	1.6	0	0	3	2	0	0	0	5	0	0
PROG+UPBEET+SELECT+OIL	3	4731	33.3	1.7	0	0	2	1	0	0	2	1	0	0
PROG+STING+UPB+POAST+OIL	1	2859	20.2	3.0	0	0	1	0	0	0	0	1	0	0
BNEX+STING+UPBEET+OIL	1	2500	17.6	1.0	0	0	1	0	0	0	0	1	0	0
BNEX+STING+UPB+ASSUR+OIL	1	2500	17.6	2.0	0	0	1	0	0	0	1	0	0	0
PROG+STG+UPB+SLT+NOR+OIL	2	2416	17.0	2.0	0	1	1	0	0	0	0	2	0	0
BNEX+UPBEET+SELECT+OIL	2	1923	13.6	1.0	0	0	2	0	0	0	2	0	0	0
SELECT/PRISM	3	1893	13.3	2.3	0	1	2	0	0	0	2	1	0	0
PROGRESS+STINGER+UPBEET	1	718	5.1	2.0	0	0	1	0	0	0	0	1	0	0
PROG+STINGER+UPBEET+OIL	2	703	5.0	1.5	0	0	2	0	0	0	0	2	0	0
BMIX+UPBEET+SELECT+OIL	2	700	4.9	1.5	0	0	2	0	0	0	2	0	0	0
BMIX+STING+UPBEET+OIL	1	690	4.9	2.0	0	0	1	0	0	0	0	1	0	0
OTHER COMBINATIONS	3	374	2.6	1.3	0	0	2	1	0	0	2	0	1	0
POAST	1	315	2.2	1.0	0	0	1	0	0	0	1	0	0	0
BETANEX+STINGER+UPBEET	2	225	1.6	1.0	1	0	1	0	0	1	0	1	0	0
BETAMIX+STINGER+UPBEET	1	160	1.1	1.0	0	0	1	0	0	0	0	1	0	0
BETANEX+UPBEET	1	75	0.5	1.0	1	0	0	0	0	1	0	0	0	0
TOTAL-POST	51	51923	366.0	1.7	4	5	37	5	0	4	16	30	1	0
C. PREEMERGE & LAY-BY HERBICIDES:														
DUAL (LAY-BY)	3	1360	9.6	1.0	1	0	0	2	0	1	0	2	0	0
ROUNDUP (PRE)	1	300	2.1	1.0	0	1	0	0	0	0	1	0	0	0
TOTAL-PRE&LAY-BY	4	1660	11.7	1.0	1	1	0	2	0	1	1	2	0	0
D. OTHER WEED CONTROL METHODS:														
ROTARY HOE	11	10845	76.4	1.6	4	1	5	1	0	4	1	6	0	0
HARROW	4	2624	18.5	1.0	2	0	2	0	0	2	0	2	0	0
TOTAL-OTHER	15	13469	94.9	1.5	6	1	7	1	0	6	1	8	0	0
TOTAL TREATMENTS	73	67662	477.0	1.6	11	7	46	9	0	11	20	41	1	0

*NR=NO RESPONSE; EXC=EXCELLENT; GD=GOOD; FR=FAIR; PR=POOR.

TABLE 8. NORMAN AND MAHNOMEN COUNTY: 18 GROWERS REPORTED ON 11,050 ACRES.

TREATMENT	NO. RPTG.	ACRES TRTED	% OF TOTAL	Ave # App	NO. OF GROWERS REPORTING									
					WEED CONTROL					CROP INJURY				
					*NR	*EXC	*GD	*FR	*PR	NR	None	Slt	Mod	Sev
A. SOIL APPLIED HERBICIDES:														
NORTRON (PRE/PPI)	3	442	4.0	1.0	1	0	1	0	1	2	1	0	0	0
EPTAM+RO-NEET	1	240	2.2	1.0	0	0	1	0	0	0	1	0	0	0
TOTAL-PPI&PRE	4	682	6.2	1.0	1	0	2	0	1	2	2	0	0	0
B. POSTEMERGENCE HERBICIDES:														
BNEX+STING+UPBT+SLCT+OIL	8	10135	91.7	1.8	2	1	5	0	0	2	1	4	0	1
BMIX+STING+UPB+SLCT+OIL	11	7815	70.7	1.4	3	3	5	0	0	3	2	4	1	1
PROG+STING+UPB+SLCT+OIL	6	6616	59.9	2.2	1	1	4	0	0	1	0	2	2	1
BMIX+STING+UP+POAST+OIL	1	5000	45.2	2.0	0	0	1	0	0	0	0	1	0	0
BETANEX+STINGER	1	2122	19.2	2.0	1	0	0	0	0	1	0	0	0	0
BNEX+STING+UPB+POAST+OIL	1	2122	19.2	2.0	1	0	0	0	0	1	0	0	0	0
BMIX+STING+UPB+ASSUR+OIL	1	1660	15.0	4.0	0	1	0	0	0	0	1	0	0	0
OTHER COMBINATIONS	2	1308	11.8	2.0	1	1	0	0	0	1	0	1	0	0
PROG+STING+UPB+POAST+OIL	2	1150	10.4	1.0	1	0	1	0	0	1	0	1	0	0
BMIX+STG+UPB+NORT+OIL	2	1000	9.0	1.0	2	0	0	0	0	2	0	0	0	0
PROG+STING+UPBEET+OIL	3	963	8.7	1.3	0	1	2	0	0	1	1	1	0	0
BMX+STG+UPB+SLT+NORT+OIL	2	890	8.1	1.5	0	1	1	0	0	0	1	1	0	0
SELECT/PRISM	2	735	6.7	1.0	1	1	0	0	0	1	1	0	0	0
BMIX+STINGER+UPBEET+OIL	1	720	6.5	3.0	0	0	1	0	0	0	0	1	0	0
BNX+STG+UPB+SLT+NORT+OIL	1	400	3.6	1.0	0	0	1	0	0	0	0	1	0	0
PROGRESS+STINGER	1	80	0.7	1.0	0	0	1	0	0	0	0	1	0	0
PROG+STING+UPB+NORT+OIL	1	72	0.7	1.0	0	1	0	0	0	1	0	0	0	0
BETAMIX+STINGER	1	10	0.1	1.0	0	0	0	1	0	0	1	0	0	0
TOTAL-POST	47	42798	387.3	1.6	13	11	22	1	0	15	8	18	3	3
C. PREEMERGE & LAY-BY HERBICIDES:														
DUAL (LAY-BY)	2	650	5.9	1.0	0	1	1	0	0	1	1	0	0	0
ROUNDUP (PRE)	1	100	0.9	1.0	0	1	0	0	0	0	1	0	0	0
TOTAL-PRE&LAY-BY	3	750	6.8	1.0	0	2	1	0	0	1	2	0	0	0
D. OTHER WEED CONTROL METHODS:														
ROTARY HOE	8	2875	26.0	1.3	3	1	3	1	0	4	0	3	1	0
TOTAL-OTHER	8	2875	26.0	1.3	3	1	3	1	0	4	0	3	1	0
TOTAL TREATMENTS	62	47105	426.3	1.5	17	14	28	2	1	22	12	21	4	3

*NR=NO RESPONSE; EXC=EXCELLENT; GD=GOOD; FR=FAIR; PR=POOR.

TABLE 9. **PEMBINA COUNTY:** 17 GROWERS REPORTED ON 11,722 ACRES.

TREATMENT	NO. RPTG.	ACRES TRTED	% OF TOTAL	Ave # App	NO. OF GROWERS REPORTING									
					WEED CONTROL					CROP INJURY				
					*NR	*EXC	*GD	*FR	*PR	NR	None	Slt	Mod	Sev
A. SOIL APPLIED HERBICIDES:														
NORTRON(PRE/PPI)	9	3869	33.0	1.0	1	4	4	0	0	1	5	3	0	0
TOTAL-PPI&PRE	9	3869	33.0	1.0	1	4	4	0	0	1	5	3	0	0
B. POSTEMERGENCE HERBICIDES:														
PROG+STINGER+UPBEET+OIL	6	8618	73.5	2.2	0	0	4	2	0	0	1	5	0	0
PROG+STING+UPB+SLCT+OIL	3	6418	54.8	3.3	0	0	3	0	0	0	2	1	0	0
BMIX+STING+UPB+SLCT+OIL	3	5055	43.1	2.3	2	0	0	1	0	2	1	0	0	0
PROGRESS+UPBEET	8	4952	42.2	1.5	0	3	1	4	0	0	3	4	1	0
BNEX+STING+UPBT+SLCT+OIL	3	4090	34.9	1.7	1	0	0	2	0	1	1	1	0	0
BNEX+STINGER+UPBEET+OIL	1	3400	29.0	2.0	0	0	1	0	0	0	0	1	0	0
SELECT/PRISM	9	3384	28.9	1.3	0	4	3	2	0	0	9	0	0	0
BETANEX+STINGER+UPBEET	2	3162	27.0	3.0	0	1	0	1	0	0	0	2	0	0
PROG+STG+UPB+SLT+NOR+OIL	1	2908	24.8	4.0	0	1	0	0	0	0	0	1	0	0
BMIX+STINGER+UPBEET+OIL	1	1830	15.6	3.0	0	0	1	0	0	0	0	1	0	0
BMX+STG+UPB+SLT+NORT+OIL	2	1472	12.6	1.0	0	1	0	1	0	0	2	0	0	0
BNX+STG+UPB+SLT+NORT+OIL	1	1001	8.5	1.0	1	0	0	0	0	0	0	0	0	1
BNEX+STING+UPB+POAST+OIL	1	534	4.6	2.0	0	0	1	0	0	0	0	0	1	0
POAST	2	381	3.3	1.0	0	0	1	0	1	0	2	0	0	0
BMIX+STING+UPBT+NORT+OIL	1	344	2.9	1.0	0	1	0	0	0	0	1	0	0	0
PROGRESS+STINGER	1	273	2.3	1.0	0	1	0	0	0	0	1	0	0	0
PROGRESS+STINGER+UPBEET	1	270	2.3	3.0	0	0	1	0	0	0	0	1	0	0
ASSURE II	2	214	1.8	1.0	0	0	1	0	1	0	2	0	0	0
TOTAL-POST	48	48306	412.1	1.8	4	12	17	13	2	3	25	17	2	1
C. PREEMERGE & LAY-BY HERBICIDES:														
DUAL (LAY-BY)	1	604	5.2	2.0	0	1	0	0	0	0	0	1	0	0
ROUNDUP (PRE)	2	270	2.3	1.0	0	1	1	0	0	0	2	0	0	0
TREFLAN (LAY-BY)	2	200	1.7	1.0	0	1	1	0	0	0	1	1	0	0
TOTAL-PRE&LAY-BY	6	1589	13.6	1.2	0	3	2	1	0	0	3	3	0	0
D. OTHER WEED CONTROL METHODS:														
ROTARY HOE	5	6210	53.0	1.4	0	1	2	2	0	0	2	3	0	0
TOTAL-OTHER	5	6210	53.0	1.4	0	1	2	2	0	0	2	3	0	0
TOTAL TREATMENTS	68	59974	511.6	1.6	5	20	25	16	2	4	35	26	2	1

*NR=NO RESPONSE; EXC=EXCELLENT; GD=GOOD; FR=FAIR; PR=POOR.

TABLE 10. POLK COUNTY: 55 GROWERS REPORTED ON 32,364 ACRES.

TREATMENT	NO. RPTG.	ACRES TRTED	% OF TOTAL	Ave # App	NO. OF GROWERS REPORTING									
					WEED CONTROL					CROP INJURY				
					NR	EXC*	GD*	FR*	PR	NR	None	SlT	Mod	Sev
A. SOIL APPLIED HERBICIDES:														
DUAL (PRE/PPI)	6	15464	47.8	1.5	2	0	4	0	0	3	2	1	0	0
NORTRON (PRE/PPI)	13	3529	10.9	1.3	0	2	10	1	0	0	10	3	0	0
TOTAL-PPI&PRE	19	18993	58.7	1.4	2	2	14	1	0	3	12	4	0	0
B. POSTEMERGENCE HERBICIDES:														
PROG+STING+UPB+SLCT+OIL	16	16850	52.1	2.1	1	5	8	2	0	4	7	5	0	0
BMIX+STING+UPB+SLCT+OIL	16	15873	49.0	2.1	2	6	6	1	1	4	6	5	1	0
SELECT/PRISM	16	12384	38.3	1.5	1	8	7	0	0	2	13	1	0	0
BMIX+STINGER+UPBEET+OIL	12	9734	30.1	1.4	3	4	5	0	0	3	5	4	0	0
BMX+STG+UPB+SLT+NORT+OIL	6	9692	29.9	2.2	2	0	4	0	0	2	1	2	1	0
BNEX+STING+UPB+SLCT+OIL	11	6713	20.7	1.7	0	5	5	1	0	1	6	4	0	0
PROG+STING+UPBEET+OIL	10	5331	16.5	1.2	3	2	5	0	0	4	2	2	2	0
BMIX+STING+UP+POAST+OIL	6	5186	16.0	1.7	0	0	6	0	0	0	2	4	0	0
BNEX+STINGER+UPBEET+OIL	6	4526	14.0	1.3	3	1	2	0	0	3	1	0	2	0
BNEX+STING+UPB+POAST+OIL	5	3906	12.1	1.4	0	0	5	0	0	0	2	3	0	0
BMIX+STING+UPBT+NORT+OIL	5	3840	11.9	2.0	0	0	4	1	0	0	0	4	1	0
OTHER COMBINATIONS	5	3597	11.1	2.0	0	0	5	0	0	0	2	2	1	0
BNX+STG+UPB+SLT+NORT+OIL	3	3192	9.9	2.0	0	0	3	0	0	0	2	1	0	0
BMIX+STING+UPB+ASSUR+OIL	3	3091	9.6	2.0	1	0	2	0	0	1	1	0	1	0
PROGRESS+STINGER+UPBEET	5	3023	9.3	1.8	0	1	4	0	0	0	2	3	0	0
PROG+UPBEET+SELECT+OIL	3	2863	8.8	2.0	1	0	2	0	0	1	2	0	0	0
BMIX+UPBEET+SELECT+OIL	3	2023	6.3	1.0	0	1	2	0	0	0	2	1	0	0
PROG+STING+UPB+POAST+OIL	2	1946	6.0	2.0	0	0	2	0	0	0	0	2	0	0
PROG+STG+UPB+SLT+NOR+OIL	1	1600	4.9	1.0	0	0	1	0	0	0	1	0	0	0
BETAMIX+UPBEET	2	1203	3.7	2.0	0	0	2	0	0	0	0	2	0	0
PROGRESS+STINGER	2	969	3.0	2.0	0	0	2	0	0	0	1	1	0	0
BNEX+STING+UPB+NORT+OIL	1	920	2.8	2.0	0	0	1	0	0	0	1	0	0	0
BNEX+UPBEET+SELECT+OIL	2	639	2.0	1.0	0	1	1	0	0	0	2	0	0	0
PROGRESS+UPBEET	2	590	1.8	1.5	0	0	2	0	0	0	1	1	0	0
BNEX+STING+UPB+ASSUR+OIL	1	548	1.7	1.0	0	0	1	0	0	0	1	0	0	0
PROG+STING+UPBT+NORT+OIL	2	516	1.6	3.0	0	0	2	0	0	0	0	2	0	0
BETANEX+STINGER	2	355	1.1	1.0	0	0	2	0	0	0	1	1	0	0
POAST	1	306	0.9	1.0	0	1	0	0	0	0	1	0	0	0
BETAMIX+STINGER+UPBEET	1	260	0.8	1.0	0	0	1	0	0	0	0	1	0	0
BETAMIX+STINGER	2	249	0.8	1.0	0	0	2	0	0	0	2	0	0	0
BETANEX+STINGER+UPBEET	1	152	0.5	1.0	0	0	1	0	0	0	1	0	0	0
ASSURE II	2	100	0.3	1.0	0	0	1	0	1	0	2	0	0	0
TOTAL-POST	155	122177	377.5	1.7	17	35	96	5	2	25	70	51	9	0
C. PREEMERGE & LAY-BY HERBICIDES:														
DUAL (LAY-BY)	16	5250	16.2	1.0	1	3	9	2	1	1	5	6	4	0
ROUNDUP (PRE)	10	3931	12.1	1.0	2	5	3	0	0	2	8	0	0	0
TREFLAN (LAY-BY)	6	3470	10.7	1.0	2	1	3	0	0	2	1	3	0	0
TOTAL-PRE&LAY-BY	32	12651	39.1	1.0	5	9	15	2	1	5	14	9	4	0
D. OTHER WEED CONTROL METHODS:														
ROTARY HOE	34	23553	72.8	1.3	10	3	15	6	0	11	8	14	1	0
HARROW	3	1106	3.4	1.3	1	0	2	0	0	1	0	2	0	0
ELECTRICAL (EDS)	1	200	0.6	1.0	0	0	1	0	0	0	0	1	0	0
WEED PULLER	2	163	0.5	1.0	1	0	0	1	0	2	0	0	0	0
TOTAL-OTHER	40	25022	77.3	1.3	12	3	18	7	0	14	8	17	1	0
TOTAL TREATMENTS	246	178843	552.6	1.5	36	49	143	15	3	47	104	81	14	0

*NR=NO RESPONSE; EXC=EXCELLENT; GD=GOOD; FR=FAIR; PR=POOR.

TABLE 11. RENVILLE, FARIBAULT, LAC QUI PARLE, REDWOOD, SIBLEY AND YELLOW MEDICINE COUNTY: 42 GROWERS REPORTED ON 12,276 ACRES.

TREATMENT	NO. RPTG.	ACRES TRTED	% OF TOTAL	Ave # App	NO. OF GROWERS REPORTING									
					WEED CONTROL					CROP INJURY				
					NR	EXC*	GD*	FR*	PR	NR	None	Slt	Mod	Sev
A. SOIL APPLIED HERBICIDES:														
DUAL (PRE/PPI)	23	5047	41.1	1.0	0	4	12	7	0	0	3	11	9	0
NORTRON (PRE/PPI)	13	2235	18.2	1.0	0	1	7	3	2	0	8	3	1	1
RO-NEET	1	598	4.9	2.0	1	0	0	0	0	1	0	0	0	0
TOTAL-PPI&PRE	37	7880	64.2	1.1	1	5	19	10	2	1	11	14	10	1
B. POSTEMERGENCE HERBICIDES:														
SELECT/PRISM	33	11143	90.8	1.1	0	23	9	0	1	0	32	1	0	0
PROGRESS+STINGER	17	5097	41.5	1.6	0	0	8	9	0	0	3	14	0	0
BETAMIX+STINGER+UPBEET	4	4304	35.1	2.3	0	0	3	0	1	0	2	2	0	0
PROGRESS	14	4061	33.1	1.7	0	2	9	3	0	0	2	12	0	0
PROGRESS+STINGER+UPBEET	5	3725	30.3	1.8	0	1	2	2	0	0	1	4	0	0
BETANEX+STINGER+UPBEET	6	2959	24.1	1.8	1	2	1	2	0	1	2	3	0	0
PROG+STINGER+UPBEET+OIL	5	2919	23.8	2.0	0	2	3	0	0	0	2	2	1	0
BMIX+STING+UPBT+NORT+OIL	4	2135	17.4	1.8	0	0	1	3	0	0	0	2	1	1
BMIX+STINGER+UPBEET+OIL	3	2125	17.3	2.3	0	0	2	1	0	0	0	3	0	0
PROGRESS+UPBEET	4	1891	15.4	1.5	0	0	3	0	1	0	3	0	1	0
BMIX+STING+UPB+SLCT+OIL	4	1591	13.0	1.5	0	0	4	0	0	0	2	2	0	0
BETANEX+STINGER	5	1203	9.8	1.4	1	0	3	0	1	1	2	2	0	0
ASSURE II	6	1192	9.7	1.0	0	4	1	1	0	0	6	0	0	0
BETAMIX+STINGER	4	846	6.9	1.5	0	1	2	1	0	0	0	4	0	0
OTHER COMBINATIONS	3	609	5.0	1.0	0	0	2	0	1	1	1	1	0	0
PROG+STING+UPB+SLCT+OIL	1	506	4.1	2.0	0	0	1	0	0	0	0	1	0	0
BETANEX+UPBEET	1	160	1.3	1.0	0	0	0	0	1	0	1	0	0	0
PROG+STING+UPBT+NORT+OIL	1	90	0.7	1.0	0	1	0	0	0	0	1	0	0	0
TOTAL-POST	120	46556	379.2	1.5	2	36	54	22	6	3	60	53	3	1
C. PREEMERGE & LAY-BY HERBICIDES:														
DUAL (LAY-BY)	16	3304	26.9	1.1	0	0	5	10	1	0	10	4	1	1
TOTAL-PRE&LAY-BY	16	3304	26.9	1.1	0	0	5	10	1	0	10	4	1	1
D. OTHER WEED CONTROL METHODS:														
ROTARY HOE	22	10105	82.3	1.3	4	1	6	10	1	6	6	8	2	0
HARROW	4	865	7.0	1.0	1	0	2	1	0	1	0	3	0	0
TOTAL-OTHER	26	10970	89.4	1.3	5	1	8	11	1	7	6	11	2	0
TOTAL TREATMENTS	199	68710	559.7	1.3	8	42	86	53	10	11	87	82	16	3

*NR=NO RESPONSE; EXC=EXCELLENT; GD=GOOD; FR=FAIR; PR=POOR.

TABLE 12. RICHLAND COUNTY: 25 GROWERS REPORTED ON 13,761 ACRES.

TREATMENT	NO. RPTG.	ACRES TRTED	% OF TOTAL	Ave # App	NO. OF GROWERS REPORTING									
					WEED CONTROL					CROP INJURY				
					*NR	*EXC	*GD	*FR	*PR	NR	None	Slt	Mod	Sev
A. SOIL APPLIED HERBICIDES:														
NORTRON(PRE/PPI)	16	5860	42.6	1.1	2	2	10	1	1	2	10	4	0	0
DUAL(PRE/PPI)	3	658	4.8	1.0	0	0	1	2	0	0	2	0	1	0
TOTAL-PPI&PRE	19	6518	47.4	1.1	2	2	11	3	1	2	12	4	1	0
B. POSTEMERGENCE HERBICIDES:														
BMIX+STINGER+UPBEET+OIL	4	7842	57.0	3.0	1	0	3	0	0	1	0	3	0	0
BMIX+STING+UPBT+NORT+OIL	6	6790	49.3	2.5	0	0	5	0	1	0	2	4	0	0
BMIX+STING+UPBT+SLCT+OIL	5	6080	44.2	2.4	0	0	3	2	0	0	1	4	0	0
BNEX+STING+UPBT+SLCT+OIL	7	5984	43.5	2.0	2	1	4	0	0	2	3	2	0	0
BMIX+STING+UP+POAST+OIL	2	5342	38.8	4.0	0	1	0	1	0	0	1	1	0	0
PROG+STING+UPB+NORT+OIL	3	5314	38.6	2.7	0	0	3	0	0	0	2	1	0	0
SELECT/PRISM	10	3988	29.0	1.0	2	6	1	1	0	2	8	0	0	0
PROG+STING+UPB+SLCT+OIL	3	1950	14.2	1.3	1	1	1	0	0	1	1	0	1	0
BNX+STG+UPB+SLT+NORT+OIL	3	1728	12.6	2.3	0	1	0	2	0	0	0	3	0	0
PROGRESS+STINGER+UPBEET	1	1520	11.0	2.0	0	0	1	0	0	0	0	1	0	0
BETAMIX+STINGER+UPBEET	1	1280	9.3	4.0	1	0	0	0	0	1	0	0	0	0
BMIX+STING+UPB+ASSUR+OIL	1	1100	8.0	1.0	0	0	1	0	0	0	0	1	0	0
BMX+STG+UPB+SLT+NORT+OIL	1	800	5.8	1.0	1	0	0	0	0	1	0	0	0	0
OTHER COMBINATIONS	3	401	2.9	1.0	0	0	2	1	0	0	0	3	0	0
BNEX+STING+UPB+POAST+OIL	1	400	2.9	1.0	0	0	0	1	0	0	0	1	0	0
BETAMIX+UPBEET	1	143	1.0	1.0	0	0	0	1	0	0	1	0	0	0
ASSURE II	1	135	1.0	1.0	0	1	0	0	0	0	1	0	0	0
POAST	1	50	0.4	1.0	0	0	1	0	0	0	1	0	0	0
TOTAL-POST	54	50847	369.5	1.9	8	11	25	9	1	8	21	24	1	0
C. PREEMERGE & LAY-BY HERBICIDES:														
DUAL (LAY-BY)	3	1530	11.1	1.0	1	0	2	0	0	1	1	1	0	0
ROUNDUP (PRE)	2	625	4.5	1.0	0	2	0	0	0	0	2	0	0	0
TOTAL-PRE&LAY-BY	5	2155	15.7	1.0	1	2	2	0	0	1	3	1	0	0
D. OTHER WEED CONTROL METHODS:														
ROTARY HOE	4	2762	20.1	1.5	2	1	0	1	0	2	1	1	0	0
TOTAL-OTHER	4	2762	20.1	1.5	2	1	0	1	0	2	1	1	0	0
TOTAL TREATMENTS	82	62282	452.6	1.7	13	16	38	13	2	13	37	30	2	0

*NR=NO RESPONSE; EXC=EXCELLENT; GD=GOOD; FR=FAIR; PR=POOR.

TABLE 13. TRAILL COUNTY: 12 GROWERS REPORTED ON 5,544 ACRES.

TREATMENT	NO. RPTG.	ACRES TRTED	% OF TOTAL	Ave # App	NO. OF GROWERS REPORTING									
					WEED CONTROL					CROP INJURY				
					*NR	*EXC	*GD	*FR	*PR	NR	None	Slt	Mod	Sev
A. SOIL APPLIED HERBICIDES:														
NORTRON(PRE/PPI)	2	480	8.7	1.0	0	0	2	0	0	0	1	1	0	0
EPTAM	1	414	7.5	1.0	0	0	1	0	0	0	1	0	0	0
DUAL(PRE/PPI)	1	5	0.1	1.0	0	0	1	0	0	0	0	0	0	1
TOTAL-PPI&PRE	4	899	16.2	1.0	0	0	4	0	0	0	2	1	0	1
B. POSTEMERGENCE HERBICIDES:														
PROG+STING+UPBT+SLCT+OIL	5	5585	100.7	2.0	0	1	4	0	0	0	3	2	0	0
BMIX+STING+UPBT+SLCT+OIL	3	3120	56.3	2.3	0	1	1	1	0	0	0	3	0	0
BMX+STG+UPB+SLT+NORT+OIL	2	2395	43.2	1.5	0	0	2	0	0	0	0	2	0	0
PROG+UPBEET+SELECT+OIL	1	1440	26.0	4.0	0	0	1	0	0	0	1	0	0	0
BNEX+STING+UPBT+NORT+OIL	1	1250	22.5	2.0	0	0	1	0	0	0	0	1	0	0
POAST	2	1050	18.9	2.0	0	1	1	0	0	0	2	0	0	0
BNX+STG+UPB+SLT+NORT+OIL	1	1020	18.4	3.0	0	0	1	0	0	0	0	1	0	0
PROGRESS+STINGER+UPBEET	1	990	17.9	3.0	0	0	1	0	0	0	1	0	0	0
BNEX+STING+UPBT+SLCT+OIL	3	934	16.8	1.0	0	0	2	1	0	0	0	3	0	0
BETANEX+STINGER+UPBEET	1	828	14.9	2.0	0	0	1	0	0	0	0	1	0	0
PROGRESS+UPBEET	1	600	10.8	2.0	0	0	0	1	0	0	0	1	0	0
BNEX+STING+UPB+ASSUR+OIL	1	241	4.3	1.0	0	0	1	0	0	0	1	0	0	0
ASSURE II	1	100	1.8	1.0	0	1	0	0	0	0	1	0	0	0
TOTAL-POST	23	19553	352.7	2.0	0	4	16	3	0	0	9	14	0	0
C. PREEMERGE & LAY-BY HERBICIDES:														
DUAL (LAY-BY)	2	650	11.7	1.0	0	1	1	0	0	0	1	1	0	0
ROUNDUP (PRE)	1	150	2.7	1.0	0	1	0	0	0	0	0	0	0	1
TOTAL-PRE&LAY-BY	3	800	14.4	1.0	0	2	1	0	0	0	1	1	0	1
D. OTHER WEED CONTROL METHODS:														
ROTARY HOE	4	3955	71.3	1.5	1	1	0	2	0	1	2	1	0	0
HARROW	1	480	8.7	1.0	0	1	0	0	0	0	1	0	0	0
TOTAL-OTHER	5	4435	80.0	1.4	1	2	0	2	0	1	3	1	0	0
TOTAL TREATMENTS	35	25687	463.3	1.7	1	8	21	5	0	1	15	17	0	2

*NR=NO RESPONSE; EXC=EXCELLENT; GD=GOOD; FR=FAIR; PR=POOR.

TABLE 14. TRAVERSE, BIG STONE, GRANT AND STEVENS COUNTY: 22 GROWERS REPORTED ON 9,540 ACRES.

TREATMENT	NO. RPTG.	ACRES TRTED	% OF TOTAL	Ave # App	NO. OF GROWERS REPORTING									
					WEED CONTROL					CROP INJURY				
					*NR	*EXC	*GD	*FR	*PR	NR	None	Slt	Mod	Sev
A. SOIL APPLIED HERBICIDES:														
NORTRON (PRE/PPI)	3	940	9.9	1.0	0	1	1	1	0	1	2	0	0	0
EPTAM+RO-NEET	1	500	5.2	1.0	0	0	1	0	0	0	1	0	0	0
DUAL (PRE/PPI)	3	391	4.1	1.0	0	2	1	0	0	0	2	0	1	0
TOTAL-PPI&PRE	7	1831	19.2	1.0	0	3	3	1	0	1	5	0	1	0
B. POSTEMERGENCE HERBICIDES:														
PROG+STINGER+UPBEET+OIL	1	5400	56.6	4.0	0	0	0	1	0	0	0	1	0	0
BMX+STG+UPB+SLT+NORT+OIL	5	4819	50.5	3.0	0	1	3	1	0	0	3	1	1	0
PROGRESS+STINGER+UPBEET	3	4560	47.8	2.7	1	1	0	1	0	1	0	2	0	0
BMIX+STINGER+UPBEET+OIL	2	3700	38.8	3.0	0	0	1	1	0	0	1	1	0	0
BNX+STG+UPB+SLT+NORT+OIL	3	2817	29.5	1.7	0	1	1	1	0	0	2	1	0	0
BNEX+STINGER+UPBEET+OIL	2	2514	26.4	3.0	0	1	0	0	1	0	2	0	0	0
PROG+STING+UPBT+NORT+OIL	3	1445	15.1	2.3	0	0	3	0	0	0	1	2	0	0
OTHER COMBINATIONS	3	1428	15.0	1.7	1	1	1	0	0	1	1	1	0	0
BMIX+STING+UPBT+SLCT+OIL	3	1280	13.4	2.0	1	2	0	0	0	1	1	1	0	0
PROGRESS+UPBEET	1	1154	12.1	2.0	0	0	1	0	0	0	0	1	0	0
PROG+STG+UPB+SLT+NOR+OIL	2	1080	11.3	1.5	0	1	1	0	0	0	0	2	0	0
BETAMIX+STINGER	1	1000	10.5	2.0	0	0	0	1	0	0	0	1	0	0
BMIX+STING+UPBT+NORT+OIL	1	980	10.3	4.0	0	0	1	0	0	0	1	0	0	0
POAST	2	958	10.0	1.0	0	1	1	0	0	0	2	0	0	0
SELECT/PRISM	4	927	9.7	1.0	0	1	3	0	0	0	4	0	0	0
BMIX+STING+UPB+POAST+OIL	1	912	9.6	2.0	0	0	1	0	0	0	0	0	1	0
BNEX+STING+UPBT+SLCT+OIL	2	844	8.8	1.5	0	1	1	0	0	0	1	1	0	0
BNEX+STING+UPBT+NORT+OIL	1	674	7.1	2.0	0	0	1	0	0	0	0	1	0	0
BETAMIX+STINGER+UPBEET	1	270	2.8	3.0	0	0	1	0	0	0	0	1	0	0
TOTAL-POST	41	36762	385.3	2.2	3	11	20	6	1	3	19	17	2	0
C. PREEMERGE & LAY-BY HERBICIDES:														
ROUNDUP (PRE)	2	1433	15.0	1.0	0	2	0	0	0	0	2	0	0	0
DUAL (LAY-BY)	4	897	9.4	1.0	1	0	3	0	0	1	1	1	1	0
TOTAL-PRE&LAY-BY	6	2330	24.4	1.0	1	2	3	0	0	1	3	1	1	0
D. OTHER WEED CONTROL METHODS:														
ROTARY HOE	6	3171	33.2	1.3	2	1	3	0	0	2	0	3	1	0
HARROW	4	880	9.2	1.0	1	0	2	1	0	1	1	1	1	0
SWATH/FLAIL/MOW	1	40	0.4	1.0	0	0	0	1	0	0	0	1	0	0
TOTAL-OTHER	11	4091	42.9	1.2	3	1	5	2	0	3	1	5	2	0
TOTAL TREATMENTS	65	45014	471.8	1.8	7	17	31	9	1	8	28	23	6	0

*NR=NO RESPONSE; EXC=EXCELLENT; GD=GOOD; FR=FAIR; PR=POOR.

TABLE 15. WALSH COUNTY: 20 GROWERS REPORTED ON 16,342 ACRES.

TREATMENT	NO. RPTG.	ACRES TRTED	% OF TOTAL	Ave # App	NO. OF GROWERS REPORTING									
					WEED CONTROL					CROP INJURY				
					*NR	*EXC	*GD	*FR	*PR	NR	None	Slt	Mod	Sev
A. SOIL APPLIED HERBICIDES:														
NORTRON(PRE/PPI)	8	3886	23.8	1.0	0	1	6	1	0	0	7	1	0	0
TOTAL-PPI&PRE	8	3886	23.8	1.0	0	1	6	1	0	0	7	1	0	0
B. POSTEMERGENCE HERBICIDES:														
PROGRESS+STINGER	1	28500	174.4	3.0	0	0	1	0	0	0	0	1	0	0
SELECT/PRISM	5	21339	130.6	2.0	2	2	1	0	0	1	4	0	0	0
PROG+STINGER+UPBEET+OIL	4	3240	19.8	2.0	1	1	2	0	0	1	0	3	0	0
PROG+STING+UPBT+SLCT+OIL	7	3186	19.5	2.0	2	0	4	1	0	2	3	2	0	0
BNEX+STING+UPB+ASSUR+OIL	1	2196	13.4	3.0	0	0	0	1	0	0	1	0	0	0
BETANEX+STINGER+UPBEET	4	2101	12.9	1.8	1	0	2	1	0	1	0	2	1	0
BNEX+STINGER+UPBEET+OIL	1	2100	12.9	4.0	0	0	1	0	0	0	0	1	0	0
BNEX+STING+UPBT+SLCT+OIL	2	1602	9.8	1.5	0	0	2	0	0	0	2	0	0	0
BMIX+STING+UPB+SLCT+OIL	1	820	5.0	2.0	0	0	1	0	0	0	1	0	0	0
PROGRESS+UPBEET	1	700	4.3	2.0	0	0	1	0	0	0	0	1	0	0
PROG+UPBEET+SELECT+OIL	1	674	4.1	2.0	0	0	1	0	0	0	0	1	0	0
BETAMIX+STINGER	1	660	4.0	1.0	0	1	0	0	0	0	1	0	0	0
BETAMIX+UPBEET	1	660	4.0	1.0	0	1	0	0	0	0	1	0	0	0
PROGRESS+STINGER+UPBEET	2	460	2.8	1.5	1	0	1	0	0	1	1	0	0	0
PROG+STING+UPBT+ASUR+OIL	1	450	2.8	3.0	0	0	1	0	0	0	1	0	0	0
BNEX+STING+UPB+POAST+OIL	2	425	2.6	1.0	0	0	2	0	0	0	1	1	0	0
PROG+STING+UPB+POAST+OIL	2	373	2.3	1.5	0	0	2	0	0	0	1	1	0	0
BETANEX+UPBEET	1	350	2.1	1.0	0	0	1	0	0	0	0	1	0	0
POAST	1	343	2.1	1.0	0	0	1	0	0	0	1	0	0	0
PROG+STING+UPBT+NORT+OIL	1	15	0.1	1.0	0	0	1	0	0	0	0	1	0	0
TOTAL-POST	40	70194	429.5	1.9	7	5	25	3	0	6	18	15	1	0
C. PREEMERGE & LAY-BY HERBICIDES:														
DUAL (LAY-BY)	3	557	3.4	1.0	1	0	2	0	0	1	2	0	0	0
ROUNDUP (PRE)	2	420	2.6	1.0	0	2	0	0	0	0	2	0	0	0
TOTAL-PRE&LAY-BY	5	977	6.0	1.0	1	2	2	0	0	1	4	0	0	0
D. OTHER WEED CONTROL METHODS:														
ROTARY HOE	9	3875	23.7	1.2	3	1	2	3	0	3	2	4	0	0
HARROW	1	250	1.5	1.0	0	0	0	1	0	0	0	1	0	0
TOTAL-OTHER	10	4125	25.2	1.2	3	1	2	4	0	3	2	5	0	0
TOTAL TREATMENTS	63	79182	484.5	1.6	11	9	35	8	0	10	31	21	1	0

*NR=NO RESPONSE; EXC=EXCELLENT; GD=GOOD; FR=FAIR; PR=POOR.

TABLE 16. WILKIN AND OTTERTAIL COUNTY: 27 GROWERS REPORTED ON 14,016 ACRES.

TREATMENT	NO. RPTG.	ACRES TRTED	% OF TOTAL	Ave # App	NO. OF GROWERS REPORTING									
					WEED CONTROL					CROP INJURY				
					*NR	*EXC	*GD	*FR	*PR	NR	None	SlT	Mod	Sev
A. SOIL APPLIED HERBICIDES:														
NORTRON(PRE/PPI)	11	2774	19.8	1.1	2	3	4	2	0	2	9	0	0	0
TOTAL-PPI&PRE	11	2774	19.8	1.1	2	3	4	2	0	2	9	0	0	0
B. POSTEMERGENCE HERBICIDES:														
BMX+STG+UPB+SLT+NORT+OIL	7	12965	92.5	2.9	1	3	3	0	0	1	3	3	0	0
PROG+STING+UPBT+SLCT+OIL	4	7977	56.9	2.8	0	2	2	0	0	0	3	1	0	0
PROG+STING+UPBT+NORT+OIL	3	6000	42.8	1.7	0	1	2	0	0	0	2	1	0	0
BMIX+STING+UPBT+SLCT+OIL	7	5705	40.7	2.4	0	2	4	1	0	1	5	1	0	0
SELECT/PRISM	7	4257	30.4	1.4	0	5	2	0	0	0	7	0	0	0
BNX+STG+UPB+SLT+NORT+OIL	4	3094	22.1	1.3	0	2	1	1	0	0	4	0	0	0
BNEX+STINGER+UPBEET+OIL	4	2268	16.2	2.3	0	0	4	0	0	0	1	3	0	0
BNEX+STING+UPBT+SLCT+OIL	4	1953	13.9	1.8	0	2	2	0	0	0	3	1	0	0
PROG+STG+UPB+SLT+NOR+OIL	3	1765	12.6	2.3	1	0	2	0	0	1	2	0	0	0
BMIX+STINGER+UPBEET+OIL	5	1368	9.8	1.2	0	1	3	1	0	0	3	1	0	1
BMIX+STING+UPBT+NORT+OIL	3	814	5.8	2.7	0	1	1	1	0	0	2	1	0	0
BETANEX+UPBT+SELECT+OIL	2	654	4.7	1.0	0	1	1	0	0	0	2	0	0	0
OTHER COMBINATIONS	2	553	3.9	1.0	0	2	0	0	0	0	2	0	0	0
BETAMIX+STINGER+UPBEET	2	522	3.7	1.5	1	0	1	0	0	1	1	0	0	0
PROGRESS+STINGER+UPBEET	1	412	2.9	2.0	0	0	1	0	0	0	1	0	0	0
BNEX+STING+UPBT+NORT+OIL	1	304	2.2	1.0	0	0	1	0	0	0	1	0	0	0
BETAMIX+STINGER	1	163	1.2	1.0	0	0	1	0	0	0	0	1	0	0
PROG+STINGER+UPBEET+OIL	1	120	0.9	1.0	0	0	1	0	0	0	0	1	0	0
BETANEX+STINGER+UPBEET	1	110	0.8	1.0	1	0	0	0	0	1	0	0	0	0
TOTAL-POST	62	51004	363.9	1.9	4	22	32	4	0	5	42	14	0	1
C. PREEMERGE & LAY-BY HERBICIDES:														
DUAL (LAY-BY)	5	899	6.4	1.0	0	2	2	1	0	0	4	1	0	0
TOTAL-PRE&LAY-BY	6	949	6.8	1.0	0	2	2	2	0	0	4	2	0	0
D. OTHER WEED CONTROL METHODS:														
ROTARY HOE	6	2853	20.4	1.3	1	1	0	4	0	1	1	4	0	0
SWATH/FLAIL/MOW	2	400	2.9	1.0	0	1	1	0	0	0	1	1	0	0
TOTAL-OTHER	8	3253	23.2	1.3	1	2	1	4	0	1	2	5	0	0
TOTAL TREATMENTS	87	57980	413.7	1.7	7	29	39	12	0	8	57	21	0	1

*NR=NO RESPONSE; EXC=EXCELLENT; GD=GOOD; FR=FAIR; PR=POOR.

TABLE 17. **OTHER COUNTY:** 5 GROWERS REPORTED ON 1,791 ACRES.

TREATMENT	NO. RPTG.	ACRES TRTED	% OF TOTAL	Ave # App	NO. OF GROWERS REPORTING									
					WEED CONTROL					CROP INJURY				
					*NR	*EXC	*GD	*FR	*PR	NR	None	Slt	Mod	Sev
A. SOIL APPLIED HERBICIDES:														
DUAL(PRE/PPI)	1	350	19.5	1.0	0	1	0	0	0	0	1	0	0	0
TOTAL-PPI&PRE	1	350	19.5	1.0	0	1	0	0	0	0	1	0	0	0
B. POSTEMERGENCE HERBICIDES:														
BETANEX+STINGER+UPBEET	2	2300	128.4	3.0	0	1	1	0	0	0	1	1	0	0
BMX+STG+UPB+SLT+NORT+OIL	1	1050	58.6	3.0	1	0	0	0	0	1	0	0	0	0
PROG+STING+UPBT+ASUR+OIL	1	675	37.7	3.0	0	0	0	0	1	0	1	0	0	0
SELECT/PRISM	1	650	36.3	1.0	0	0	1	0	0	0	1	0	0	0
BNEX+STING+UPBT+NORT+OIL	1	650	36.3	1.0	1	0	0	0	0	1	0	0	0	0
BNEX+STING+UPBT+SLCT+OIL	1	632	35.3	2.0	0	1	0	0	0	0	0	1	0	0
BMIX+STING+UPBT+SLCT+OIL	1	316	17.6	1.0	0	0	1	0	0	0	0	1	0	0
TOTAL-POST	8	6273	350.3	2.1	2	2	3	0	1	2	3	3	0	0
C. PREEMERGE & LAY-BY HERBICIDES:														
DUAL (LAY-BY)	1	650	36.3	1.0	0	0	1	0	0	0	1	0	0	0
TOTAL-PRE&LAY-BY	1	650	36.3	1.0	0	0	1	0	0	0	1	0	0	0
D. OTHER WEED CONTROL METHODS:														
ROTARY HOE	2	2000	111.7	2.0	1	0	1	0	0	1	0	1	0	0
TOTAL-OTHER	2	2000	111.7	2.0	1	0	1	0	0	1	0	1	0	0
TOTAL TREATMENTS	12	9273	517.8	1.9	3	3	5	0	1	3	5	4	0	0

*NR=NO RESPONSE; EXC=EXCELLENT; GD=GOOD; FR=FAIR; PR=POOR.

A summary of the most important weed problem responses from 1978 to 2004.

Year	Weed indicated as most important weed problem in sugarbeet													
	PIWE ¹	FXTL	COLQ	WIOA	WIBW	WIMU	KOCZ	COCB	SMWE	EBNS	COMA	LASA	VELE	WAHE
	-----Percent of responses-----													
1978	55	19	3	8	6	1								
1978	53	22	5	5	7	1								
1980	43	23	10	10	8	1								
1981	46	20	8	6	9	3	5							
1982	44	8	7	9	11	7	14							
1983	50	8	11	6	5	4	12							
1984	54	5	6	6	5	4	10							
1985	43	2	11	9	6	5	12							
1986	71	5	4	3	2	1	5	4						
1987	61	7	6	3	6	2	6	2						
1988	75	2	5	1	2	<1	9	1						
1989	54	5	4	1	5	<1	21	1						
1990	51	2	8	1	5	0	23	1	3					
1991	59	3	4	0	2	0	18	2	3					
1992	47	4	8	3	4	<1	16	3	8					
1993	38	3	6	6	8	1	13	3	9	3	2			
1994	61	2	6	2	8	1	8	2	6	2	1			
1995	71	2	4	1	2	1	4	1	8	4	1			
1996	72	4	4	2	1	1	3	2	6	2	1			
1997	53	7	4	2	6	1	3	2	5	4	1			
1998	51	9	7	2	4	1	13	1	4	1	<1			
1999	40	2	10	2	1	<1	33	1	3	1	<1	2		
2000	18	2	19	<1	2	<1	43	2	3	<1	<1	2		1
2001	43	1	10	<1	1	0	32	1	4	4	<1	1		2
2002	44	<1	14	<1	<1	0	26	1	4	<1	<1	<1	2	5
2003	25	<1	18	<1	<1	0	46	<1	4	<1	<1	1	1	2
2004	21	<1	25	1	0	0	41	1	4	1	1	1	2	1

¹PIWE = Pigweed species, FXTL = Green & Yellow foxtail, COLQ = Common lambsquarters, WIOA = Wild oats, WIBW = Wild buckwheat, WIMU = Wild mustard, KOCZ = Kochia, COCB = Common cocklebur, SMWE = Smartweed, EBNS = Eastern black nightshade, COMA = Common mallow, LASA = Lanceleaf sage, VELE = Velvetleaf and WAHE = Waterhemp.

A summary of the worst production problem responses from 1978 to 2004.

Year	Production problem indicated as worst in sugarbeet										
	No Problem	Weeds	Weather	Emergence/stand	Labor mgmt.	Root Maggot	Cercospora leaf spot	Herbicide injury	Rhizomania	Rhizoctonia/Aphanomyces	
	-----percent of responses-----										
1978	21	47	16	7	6	2	0				
1978	19	41	28	6	4	1	0				
1980	5	23	42	28	2	0	0				
1981	4	35	38	16	1	0	6				
1982	10	39	35	9	3	4	0				
1983	3	37	37	13	2	1	5				
1984	5	26	49	8	2	1	2				
1985	4	20	45	17	1	1	1				
1986	4	39	31	18	1	1	1				
1987	5	42	23	22	2	0	2				
1988	1	37	12	40	1	1	1				
1989	5	38	19	16	3	8	2				
1990	5	42	20	10	2	8	4				
1991	3	26	4	18	1	26	7			8	
1992	11	45	9	15	5	9	1			3	
1993	3	40	21	16	4	1	2			12	
1994	3	56	12	13	4	1	3			8	
1995	2	51	6	2	3	<1	24			11	
1996	6	53	12	11	6	2	3			6	
1997	15	34	13	12	3	1	5			14	
1998	3	25	9	4	1	1	36		2	17	
1999	14	39	14	12	2	1	6		2	9	
2000	8	48	9	10	1	<1	3		2	18	
2001	6	52	13	5	2	1	1		3	16	
2002	4	53	11	19	1	<1	<1		3	9	
2003	7	61	9	4	1	<1	1	4	2	11	
2004	6	47	10	21	2	1	0	1	1	8	

TABLE 20. Worst weed problem in sugarbeet, 2004.

County	Responsess	No Problem	MIWE ¹	COCB	COLQ	COMA	VELE	EBNS	FXTL
-----% of respondents-----									
Cass	20	0	0	0	20	5	0	0	0
Chippewa ²	29	3	0	3	52	0	0	3	0
Clay ³	25	4	0	0	24	0	0	0	0
Grand Forks	18	6	0	0	0	0	0	0	0
Kittson	13	8	0	0	15	8	0	0	0
Marshall	17	0	0	0	6	0	6	6	0
Norman ⁴	16	0	0	0	13	0	0	0	0
Pembina	18	6	11	0	6	0	0	0	0
Polk	55	4	0	0	16	0	0	0	2
Renville ⁵	44	0	0	2	45	2	11	0	0
Richland	27	0	0	0	37	0	0	0	0
Trail	11	0	0	0	27	0	0	0	0
Traverse ⁶	24	0	0	4	21	0	0	0	0
Walsh	22	0	0	0	14	0	0	0	0
Wilkin ⁷	27	0	0	0	37	0	0	0	0
Other ⁸	4	0	0	0	25	0	36	0	0
Total	370	2	1	1	25	1	2	1	<1

Table continued

TABLE 20 (con't). Worst weed problem in sugarbeet, 2004.

County	KOCZ	LASA	PIWE	SMWE	WAHE	WIBW	WIMU	WIOA	Other ⁹
-----% of respondents-----									
Cass	30	5	40	0	0	0	0	0	0
Chippewa ²	3	0	14	10	10	0	0	0	0
Clay ³	56	0	16	0	0	0	0	0	0
Grand Forks	78	0	17	0	0	0	0	0	0
Kittson	46	0	15	0	0	0	0	8	0
Marshall	47	0	35	0	0	0	0	6	0
Norman ⁴	50	0	38	0	0	0	0	0	0
Pembina	67	0	6	0	0	0	0	6	0
Polk	62	0	11	2	0	0	0	4	0
Renville ⁵	5	0	16	16	2	0	0	0	0
Richland	19	4	33	4	0	0	0	0	0
Trail	64	0	9	0	0	0	0	0	0
Traverse ⁶	29	0	42	0	0	0	0	0	4
Walsh	82	0	5	0	0	0	0	0	0
Wilkin ⁷	33	0	26	4	0	0	0	0	0
Other ⁸	0	0	50	0	0	0	0	0	0
Total	41	1	21	4	1	0	0	1	<1

¹CATH = Canada thistle; COCB = Common cocklebur; COLQ = Common lambsquarters; COMA = Common mallow; VELE = velvetleaf; EBNS = eastern black nightshade; FXTL = Green & yellow foxtail; KOCZ = Kochia; LASA = Lanceleaf sage; PIWE = pigweed species; SMWE = Smartweed; WAHE = Waterhemp; WIBW = Wild buckwheat; WIOA = Wild oats.

²Includes Swift and Kandiyohi Counties.

³Includes Becker County.

⁴Includes Mahnommen County.

⁵Includes Redwood, Faribault, Yellow Medicine, Lac Qui Parle and Sibley Counties.

⁶Includes Grant, Stevens and Big Stone Counties.

⁷Includes Ottertail County.

⁸Other counties = Stearns, Brown and No Response.

⁹Other weeds = Common sunflower.

TABLE 21. Most serious production problem in sugarbeet, 2004.

County	Responses	No Prob	Weeds	Emerg/ Stand	Labor Mangmt	Root Maggot	CLS ¹	Rhizo- mania	Rhizoctonia/ Aphanomyces	Weather	Herb injury	Other ⁹
-----% of respondents-----												
Cass	20	0	25	40	10	0	0	0	20	0	0	5
Chippewa ²	32	3	78	0	0	0	0	3	6	6	0	3
Clay ³	24	8	33	38	0	0	0	0	0	13	0	8
Grand Forks	17	6	65	18	0	0	0	0	0	12	0	0
Kittson	12	0	67	17	0	0	0	0	0	17	0	0
Marshall	16	0	38	38	6	0	0	0	0	13	0	6
Norman ⁴	17	6	41	47	0	0	0	0	0	0	6	0
Pembina	18	11	33	11	6	11	0	0	0	28	0	0
Polk	52	8	40	29	2	0	0	0	6	15	0	0
Renville ⁵	40	8	43	8	0	0	0	3	20	10	5	5
Richland	27	11	44	19	7	4	0	0	11	0	0	4
Traill	9	0	67	11	0	0	0	0	11	11	0	0
Traverse ⁶	21	10	57	14	0	0	0	0	10	5	5	0
Walsh	20	0	50	25	0	0	0	5	5	15	0	0
Wilkin ⁷	25	8	52	16	0	0	0	0	12	12	0	0
Other ⁸	2	50	0	0	0	0	0	0	0	0	50	0
Total	352	6	47	21	2	1	0	1	8	10	1	2

¹CLS = Cercospora leaf spot.

²Includes Swift and Kandiyohi Counties.

³Includes Becker County.

⁴Includes Mahnomen County.

⁵Includes Redwood, Faribault, Yellow Medicine, Lac Qui Parle and Sibley Counties.

⁶Includes Grant, Stevens and Big Stone Counties.

⁷Includes Ottertail County.

⁸Other counties = Stearns, Brown and No Response.

⁹Other =Cover crop control, white grubs, field drifting, sugar price, N management, fusarium and variety selections.

TABLE 20. Sugarbeet acreage that was hand weeded, 2004.

County	Acres planted by respondents	Hand weeded
		% of acres
Cass	10,333	27
Chippewa ²	11,990	57
Clay ³	20,997	26
Grand Forks	9,305	26
Kittson	6,847	4
Marshall	14,186	11
Norman ⁴	11,050	6
Pembina	11,722	30
Polk	32,364	10
Renville ⁵	12,276	77
Richland	13,761	41
Traill	5,544	28
Traverse ⁶	9,540	24
Walsh	16,342	39
Wilkin ⁷	14,016	28
Other ⁸	1,791	47
Total	202,064	28

²Includes Swift and Kandiyohi Counties.

³Includes Becker County.

⁴Includes Mahnomen County.

⁵Includes Redwood, Faribault, Yellow Medicine, Lac Qui Parle and Sibley Counties.

⁶Includes Grant, Stevens and Big Stone Counties.

⁷Includes Ottertail County.

⁸Includes Stearns, Brown and No Response.

TABLE 23. Method of herbicide application, 2004.

Herbicide	Band	Method of application	
		Broadcast ground	Broadcast air
-----% of acres-----			
Eptam + Ro-Neet, Eptam, Ro-Neet	64	36	0
Dual (PRE/PPI/Lay-By)	26	74	6
Nortron (PRE/PPI)	84	16	0
Betamix/Betanex/Progress	0	73	27
Poast, Select, Assure II	16	79	5
Bnex/Bmix/Progress+UpBeet	38	62	1
Bnex/Bmix/Progress+Stinger	4	85	11
Bnex/Bmix/Progress+UpB+Stinger	34	53	13
Bnex/Bmix/Prog+UpB+Sting+Nortron+Grass	53	45	2
Bnex/Bmix/Prog+UpB+Sting+Grass	37	55	8
Bnex/Bmix/Prog + UpB + Sting + Nortron	70	21	10
Bnex/Bmix/Prog + UpBeet + Grass	9	84	7
All herbicides	34	58	8

TABLE 24. Cost of hand weeding and hand thinning sugarbeet, 2004.

County	Respondents	Dollars per acre					
		0	1-10	11-15	16-20	21-25	26-30
-----% of respondents-----							
Cass	19	47	0	16	11	26	0
Chippewa ²	32	31	9	6	16	6	16
Clay ³	26	54	4	4	19	15	0
Grand Forks	20	50	0	10	5	20	0
Kittson	13	85	0	0	8	0	0
Marshall	19	63	0	0	0	16	16
Norman ⁴	18	72	0	0	0	11	6
Pembina	17	41	0	0	0	35	18
Polk	55	71	2	2	13	11	2
Renville ⁵	41	15	22	17	10	12	7
Richland	25	32	8	0	16	20	8
Traill	12	25	8	8	0	35	8
Traverse ⁶	22	59	0	0	9	14	5
Walsh	20	25	5	5	20	35	10
Wilkin ⁷	27	48	0	7	11	19	0
Other ⁸	5	40	0	0	0	20	0
Total	371	47	5	5	10	16	6

Table continued.

TABLE 24 (con't) Cost of hand weeding and hand thinning sugarbeet, 2004.

County	Dollars per acre							
	31-35	36-40	41-45	46-50	51-55	56-60	61-70	>80
-----% of respondents-----								
Cass	0	0	0	0	0	0	0	0
Chippewa ²	3	3	3	3	0	0	0	3
Clay ³	4	0	0	0	0	0	0	0
Grand Forks	5	5	0	0	0	5	0	0
Kittson	0	0	0	0	0	8	0	0
Marshall	0	5	0	0	0	0	0	0
Norman ⁴	0	6	0	6	0	0	0	0
Pembina	0	0	6	0	0	0	0	0
Polk	0	0	0	0	0	0	0	0
Renville ⁵	5	7	0	2	0	0	2	0
Richland	4	0	0	4	4	0	0	4
Traill	8	0	0	17	0	0	0	0
Traverse ⁶	5	0	0	9	0	0	0	0
Walsh	0	0	0	0	0	0	0	0
Wilkin ⁷	0	7	0	4	0	4	0	0
Other ⁸	0	20	0	0	0	20	0	0
Total	2	3	1	2	0.3	1	0.3	0.5

²Includes Swift and Kandiyohi Counties.

³Includes Becker County.

⁴Includes Mahnomen County.

⁵Includes Redwood, Faribault, Yellow Medicine, Lac Qui Parle and Sibley Counties.

⁶Includes Grant, Stevens and Big Stone Counties.

⁷Includes Ottertail County.

⁸Includes Stearns, Brown and No Response.

TABLE 25. Total sugarbeet acreage operated by respondents to the survey, 2004.

County	Respondents	Acres of sugarbeet					
		<50	50-99	100-199	200-299	300-399	400-599
-----% of respondents-----							
Cass	19	0	0	11	16	11	32
Chippewa ¹	32	0	6	34	3	13	22
Clay ²	26	4	0	8	12	15	15
Grand Forks	20	0	0	10	10	30	20
Kittson	13	0	0	15	8	31	15
Marshall	19	5	0	16	5	16	16
Norman ³	18	0	11	0	22	6	28
Pembina	17	0	0	6	12	12	18
Polk	55	2	4	5	9	15	25
Renville ⁴	41	2	12	32	22	12	7
Richland	25	0	0	0	12	32	24
Traill	12	0	8	8	8	25	17
Traverse ⁵	22	5	5	14	23	14	27
Walsh	20	5	10	5	15	20	25
Wilkin ⁶	27	4	4	22	11	19	7
Other ⁷	5	0	0	0	40	40	0
Total	371	2	4	13	13	17	19

Table continued.

TABLE 25 (cont.). Total sugarbeet acreage operated by respondents to the survey, 2004.

County	600-799	Acres of sugarbeet			
		800-999	1000-1499	1500-1999	>2000
-----% of respondents-----					
Cass	21	0	5	0	5
Chippewa ¹	16	3	3	0	0
Clay ²	8	8	15	8	8
Grand Forks	15	10	5	0	0
Kittson	8	15	8	0	0
Marshall	11	5	11	11	5
Norman ³	0	11	17	0	6
Pembina	29	0	12	12	0
Polk	16	7	11	5	0
Renville ⁴	7	2	2	0	0
Richland	4	16	12	0	0
Traill	17	8	8	0	0
Traverse ⁵	5	0	5	5	0
Walsh	15	0	0	0	5
Wilkin ⁶	15	4	4	11	0
Other ⁷	20	0	0	0	0
Total	12	6	8	4	2

¹Includes Swift and Kandiyohi Counties.²Includes Becker County.³Includes Mahnomen County.⁴Includes Redwood, Faribault, Yellow Medicine, Lac Qui Parle and Sibley Counties.⁵Includes Grant, Stevens and Big Stone Counties.⁶Includes Ottertail County.⁷Included Stearns, Brown and No Response.

Table 26. How growers determined the timing of postemergence herbicide applications, 2004.

County	Respondents	Spray every 5 days	Spray every 7 days	Spray every 5-10 days depending on environment	Based on agriculturist recommendations	Based on field scouting	Based on accumulated growing degree days
-----% of respondents-----							
Cass	22	0	23	27	5	41	5
Chippewa ¹	39	0	13	41	18	28	0
Clay ²	37	0	8	41	19	27	5
Grand Forks	28	0	11	32	18	32	7
Kittson	17	0	6	24	24	47	0
Marshall	20	0	10	15	20	55	0
Norman ³	24	0	21	21	21	29	8
Pembina	22	22	27	32	5	18	14
Polk	78	1	5	47	15	24	6
Renville ⁴	50	0	6	32	20	40	2
Richland	33	3	18	27	18	30	3
Traill	19	5	16	26	16	32	5
Traverse ⁵	27	0	26	30	37	7	0
Walsh	25	8	8	48	4	32	0
Wilkin ⁶	37	0	0	43	27	24	5
Other ⁷	4	0	50	25	0	25	0
Total	482	1	12	32	18	30	4

¹Includes Swift and Kandiyohi Counties.²Includes Becker County.³Includes Mahnommen County.⁴Includes Redwood, Faribault, Yellow Medicine, Lac Qui Parle and Sibley Counties.⁵Includes Grant, Stevens and Big Stone Counties.⁶Includes Ottertail County.⁷Includes Stearns, Brown and No Response.**Table 27. Responses to the question "How useful/valuable are the bimonthly Ag Notes from American Crystal?", 2004. (This question was only mailed to the American Crystal growers).**

	Respondents	Extremely	Very	Somewhat	Slightly	Not Useful
-----% of respondents-----						
Cass	17	18	71	12	0	0
Clay ¹	23	9	39	52	0	0
Grand Forks	19	32	47	21	0	0
Kittson	12	33	42	25	0	0
Marshall	18	22	39	33	6	0
Norman ²	18	17	67	17	0	0
Pembina	17	24	47	24	6	0
Polk	53	19	64	15	2	0
Richland	4	25	25	50	0	0
Traill	12	8	67	25	0	0
Walsh	20	25	30	40	5	0
Wilkin ³	2	0	50	50	0	0
Other ⁴	1	100	0	0	0	0
Total	216	21	52	26	2	0

¹Includes Becker County.²Includes Mahnommen County.³Includes Ottertail County.⁴Includes Stearns, Brown and No Response.