

TABLE 24A. DESICCCANT Usage in North Dakota, 1992.

	Acres treated	Acres treated	Applications				Applicator		Method of application	
			1	2	3	4	Farm operator	Custom	Aerial	Ground
Fungicide	(1000)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Diquat	60.8	0.2	72.6	27.4	.	.	52.1	47.9	46.7	53.3
Endothall	4.3	0.0	92.8	7.2	.	.	34.9	65.1	65.1	34.9
Paraquat	4.4	0.0	100.0	.	.	.	37.4	62.6	62.6	37.4
Sodium chlorate	4.2	0.0	100.0	100.0	100.0	.
Total	73.7	0.2	76.9	23.1	.	.	47.3	52.7	51.8	48.2

TABLE 24B. DESICCCANT Usage in North Dakota, 1989¹.

	Acres treated	Acres treated	Applications				Applicator		Method of application	
			1	2	3	4	Farm operator	Custom	Aerial	Ground
Fungicide	(1000)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Diquat	12.9	0.0	100.0	.	.	.	21.9	78.1	34.3	65.7
Sodium chlorate	6.3	0.0	73.2	26.8	.	.	.	100.0	89.8	10.2
Sulfuric acid	4.1	0.0	100.0	.	.	.	5.6	94.4	.	100.0
Total	23.3	0.1	92.7	7.3	.	.	13.1	86.9	43.4	56.6

¹McMullen, M.P., A.G. Dexter, J.D. Nalewaja, and G. Dahl. 1990. Pesticide Use on Major Crops in North Dakota, 1989. North Dakota State University in cooperation with North Dakota Crop and Livestock Reporting Service, Extension Report No. 1.

Table 24C. Other chemical usage in North Dakota, 1984¹.

	Acres treated	Acres treated	Applicator		Method of application	
			Farm operator	Custom	Aerial	Ground
Desiccant	(1000)	(%)	(%)	(%)	(%)	(%)
Dinoseb	32.5	0.0	37.7	62.3	57.1	42.9
Diquat	25.7	0.0	82.6	17.4	17.4	82.6
Paraquat	8.7	0.0	46.9	53.1	93.4	6.6
Sodium chlorate	2.4	0.0	0.0	100.0	100.0	0.0
Sulfuric acid	1.7	0.0	0.0	100.0	85.7	14.3
Total	71.0	0.2	53.3	46.7	48.1	51.9

¹McMullen, M.P., A.G. Dexter, J.D. Nalewaja, W. Hamlin, and K. Davison. 1985. Pesticide Use on Major Crops in North Dakota, 1984. North Dakota State University in cooperation with North Dakota Crop and Livestock Reporting Service, Agronomy Report 3. 31p.

Table 24D. Desiccants, bird repellents, and growth regulator usage in North Dakota 1978¹.

Product	Acres treated	Acres treated	Applicator		Method of application	
			Farm operator	Custom	Aerial	Ground
Product	(1000)	(%)	(%)	(%)	(%)	(%)
Dinoseb	27.7	0.1	30	70	57	43
Paraquat	50.8	0.2	19	81	51	48
Sodium chlorate	0.8	0.0	0	100	100	0
Sulfuric acid	3.8	0.0	0	100	100	0
4-AP	1.5	0.0	0	100	100	0
30% Maleic hydrazide	27.8	0.1	98	2	4	96
2,4-D ester	6.9	0.0	100	0	0	100
Total	119.3	0.4	44	56	38	62

¹Nalewaja, J.D., A.G. Dexter, J. Buchli, W. Hamlin, and G. Kimmet. 1980. Pesticide Usage in Major North Dakota Crops. North Dakota State University in cooperation with North Dakota Crop and Livestock Reporting Service, Agronomy Report 1. 33p.

Table 25. Summary of non-pesticide farm procedures and methods used in North Dakota, 1992.

Method or Procedure	District	Total	Used	Used for	Used	Used for
			procedure	pest control	procedure	pest control
		---(Number reporting)---			(% of total)	(% of users)
CROP ROTATION	Northwest	236	199	108	84	54
	North Central	125	110	76	88	69
	Northeast	346	320	241	92	75
	West Central	196	167	115	85	69
	Central	187	159	111	85	70
	East Central	251	242	199	96	82
	Southwest	173	141	91	82	65
	South Central	163	139	95	85	68
	Southeast	234	217	159	93	73
	State	1911	1694	1195	89	71
SUMMER FALLOW	Northwest	236	220	106	93	48
	North Central	125	104	60	83	58
	Northeast	346	285	180	82	63
	West Central	196	160	105	82	66
	Central	187	144	91	77	63
	East Central	251	207	123	82	59
	Southwest	173	139	89	80	64
	South Central	163	123	80	75	65
	Southeast	234	168	84	72	50
	State	1911	1550	918	81	59
MOLDBOARD PLOW	Northwest	236	46	24	19	52
	North Central	125	48	33	38	69
	Northeast	346	165	124	48	75
	West Central	196	70	42	36	60
	Central	187	76	47	41	62
	East Central	251	107	77	43	72
	Southwest	173	32	17	18	53
	South Central	163	93	61	57	66
	Southeast	234	128	83	55	65
	State	1911	765	508	40	66
ROW CROP CULTIVATION	Northwest	236	29	21	12	72
	North Central	125	55	33	44	60
	Northeast	346	235	193	68	82
	West Central	196	64	51	33	80
	Central	187	113	84	60	74
	East Central	251	183	158	73	86
	Southwest	173	29	22	17	76
	South Central	163	79	53	48	67
	Southeast	234	159	124	68	78
	State	1911	946	739	50	78

Table 25. (Continued)

Method or Procedure	District	Total	Used procedure	Used for	Used	Used for
				pest control	procedure	pest control
		----(Number reporting)----		(% of total)	(% of users)	
HARROW / ROTARY HOE	Northwest	236	38	13	16	34
	North Central	125	48	31	38	65
	Northeast	346	195	147	56	75
	West Central	196	53	35	27	66
	Central	187	67	42	36	63
	East Central	251	119	94	47	79
	Southwest	173	31	18	18	58
	South Central	163	56	33	34	59
	Southeast	234	97	76	41	78
	State	1911	704	489	37	69
NO TILL	Northwest	236	32	16	14	50
	North Central	125	12	4	10	33
	Northeast	346	16	6	5	38
	West Central	196	25	8	13	32
	Central	187	14	5	8	36
	East Central	251	23	9	10	39
	Southwest	173	31	9	18	29
	South Central	163	22	5	13	23
	Southeast	234	25	7	11	28
	State	1911	200	69	10	35
RESISTANT VARIETIES	Northwest	236	117	96	50	82
	North Central	125	77	56	62	73
	Northeast	346	254	223	73	88
	West Central	196	108	93	55	86
	Central	187	118	91	63	77
	East Central	251	205	186	82	91
	Southwest	173	97	77	56	79
	South Central	163	80	64	49	80
	Southeast	234	141	128	60	91
	State	1911	1197	1014	63	85
HAND WEEDING	Northwest	236	11	8	5	73
	North Central	125	7	5	6	71
	Northeast	346	120	102	35	85
	West Central	196	19	16	10	84
	Central	187	13	10	7	77
	East Central	251	100	88	40	88
	Southwest	173	8	7	5	88
	South Central	163	14	11	9	79
	Southeast	234	71	59	30	83
	State	1911	363	306	19	84

Table 25. (Continued)

Method or Procedure	District	Total	Used	Used for	Used	Used for
			procedure	pest control	procedure	pest control
		----(Number reporting)----		(% of total)		(% of users)
STUBBLE BURNING	Northwest	236	9	3	4	33
	North Central	125	15	10	12	67
	Northeast	346	38	25	11	66
	West Central	196	4	2	2	50
	Central	187	9	4	5	44
	East Central	251	8	4	3	50
	Southwest	173	5	3	3	60
	South Central	163	6	4	4	67
	Southeast	234	8	5	3	63
		State	1911	102	60	5
INSECTS / DISEASES	Northwest	236	3	3	1	100
	North Central	125	4	3	3	75
	Northeast	346	11	7	3	64
	West Central	196	6	5	3	83
	Central	187	6	3	3	50
	East Central	251	12	8	5	67
	Southwest	173	8	6	5	75
	South Central	163	11	8	7	73
	Southeast	234	4	3	2	75
		State	1911	65	46	3
FIELD MONITORING	Northwest	236	134	118	57	88
	North Central	125	84	71	67	85
	Northeast	346	276	257	80	93
	West Central	196	128	115	65	90
	Central	187	111	99	59	89
	East Central	251	214	200	85	93
	Southwest	173	106	93	61	88
	South Central	163	102	90	63	88
	Southeast	234	170	150	73	88
		State	1911	1325	1193	69
OTHER	Northwest	236	16	9	7	56
	North Central	125	4	3	3	75
	Northeast	346	17	11	5	65
	West Central	196	8	7	4	88
	Central	187	7	3	4	43
	East Central	251	12	9	5	75
	Southwest	173	8	5	5	63
	South Central	163	12	7	7	58
	Southeast	234	11	7	5	64
		State	1911	95	61	5

Table 26. Summary of level¹ of concern for pesticide issues in North Dakota, 1992.

Pesticide Issue	District	Total Reports	Level 5	Level 4	Level 3	Level 2	Level 1	Level 5	Level 4	Level 3	Level 2	Level 1	
		------(Number reporting)-----						------(% of total)-----					
APPLICATOR SAFETY	Northwest	226	142	40	26	8	10	63	18	12	3.5	4.4	
	North Central	116	64	24	19	5	4	55	21	16	4.3	3.4	
	Northeast	334	221	69	26	11	7	66	21	8	3.3	2.1	
	West Central	181	107	34	22	9	9	59	19	12	5.0	5.0	
	Central	178	98	41	19	13	7	55	23	11	7.3	3.9	
	East Central	247	173	38	21	8	7	70	15	9	3.2	2.8	
	Southwest	166	91	37	17	13	8	55	22	10	7.8	4.8	
	South Central	142	75	27	25	4	11	53	19	18	2.8	7.7	
	Southeast	225	156	39	18	7	5	69	17	8	3.1	2.2	
	State	1815	1127	349	193	78	68	62	19	11	4.3	3.7	
FOOD SAFETY	Northwest	225	133	43	25	13	11	59	19	11	5.8	4.9	
	North Central	118	70	17	19	9	3	59	14	16	7.6	2.5	
	Northeast	332	208	60	42	11	11	63	18	13	3.3	3.3	
	West Central	180	108	33	19	5	15	60	18	11	2.8	8.3	
	Central	176	89	38	21	14	14	51	22	12	8.0	8.0	
	East Central	246	161	36	33	8	8	65	15	13	3.3	3.3	
	Southwest	166	90	27	24	9	16	54	16	14	5.4	9.6	
	South Central	142	72	28	22	8	12	51	20	15	5.6	8.5	
	Southeast	226	155	37	19	8	7	69	16	8	3.5	3.1	
	State	1811	1086	319	224	85	97	60	18	12	4.7	5.4	
ENVIRONMENTAL PROTECTION	Northwest	226	115	50	40	11	10	51	22	18	4.9	4.4	
	North Central	116	62	21	20	11	2	53	18	17	9.5	1.7	
	Northeast	330	173	83	50	14	10	52	25	15	4.2	3.0	
	West Central	180	99	40	27	2	12	55	22	15	1.1	6.7	
	Central	176	72	54	37	4	9	41	31	21	2.3	5.1	
	East Central	246	137	54	36	11	8	56	22	15	4.5	3.3	
	Southwest	166	77	38	27	9	15	46	23	16	5.4	9.0	
	South Central	143	62	36	23	12	9	43	25	16	8.4	6.3	
	Southeast	225	117	64	30	5	9	52	28	13	2.2	4.0	
	State	1808	914	440	290	79	84	51	24	16	4.4	4.6	
REGULATION	Northwest	223	86	56	50	18	13	39	25	22	8.1	5.8	
	North Central	115	55	17	22	15	6	48	15	19	13.0	5.2	
	Northeast	331	150	64	82	18	17	45	19	25	5.4	5.1	
	West Central	175	63	42	50	12	8	36	24	29	6.9	4.6	
	Central	177	64	44	40	14	15	36	25	23	7.9	8.5	
	East Central	244	118	52	51	13	10	48	21	21	5.3	4.1	
	Southwest	166	58	32	49	10	17	35	19	30	6.0	10.0	
	South Central	141	61	31	29	8	12	43	22	21	5.7	8.5	
	Southeast	221	94	52	56	12	7	43	24	25	5.4	3.2	
	State	1793	749	390	429	120	105	42	22	24	6.7	5.9	

¹Level 5 indicates the highest concern and level 1 no concern for the issue.

Table 26. Summary of level¹ of concern for pesticide issues in North Dakota, 1992. (Continued)

Pesticide Issue	District	Total Reports	Level					Level				
			5	4	3	2	1	5	4	3	2	1
		------(Number reporting)-----						------(% of total)-----				
CONTINUED AVAILABILITY	Northwest	224	105	52	44	8	15	47	23	20	4	7
	North Central	114	70	20	16	2	6	61	18	14	2	6
	Northeast	325	180	85	44	8	8	55	26	14	3	3
	West Central	177	85	42	31	8	11	48	24	18	5	6
	Central	174	71	46	38	6	13	41	26	22	3	8
	East Central	244	150	47	30	8	9	61	19	12	3	4
	Southwest	166	73	43	27	7	16	44	26	16	4	10
	South Central	140	64	23	29	5	19	46	16	21	4	14
	Southeast	223	114	59	37	3	10	51	26	17	1	5
	State	1787	912	417	296	55	107	51	23	17	3	6
EFFECTIVE PEST CONTROL	Northwest	222	107	52	35	14	14	48	23	16	6	6
	North Central	113	69	22	9	5	8	61	19	8	4	7
	Northeast	328	213	61	39	9	6	65	19	12	3	2
	West Central	177	86	44	33	4	10	49	25	19	2	6
	Central	174	86	41	27	10	10	49	24	16	6	6
	East Central	243	164	50	18	5	6	67	21	7	2	3
	Southwest	167	87	38	19	12	11	52	23	11	7	7
	South Central	138	75	25	23	5	10	54	18	17	4	7
	Southeast	225	150	39	26	4	6	67	17	12	2	3
	State	1787	1037	372	229	68	81	58	21	13	4	5
NEED FOR NEW PRODUCTS	Northwest	221	71	55	54	18	23	32	25	24	8	10
	North Central	114	50	19	23	10	12	44	17	20	9	11
	Northeast	327	153	75	73	13	13	47	23	22	4	4
	West Central	176	63	38	39	13	23	36	22	22	7	13
	Central	174	54	49	33	22	16	31	28	19	13	9
	East Central	246	121	49	48	17	11	49	20	20	7	5
	Southwest	166	50	45	38	12	21	30	27	23	7	13
	South Central	137	41	34	27	10	25	30	25	20	7	18
	Southeast	221	83	64	47	11	16	38	29	21	5	7
	State	1782	686	428	382	126	160	38	24	21	7	9
RESISTANCE TO PESTICIDES	Northwest	220	81	59	47	18	15	37	27	21	8	7
	North Central	114	57	22	19	7	9	50	19	17	6	8
	Northeast	328	168	84	54	17	5	51	26	16	5	2
	West Central	175	67	44	32	11	21	38	25	18	6	12
	Central	173	61	47	25	26	14	35	27	14	15	8
	East Central	243	127	64	39	5	8	52	26	16	2	3
	Southwest	166	52	47	37	19	11	3	28	22	11	7
	South Central	137	47	33	30	12	15	34	24	22	9	11
	Southeast	224	97	66	35	8	18	43	29	16	4	8
	State	1780	757	466	318	123	116	43	26	18	7	7

¹Level 5 indicates the highest concern and level 1 no concern for the issue.

Table 27. Average summary level¹ of concern for pesticide issues in North Dakota, 1992.

<u>COMPOSITE SCORE</u>	
<u>CONCERN</u>	<u>SCORE</u>
APPLICATOR SAFETY	4.3
FOOD SAFETY	4.2
ENVIRONMENTAL PROTECTION	4.1
REGULATION	3.8
CONTINUED AVAILABILITY	4.1
EFFECTIVE PEST CONTROL	4.2
NEED FOR NEW PRODUCTS	3.7
RESISTANCE TO PESTICIDES	3.9

¹Level 5 indicates the highest concern and level 1 no concern for the issue.

North Dakota



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U.S. Department of Agriculture
National Agricultural
Statistics Service

Cooperating with

North Dakota State University
Agricultural Experiment Station
and Extension Service
December 1992

1992 PESTICIDE USE SURVEY

Dear North Dakota Operator:

Your Help is Needed!! Please take the time to complete and return this 1992 Pesticide Use Survey. Individual reports will be kept confidential.

Since the last Pesticide Use Survey in 1989, public concern over agricultural use of pesticides and potential risks has continued to be widespread. This concern is resulting in increased regulation and loss of several important pesticide uses.

The Environmental Protection Agency is required to make sure benefits of pesticide use outweigh risks. Your participation will provide information needed to evaluate benefits as part of the registration or reregistration process. Without it, regulatory decisions could jeopardize future use of pesticides that benefit your farming operation.

Thank you for your help.

Sincerely,

A handwritten signature in cursive script, reading "William H. Pietsch".

William H. Pietsch, Director
North Dakota State University
Extension Service

A handwritten signature in cursive script, reading "Steven D. Wiyatt".

Steven D. Wiyatt, State Statistician
North Dakota Agricultural
Statistics Service

I. ACREAGE AND TREATMENTS BY CROP

REPORT FOR THE FARM YOU OPERATE (Include Land Rented From Others, Exclude Land Rented Out)							
1992 CROP	TOTAL ACRES PLANTED	ACRES PLANTED WITH TREATED SEED (Exclude Inoculant)		NUMBER OF ACRES TREATED FOR EACH OF THE FOLLOWING: (Include 1991 applications for 1992 crop)			
		TOTAL	WITH ON FARM TREATED SEED	WEED CONTROL (Herbicides)	INSECT CONTROL (Insecticides) (Exclude seed treatment)	DISEASE CONTROL (Fungicides) (Exclude seed treatment)	DESICCANTS (Vine killers, etc.)
WHEAT (Durum, Other Spring, Winter)	001	002	003	004	005	006	007
BARLEY	008	009	010	011	012	013	014
OATS	015	016	017	018	019	020	021
FLAX	022	023	024	025	026	027	028
CORN	029	030	031	032	033	034	035
SUNFLOWER	036	037	038	039	040	041	042
SOYBEANS	043	044	045	046	047	048	049
POTATOES	050	051	052	053	054	055	056
SUGARBEETS	057	058	059	060	061	062	063
DRY EDIBLE BEANS	064	065	066	067	068	069	070
ALFALFA HAY	071	072	073	074	075	076	077
OTHER HAY	078	079	080	081	082	083	084
CRP	085	086	087	088	089	090	091
FALLOW & SET ASIDE ACREAGE	092	093	094	095	096	097	098
PASTURE AND RANGE	099	100	101	102	103	104	105
TOTAL ACRES OPERATED	106						

II. FARM TREATED SEED - for 1992 crop (Please report for seed that was treated on your farm and used on your operation, excluding inoculants. Include on-farm custom and self applied treatment.)

PRODUCT USED TO TREAT (Refer to enclosed list)	OFFICE USE	Acres Seeded With This Seed	METHOD 1 = Drill Box 2 = Auger 3 = Other	PRODUCT USED TO TREAT (Refer to enclosed list)	OFFICE USE	Acres Seeded With This Seed	METHOD 1 = Drill Box 2 = Auger 3 = Other
WHEAT SEED (All)				FLAX SEED			
	110	111	112		170	171	172
	113	114	115		173	174	175
	116	117	118	SOYBEAN SEED			
	119	120	121		190	191	192
	122	123	124		193	194	195
BARLEY SEED				POTATO SEED			
	130	131	132		210	211	212
	133	134	135		213	214	215
	136	137	138		216	217	218
OAT SEED				OTHER SEED			
	150	151	152		230	231	232
	153	154	155		233	234	235


III. **USAGE OF INDIVIDUAL PESTICIDES ON 1992 CROPS** - Include applications after September 1, 1991 on crops for 1992 harvest. (Please report below the acres treated with each individual chemical during 1992 by crop and/or land use. If pesticides were applied in combination, report each separately. Exclude seed treatment and inoculants.)

NAME OF PESTICIDE USED (Please list chemical used. If necessary, refer to the enclosed list.)	OFFICE USE	ACRES TREATED	No. of Appli-cations	APPLI-CATOR		METHOD
				1 = Self 2 = Custom	1 = Aerial 2 = Ground	
(Example) <i>Avenge</i>		500	1	2	1	
WHEAT (Durum, Other Spring, Winter)						
	250	251	252	253	254	
	255	256	257	258	259	
	260	261	262	263	264	
	265	266	267	268	269	
	270	271	272	273	274	
	275	276	277	278	279	
OATS						
	350	351	352	353	354	
	355	356	357	358	359	
	360	361	362	363	364	
	365	366	367	368	369	
CORN						
	450	451	452	453	454	
	455	456	457	458	459	
	460	461	462	463	464	
	465	466	467	468	469	
	470	471	472	473	474	
SOYBEANS						
	550	551	552	553	554	
	555	556	557	558	559	
	560	561	562	563	564	
	565	566	567	568	569	
	570	571	572	573	574	
POTATOES						
	650	651	652	653	654	
	655	656	657	658	659	
	660	661	662	663	664	
	665	666	667	668	669	
	670	671	672	673	674	
	675	676	677	678	679	
	680	681	682	683	684	
ALFALFA HAY						
	750	751	752	753	754	
	755	756	757	758	759	
CRP						
	850	851	852	853	854	
	855	856	857	858	859	
BARLEY						
	300	301	302	303	304	
	305	306	307	308	309	
	310	311	312	313	314	
	315	316	317	318	319	
	320	321	322	323	324	
	325	326	327	328	329	
FLAX						
	400	401	402	403	404	
	405	406	407	408	409	
	410	411	412	413	414	
	415	416	417	418	419	
SUNFLOWER						
	500	501	502	503	504	
	505	506	507	508	509	
	510	511	512	513	514	
	515	516	517	518	519	
	520	521	522	523	524	
DRY EDIBLE BEANS						
	600	601	602	603	604	
	605	606	607	608	609	
	610	611	612	613	614	
	615	616	617	618	619	
	620	621	622	623	624	
SUGARBEETS						
	700	701	702	703	704	
	705	706	707	708	709	
	710	711	712	713	714	
	715	716	717	718	719	
	720	721	722	723	724	
	725	726	727	728	729	
	730	731	732	733	734	
OTHER HAY						
	800	801	802	803	804	
	805	806	807	808	809	
FALLOW, SET ASIDE ACREAGE						
	900	901	902	903	904	
	905	906	907	908	909	
PASTURE						
	950	951	952	953	954	

IV. ON FARM PROCEDURES - Which of the following methods or procedures do you use on your operation? Of those used, which are used for pest (weeds, insects, disease) control?

METHOD OR PROCEDURE	IS THIS METHOD USED?		WAS IT USED FOR PEST CONTROL?		OFFICE USE
	YES	NO	YES	NO	
Crop Rotation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	770
Summer Fallow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	771
Moldboard Plow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	772
Row Crop Cultivation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	773
Harrow or Rotary Hoe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	774
No Till	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	775
Resistant Varieties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	776
Hand Weeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	777
Stubble Burning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	778
Beneficial Insects or Diseases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	779
Field Monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	780
Other: (Please Specify _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	781

V. CONCERNS - For each of the following pesticide issues, please circle the number to indicate your level of concern. Please keep in mind a circle around a number five (5) indicates a high level of concern, and a circle around a number one (1) indicates a level of no concern.

PESTICIDE ISSUES	High Concern  No Concern					OFFICE USE
	5	4	3	2	1	
Applicator Safety	5	4	3	2	1	782
Food Safety	5	4	3	2	1	783
Environmental Protection	5	4	3	2	1	784
Regulation	5	4	3	2	1	785
Continued Availability	5	4	3	2	1	786
Effective Pest Control	5	4	3	2	1	787
Need for New Products	5	4	3	2	1	788
Resistance to Pesticides	5	4	3	2	1	789

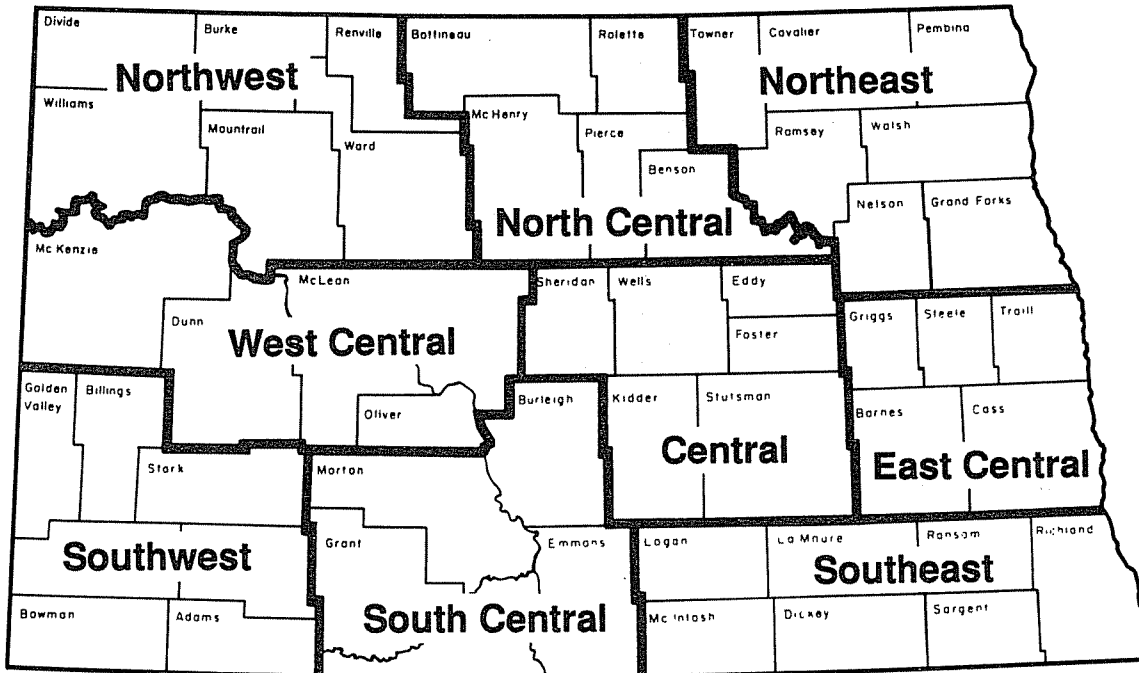
The results of this survey will be available from the North Dakota State University Extension Service.
THANK YOU!

Comments: _____

Reported by: _____ Date: _____

APPENDIX B.

North Dakota Agricultural Statistics Districts



APPENDIX C.

TRADE AND COMMON NAMES OF PESTICIDES

HERBICIDES

Trade Name	Common Name	Trade Name	Common Name
2,4-D Amine	2,4-D	Butyrac 175	2,4-DB
2,4-D Amine 4 pound	2,4-D	Butyrac 200	2,4-DB
2,4-D Ester	2,4-D	Cannon	Alachlor + Trifluralin
2,4-D LV Ester	2,4-D	Carbyne	Barban
2,4-D LV Ester 6	2,4-D	Cheyenne	Fenoxaprop + MCPA + Thifensulfuron + Tribenuron
2,4-D LV-4	2,4-D	Chiptox MCPA Sodium	MCPA
2,4-D LV-6	2,4-D	Class 40 A	2,4-D
2,4-DB	2,4-DB	Class 80 A WSP	2,4-D
2,4-DB 1.75	2,4-DB	Class MCPA	MCPA
Aatrex 4L	Atrazine	Class MCPE	MCPA
Aatrex Nine-O	Atrazine	Class Trust	Trifluralin
Accent	Nicosulfuron	Classic	Chlorimuron
Accord	Glyphosate	Cobra	Lactofen
Agsco 400	2,4-D	Command	Clomazone
Agsco MXL Herbicide	MCPA	Commence	Trifluralin + Clomazone
Ally	Metsulfuron	Confidence	Alachlor
Amber	Triasulfuron	Cornbelt 2,4-D	2,4-D
Amiben	Chloramben	Cornbelt Atrazine 4L	Atrazine
Amine 4 2,4-D Weed Killer	2,4-D	Cornbelt Atrazine 90 DF	Atrazine
Amitrol-T	Amitrole	Cornbelt Hi-Pen	2,4-D
Antor	Diethatyl	Cornbelt LV-4	2,4-D
Arena	Alachlor	Cornbelt LV-6	2,4-D
Ascend	Bentazon	Cornbelt Saddle	Alachlor
Assert	Imazamethabenz	Cornbelt Trifluralin	Trifluralin
Assure II	Quizalofop-P	Crop Star GB	Alachlor
Atrazine	Atrazine	Crossbow	Triclopyr + 2,4-D
Atrazine 4L	Atrazine	Curtail	Clopyralid + 2,4-D
Atrazine 4L Herbicide	Atrazine	Curtail M	Clopyralid + MCPA
Atrazine 90	Atrazine	Cycle	Metolachlor + Cyanazine
Atrazine 90 DF	Atrazine	Cyclone	Paraquat
Atrazine 90 WDG Herbicide	Atrazine	Dacamine 4D	2,4-D
Avenge	Difenzoquat	Dakota	Fenoxaprop + MCPA
Balan	Benefin	Depend	Bentazon
Banvel	Dicamba	Diquat	Diquat
Banvel SGF	Dicamba	Diuron	Diuron
Barrage	2,4-D	Diuron 80 WDG	Diuron
Basagran	Bentazon	DPD Ester Brush Killer	2,4-D
Beacon	Primisulfuron	Dual	Metolachlor
Betamix	Desmedipham + Phenmedipham	Envert 171	2,4-D
Betanex	Desmedipham	Eptam	EPTC
Bicep	Atrazine + Metolachlor	Eradicane	EPTC + Safener
Bladex	Cyanazine	Eradicane Extra	EPTC + Safener + extender
Blazer	Acifluorfen	Evik	Ametryn
Bronate	Bromoxynil + MCPA	Express	Tribenuron
Bronco	Alachlor + Glyphosate	Extrazine II	Cyanazine + Atrazine
Brush Rhap Low Volatile 4-D	2,4-D	Fallow Master	Glyphosate + Dicamba
Buckle	Triallate + Trifluralin	Far-Go	Triallate
Buctril	Bromoxynil	Farmland Liquid Atrazine 4L	Atrazine
Bullet	Alachlor + Atrazine	Formula 40	2,4-D

Trade Name	Common Name
Freedom	Alachlor + Trifluralin
Fusilade 2000	Fluazifop-P
Fusion	Fluazifop-P + Fenoxaprop
Galaxy	Acifluorfen + Bentazon
Glean	Chlorsulfuron
Gramoxone Extra	Paraquat
Harmony Extra	Thifensulfuron + Tribenuron
Herbicide 273	Endothall
Hi-Dep	2,4-D
Hoelon	Diclofop
Honcho	Glyphosate
Judge	Alachlor
Jury	Glyphosate
Karmex DF	Diuron
Kerb	Pronamide
Krenite	Fosamine
Laddok	Bentazon + Atrazine
Landmaster BW	Glyphosate + 2,4-D
Lariat	Alachlor + Atrazine
Lasso	Alachlor
Lasso II	Alachlor
Leader	Bentazon
Lexone	Metribuzin
Linex 4 L	Linuron
Linex 50 DF	Linuron
Lorox	Linuron
Low Vol 4 Ester Weed Killer	2,4-D
Low Vol Ester 4	2,4-D
Low vol Ester 6	2,4-D
Marksman	Dicamba + Atrazine
MCP 2 Sodium Herbicide	MCPA
MCP Amine 4	MCPA
MCPA 4 Ester Herbicide	MCPA
MCPA Amine Herbicide	MCPA
MCPA LV Ester	MCPA
Micro Tech	Alachlor
Mirage	Glyphosate
Nortron	Ethofumesate
Option II	Fenoxaprop
Pacer	Bentazon
Pardner	Alachlor
Pinnacle	Thifensulfuron
Pledge	Bentazon
Poast	Sethoxydim
Princep	Simazine
Propanil 4E	Propanil
Propanil 60 DF	Propanil
Protocol	Glyphosate
Prowl	Pendimethalin
Pursuit	Imazethapyr
Pyrazon	Pyramin
Ramrod	Propachlor
Ranger	Glyphosate
Rascal	Glyphosate
Rattler	Glyphosate
Rescue	Naptalam + 2,4-D

Trade Name	Common Name
Rhomene	MCPA
Rhonox	MCPA
Rodeo	Glyphosate
Ro-Neet	Cycloate
Roundup/RT	Glyphosate
Ruler	Glyphosate
Salute	Trifluralin + Metribuzin
Salvo Low Volatile Weed Killer	2,4-D
Savage	2,4-D
Scope	Bentazon
SEE 2,4-D LV4	2,4-D
Select	Clethodim
Sencor	Metribuzin
Silhouette	Glyphosate
Simazine 4L	Simazine
Simazine 80 W	Simazine
Simazine 90 DF	Simazine
Simazine 90 WDG	Simazine
Solution	2,4-D
Sonalan	Ethalfluralin
Sostrum Atrazine	Atrazine
Stall	Alachlor
Stall MT	Alachlor
Stampede CM	Propanil + MCPA
Starfire	Paraquat
Stinger	Clopyralid
Sulv	2,4-D
Sutan +	Butylate + Safener
Sutazine +	Butylate + Atrazine + Safener
Tiller	Fenoxaprop + 2,4-D + MCPA
Tordon	Picloram
Treflan 5	Trifluralin
Treflan 80 DC	Trifluralin
Treflan EC	Trifluralin
Treflan M.T.F.	Trifluralin
Treflan TR-10	Trifluralin
Tri-4	Trifluralin
Trific 60 DF	Trifluralin
Trifluralin 10G	Trifluralin
Trifluralin 4 AT	Trifluralin
Trifluralin 4 EC	Trifluralin
Trilin 10 G	Trifluralin
Trilin 4 AT	Trifluralin
Turbo	Metribuzin + Metolachlor
Weed Pro 3# Amine	2,4-D
Weed Pro 4# Low Vol	2,4-D
Weed Pro 6# Low Vol	2,4-D
Weed Pro Atrazine	Atrazine
Weed Rhap A-4D	2,4-D
Weed Rhap LV-6D	2,4-D
Weedar 64	2,4-D
Weedar Sodium MCPA	MCPA
Weedestroy	MCPA
Weedone 170	2,4-D
Weedone LV 4	2,4-D
Weedone LV 6	2,4-D

INSECTICIDES

<u>Trade Name</u>	<u>Common Name</u>
Ambush	Permethrin
Asana XL	Esfenvalerate
Counter	Terbufos
Cygon	Dimethoate
Diazinon	Diazinon
Dipel	Bacillus thuringiensis
Di-Syston	Disulfoton
Dyfonate	Fonofos
Force	Tefluthrin
Furadan	Carbofuran
Guthion	Azinphos-methyl
Lannate	Methomyl
Lorsban	Chlorpyrifos
Malathion	Malathion
Methyl parathion	Methyl parathion
Mocap	Ethoprop
Monitor	Methamidophos
NOLO (TM) Bait	Nosema locustae fungus
Orthene	Acephate
Parathion	Ethyl parathion
Penncap M	Encapsulated methyl parathion
Phosphamidon	Phosphamidon
Pounce	Permethrin
Pydrin	Fenvalerate
Reldan	Chlopyrifos-methyl
Scout X-TRA	Tralomethrin
Sevin	Carbaryl
Supracide	Methidathion
Temik	Aldicarb
Thimet	Phorate
Thiodan	Endosulfan
Vydate	Oxamyl

FUNGICIDES

<u>Trade Name</u>	<u>Common Name</u>
Basicop	Copper
Bayleton	Triademefon
Benlate	Benlate
Blite Out Plus	Maneb+Triphenyltin hydrodioxide
Bravo	Chlorothalonil
Champ	Copper
Champion	Copper
Dithane	Mancozeb
Du-Ter	Triphenyltin hydroxide
Kocide	Copper
Kocide 404S	Copper + Sulfur hydroxide
Maneb Plus Zinc F4	Maneb + Zinc
Manex II	Mancozeb
Manzate	Mancozeb
Mertect	Thiabendazole
Microthiol	Sulfur
Penncozeb	Mancozeb
Pro-Tex	Maneb + Triphenyltin hydroxide
Ridomil	Ridomil
Ridomil MZ58	Metalaxyl + Mancozeb
Ridomil/Bravo	Metalaxyl + Chlorothalonil
Rovral	Iprodione
Sulfur DF	Sulfur
Super Six	Sulfur
Super Tin	Triphenyltin hydroxide
That Flowable	Sulfur
Thiolux	Sulfur
Tilt	Propiconazole
Top Cop Tribasi	Copper
Top Cop W	Sulfur + Copper
Topsin	Thiophanate methyl
Uniflow	Sulfur

SEED TREATMENT

Trade Name	Common Name	Trade Name	Common Name
Agri-Strep	Streptomycin	Isotox Seed Treater F	Captan + Lindane
Agrosol	Captan + Thiabendazole	Lindane	Lindane
Agrosol Pour-On	Thiram + Thiabendazole	Lorsban 30	Chlorpyrifos
Agrosol T	Thiram + Thiabendazole	Lorsban 50-SL	Chlorpyrifos
Agrox 2-Way	Captan + Diazinon	Mancozeb	Mancozeb
Apron	Metalaxyl	Maneb	Maneb
Apron-Terraclor	Metalaxyl + PCNB	Maneb + Lindane	Maneb + Lindane
AS-50	Streptomycin	Maneb-Lindane	Maneb + Lindane
Baytan	Triadimenol	Manex II	Mancozeb
Bean Guard	Captan + Carboxin	Nu-Gro Captan	Captan
Benlate	Benomyl	Nu-Gro Captan Carboxin	Captan + Carboxin
Captan	Captan	Nu-Gro Soybean Seed Protect	Captan
Chloroneb	Chloroneb	Nuzone	Imazalil
DB Green	Maneb + Lindane	Omega	Prochloraz
DB Green + Vitavax	Carboxin + Maneb + Lindane	Polyram	Metiram
Diazinon	Diazinon	PST Plus Bark	Mancozeb
Dithane	Mancozeb	Rival	Captan + PCNB + Thiabendazole
Double R	Imazalil	RTU-PCNB	PCNB
Dustret A	Maneb + Streptomycin + Bark	RTU-Vitavax-Thiram	Carboxin + Thiram
Dustret T	Thiophanate methyl	Seed Mate Captan Vitavax	Captan + Carboxin
Enhance Plus	Carboxin + Maneb + Lindane	Seed Mate Maneb Lindane	Maneb + Lindane
Fir Bark	Zineb	Sim-Tec Plus	Thiabendazole
Flo-Pro IMZ	Imazalil	Spud Bark	Mancozeb
Formaldehyde	Formaldehyde	Terra Coat	PCNB
Gammasan	Captan + Lindane	Tops 2.5D	Thiophanate methyl
Germate Plus	Carboxin + Diazinon + Lindane	Triple Noctin	Thiram
Grain Guard	Mancozeb	Vitavax	Carboxin
Granol NM	Maneb + Lindane	Vitavax 200	Carboxin + Thiram
Granox Plus	Maneb + Thiabendazole	Vitavax Pour-On	Carboxin + Thiram
Gustafson 42S	Thiram	VTL	Carboxin + Thiram + Lindane
		Yield Shield	Thiram

DESICCANTS

Trade Name	Common Name	Trade Name	Common Name
Chlorate Defoliant Desiccant	Sodium Chlorate	Gramoxone Extra	Paraquat
Cyclone	Paraquat	Leafex-3	Sodium Chlorate
Defol-6	Sodium Chlorate	Sodium Chlorate 6	Sodium Chlorate
Des-i-cate	Endothall	Sulfuric Acid	Sulfuric Acid
Diquat	Diquat		

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