

**Table 39. Fertilizers and Chemicals Applied: 2002 and 1997**

[Data are based on a sample of farms. For meaning of abbreviations and symbols, see introductory text]

Item	North Dakota	Adams	Barnes	Benson	Billings	Bottineau	Bowman
Commercial fertilizer, lime, and soil conditioners <sup>1</sup> . . . . . farms, 2002	15,563	164	448	298	77	447	149
1997	19,802	148	554	452	79	564	218
acres treated, 2002	16,671,283	162,394	540,106	387,915	35,398	608,160	153,151
1997	16,369,427	147,047	596,706	447,132	38,096	554,011	132,317
Cropland fertilized, except cropland pastured . . . . . farms, 2002	15,445	164	448	298	77	446	145
1997	19,739	147	554	452	79	564	218
acres treated, 2002	16,601,444	(D)	538,906	387,190	32,524	(D)	152,250
1997	16,341,375	146,367	595,726	446,897	38,096	553,787	(D)
Pastureland and rangeland fertilized . . . . . farms, 2002	520	2	15	4	7	2	7
1997	336	4	21	9	-	9	2
acres treated, 2002	69,839	(D)	1,200	725	2,874	(D)	901
1997	28,052	680	980	235	-	224	(D)
Manure . . . . . farms, 2002	4,662	45	117	92	44	82	64
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	268,782	3,314	4,360	4,905	1,029	4,508	4,631
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control-							
Insects <sup>2</sup> . . . . . farms, 2002	3,670	34	114	69	4	212	15
1997	4,527	26	186	84	12	151	37
acres treated, 2002	1,601,682	5,152	55,552	32,530	1,800	102,948	2,809
1997	1,535,665	(D)	59,996	27,620	2,850	42,469	9,711
Weeds, grass, or brush . . . . . farms, 2002	13,871	131	382	273	72	411	114
1997	16,140	100	533	359	33	473	118
acres treated, 2002	14,112,382	121,249	500,202	325,319	24,490	535,337	119,888
1997	13,323,641	95,057	546,932	350,883	20,929	478,111	72,127
Nematodes . . . . . farms, 2002	108	6	1	2	-	2	-
1997	236	-	10	2	-	1	-
acres treated, 2002	53,245	348	(D)	(D)	-	(D)	-
1997	114,683	-	(D)	(D)	-	-	-
Diseases in crops and orchards . . . . . farms, 2002	1,681	15	56	20	-	33	-
1997	1,734	12	45	33	3	13	-
acres treated, 2002	1,208,071	4,228	23,420	10,825	-	14,340	-
1997	898,955	2,814	22,140	11,849	384	9,812	-
Chemicals used to control growth, thin fruit, or defoliate . . . . . farms, 2002	628	-	17	8	-	29	-
1997	618	3	23	8	-	12	1
acres on which used, 2002	284,337	-	6,086	1,260	-	7,710	-
1997	244,272	(D)	4,795	4,368	-	2,730	(D)

  

Item	Burke	Burleigh	Cass	Cavalier	Dickey	Divide	Dunn
Commercial fertilizer, lime, and soil conditioners <sup>1</sup> . . . . . farms, 2002	254	214	644	455	261	372	272
1997	331	294	797	575	359	355	383
acres treated, 2002	271,370	150,466	748,535	649,859	290,802	287,042	163,009
1997	239,456	170,035	822,157	672,261	270,315	253,086	199,779
Cropland fertilized, except cropland pastured . . . . . farms, 2002	254	214	637	455	261	372	265
1997	331	283	796	575	350	355	383
acres treated, 2002	(D)	149,966	747,612	649,859	289,862	(D)	160,255
1997	239,456	169,815	821,605	(D)	269,785	(D)	199,347
Pastureland and rangeland fertilized . . . . . farms, 2002	1	10	18	-	12	2	39
1997	-	11	6	2	10	1	4
acres treated, 2002	(D)	500	923	-	940	(D)	2,754
1997	-	220	552	(D)	530	(D)	432
Manure . . . . . farms, 2002	45	120	108	12	98	112	150
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	1,718	15,028	4,294	556	5,627	4,749	7,610
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control-							
Insects <sup>2</sup> . . . . . farms, 2002	36	23	180	196	37	22	25
1997	31	51	404	116	114	22	38
acres treated, 2002	15,186	5,653	77,196	85,653	11,948	12,229	4,263
1997	11,314	11,134	172,138	64,807	34,958	8,534	12,203
Weeds, grass, or brush . . . . . farms, 2002	207	225	535	411	234	307	221
1997	295	225	748	501	301	351	197
acres treated, 2002	198,050	130,546	764,129	506,606	238,567	237,945	116,817
1997	215,087	101,086	849,847	572,479	229,080	236,637	64,830
Nematodes . . . . . farms, 2002	2	-	11	2	2	1	-
1997	21	14	9	5	2	-	1
acres treated, 2002	(D)	-	4,626	(D)	(D)	(D)	-
1997	5,324	9,212	5,458	9,569	(D)	-	(D)
Diseases in crops and orchards . . . . . farms, 2002	33	1	108	143	3	19	2
1997	15	23	81	48	12	7	11
acres treated, 2002	13,696	(D)	49,562	101,399	(D)	5,994	(D)
1997	8,163	390	30,217	30,707	2,947	11,263	5,763
Chemicals used to control growth, thin fruit, or defoliate . . . . . farms, 2002	9	1	17	66	5	15	3
1997	9	1	32	11	2	-	1
acres on which used, 2002	2,494	(D)	4,060	28,375	2,047	3,933	600
1997	27	(D)	3,405	12,622	(D)	-	(D)

See footnote(s) at end of table.

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**Table 39. Fertilizers and Chemicals Applied: 2002 and 1997 - Con.**

[Data are based on a sample of farms. For meaning of abbreviations and symbols, see introductory text]

Item	Eddy	Emmons	Foster	Golden Valley	Grand Forks	Grant	Griggs	Hettinger
Commercial fertilizer, lime, and soil conditioners <sup>1</sup> . . . . . farms, 2002	134	310	160	123	430	262	126	200
1997	188	377	177	156	548	323	216	248
acres treated, 2002	117,459	276,516	219,559	111,847	548,587	186,446	186,765	308,688
1997	138,657	230,258	213,323	129,995	578,601	169,712	219,075	301,129
Cropland fertilized, except cropland pastured . . . . . farms, 2002	134	309	156	123	430	251	126	177
1997	188	377	173	155	548	323	216	248
acres treated, 2002	116,523	275,736	219,159	(D)	(D)	183,716	186,765	301,451
1997	138,657	229,158	211,743	129,045	578,241	169,212	219,075	(D)
Pastureland and rangeland fertilized . . . . . farms, 2002	9	3	4	4	24	13	-	40
1997	-	10	13	6	19	5	-	2
acres treated, 2002	936	780	400	(D)	(D)	2,730	-	7,237
1997	-	1,100	1,580	950	360	500	-	(D)
Manure . . . . . farms, 2002	60	236	33	39	50	187	25	67
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	3,478	10,555	1,858	2,215	2,112	10,157	922	3,776
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control-								
Insects <sup>2</sup> . . . . . farms, 2002	36	75	33	19	154	29	42	23
1997	50	58	51	71	145	53	71	36
acres treated, 2002	8,834	25,073	12,316	8,731	95,688	5,575	13,810	9,801
1997	16,189	13,102	21,160	21,241	63,258	7,167	14,339	13,648
Weeds, grass, or brush . . . . . farms, 2002	124	267	133	103	357	283	143	173
1997	142	229	173	109	418	165	192	166
acres treated, 2002	100,154	226,120	177,666	99,917	477,898	136,719	181,175	257,378
1997	104,572	111,041	188,524	89,931	502,351	76,446	187,246	197,818
Nematodes . . . . . farms, 2002	-	-	-	-	11	-	-	-
1997	-	15	5	1	15	5	1	-
acres treated, 2002	-	-	-	-	7,548	-	-	-
1997	-	6,872	1,020	(D)	8,620	2,000	(D)	-
Diseases in crops and orchards . . . . . farms, 2002	5	1	19	7	139	1	29	3
1997	5	1	7	12	170	2	14	11
acres treated, 2002	692	(D)	11,398	2,119	113,788	(D)	20,259	2,700
1997	1,982	(D)	3,225	5,294	97,254	(D)	8,155	6,173
Chemicals used to control growth, thin fruit, or defoliate . . . . . farms, 2002	2	-	8	7	55	11	11	9
1997	9	10	4	4	53	6	1	2
acres on which used, 2002	(D)	-	4,977	3,112	18,587	1,188	11,018	2,615
1997	4,300	8,722	683	52	27,035	(D)	(D)	(D)
Item	Kidder	LaMoure	Logan	McHenry	McIntosh	McKenzie	McLean	Mercer
Commercial fertilizer, lime, and soil conditioners <sup>1</sup> . . . . . farms, 2002	173	314	192	372	186	273	506	207
1997	197	422	264	459	224	384	622	234
acres treated, 2002	107,007	417,730	138,148	331,893	177,108	230,108	628,231	115,723
1997	95,769	367,710	133,127	334,445	169,706	206,740	518,947	104,223
Cropland fertilized, except cropland pastured . . . . . farms, 2002	173	314	191	372	186	272	493	206
1997	197	422	264	459	223	381	622	234
acres treated, 2002	(D)	416,382	136,231	327,373	174,738	229,658	627,345	(D)
1997	95,769	367,030	132,707	(D)	169,587	205,477	(D)	(D)
Pastureland and rangeland fertilized . . . . . farms, 2002	1	14	9	12	27	6	20	1
1997	-	18	7	8	9	15	1	2
acres treated, 2002	(D)	1,348	1,917	4,520	2,370	450	886	(D)
1997	-	680	420	(D)	119	1,263	(D)	(D)
Manure . . . . . farms, 2002	145	111	113	144	105	81	186	54
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	13,797	11,826	5,043	8,486	8,069	4,884	7,951	1,653
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control-								
Insects <sup>2</sup> . . . . . farms, 2002	22	53	34	107	49	14	60	4
1997	10	133	46	130	55	46	79	33
acres treated, 2002	15,495	29,684	12,758	33,926	15,552	5,124	25,220	955
1997	5,935	39,655	11,773	32,501	17,517	12,311	18,993	4,547
Weeds, grass, or brush . . . . . farms, 2002	162	302	174	337	181	255	442	224
1997	168	355	197	418	166	229	577	172
acres treated, 2002	71,006	328,493	90,748	250,174	143,082	194,875	506,229	128,260
1997	62,632	304,933	76,668	238,668	124,864	103,035	448,142	62,420
Nematodes . . . . . farms, 2002	-	-	-	-	-	-	8	-
1997	-	8	1	-	1	9	1	-
acres treated, 2002	-	-	-	-	-	-	8	-
1997	-	124	(D)	-	(D)	7,742	(D)	-
Diseases in crops and orchards . . . . . farms, 2002	4	5	5	15	3	3	36	9
1997	11	33	2	30	8	32	16	7
acres treated, 2002	5,593	1,648	200	8,585	1,958	(D)	25,292	1,440
1997	4,655	11,937	(D)	22,137	1,588	15,497	10,102	2,340
Chemicals used to control growth, thin fruit, or defoliate . . . . . farms, 2002	3	7	5	13	1	4	7	-
1997	-	36	8	10	2	3	12	19
acres on which used, 2002	(D)	5,493	2,500	1,550	(D)	840	4,975	-
1997	-	5,378	1,090	1,200	(D)	809	8,307	3,672

See footnote(s) at end of table.

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**Table 39. Fertilizers and Chemicals Applied: 2002 and 1997 - Con.**

[Data are based on a sample of farms. For meaning of abbreviations and symbols, see introductory text]

Item	Morton	Mountrail	Nelson	Oliver	Pembina	Pierce	Ramsey	Ransom
Commercial fertilizer, lime, and soil conditioners <sup>1</sup> . . . . . farms, 2002	448	425	227	131	334	225	318	235
1997	497	490	337	172	492	359	382	349
acres treated, 2002	256,044	439,929	286,805	91,020	480,546	239,125	468,960	212,319
1997	249,828	375,142	280,017	77,484	473,789	275,674	428,393	283,294
Cropland fertilized, except cropland pastured . . . . . farms, 2002	436	419	227	131	334	225	318	235
1997	496	489	337	172	492	359	374	349
acres treated, 2002	250,995	438,189	284,705	(D)	(D)	237,285	468,570	210,067
1997	248,680	(D)	(D)	77,484	(D)	274,693	428,355	283,116
Pastureland and rangeland fertilized . . . . . farms, 2002	35	11	15	1	2	16	3	22
1997	5	2	4	-	2	15	9	3
acres treated, 2002	5,049	1,740	2,100	(D)	(D)	1,840	390	2,252
1997	1,148	(D)	(D)	-	(D)	981	38	178
Manure . . . . . farms, 2002	253	86	60	102	49	102	13	108
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	15,424	5,564	1,910	5,762	1,486	4,985	1,036	7,107
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control-								
Insects <sup>2</sup> . . . . . farms, 2002	83	47	105	6	163	68	102	24
1997	82	13	106	4	218	78	165	91
acres treated, 2002	14,169	22,542	28,899	2,125	94,250	40,712	48,830	8,759
1997	14,126	14,290	39,147	(D)	83,543	18,271	67,730	23,606
Weeds, grass, or brush . . . . . farms, 2002	413	354	195	171	291	208	274	199
1997	302	413	269	144	417	338	339	324
acres treated, 2002	204,633	401,381	230,599	91,690	387,240	188,392	408,136	173,561
1997	131,882	292,853	232,287	40,760	365,981	236,892	374,913	243,525
Nematodes . . . . . farms, 2002	-	2	-	-	15	-	-	1
1997	1	-	-	8	28	-	-	2
acres treated, 2002	(D)	(D)	-	-	6,065	-	-	(D)
1997	(D)	-	-	800	6,755	-	(D)	(D)
Diseases in crops and orchards . . . . . farms, 2002	1	34	43	-	179	46	38	6
1997	6	5	30	3	231	16	48	29
acres treated, 2002	(D)	24,981	37,505	-	142,095	26,080	27,083	10,234
1997	540	6,770	16,576	(D)	97,417	10,529	38,743	14,722
Chemicals used to control growth, thin fruit, or defoliate . . . . . farms, 2002	10	32	20	-	36	10	17	3
1997	1	33	7	-	44	-	11	22
acres on which used, 2002	1,000	9,646	17,755	-	20,497	8,394	8,323	1,877
1997	(D)	6,952	2,335	-	30,374	-	8,325	13,105
Item	Renville	Richland	Rolette	Sargent	Sheridan	Sioux	Slope	Stark
Commercial fertilizer, lime, and soil conditioners <sup>1</sup> . . . . . farms, 2002	257	600	190	318	220	72	117	377
1997	359	704	282	381	257	94	174	437
acres treated, 2002	386,035	589,132	189,944	254,492	211,747	43,106	117,203	289,930
1997	351,841	501,348	204,271	285,871	171,583	41,073	112,384	236,518
Cropland fertilized, except cropland pastured . . . . . farms, 2002	257	600	189	318	220	72	105	377
1997	359	704	270	381	257	94	174	427
acres treated, 2002	385,860	586,802	187,892	254,040	210,857	43,106	114,761	284,816
1997	(D)	499,646	202,751	(D)	(D)	41,073	111,709	232,108
Pastureland and rangeland fertilized . . . . . farms, 2002	5	25	19	5	6	-	15	24
1997	1	34	14	1	1	-	6	17
acres treated, 2002	175	2,330	2,052	452	890	-	2,442	5,114
1997	(D)	1,702	1,520	(D)	(D)	-	675	4,410
Manure . . . . . farms, 2002	15	97	69	80	71	18	41	202
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	1,043	7,430	2,931	4,064	2,793	1,277	2,482	7,295
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control-								
Insects <sup>2</sup> . . . . . farms, 2002	122	234	48	35	54	9	21	77
1997	48	246	54	64	49	21	32	53
acres treated, 2002	65,427	100,652	16,176	9,615	28,705	7,780	7,985	26,525
1997	19,740	79,611	12,473	22,125	9,961	3,196	4,997	10,038
Weeds, grass, or brush . . . . . farms, 2002	197	513	221	300	202	31	86	296
1997	291	604	261	296	176	48	122	327
acres treated, 2002	272,798	594,124	186,279	242,552	200,093	22,975	98,853	200,179
1997	274,626	546,855	171,542	281,395	121,717	23,166	90,986	135,307
Nematodes . . . . . farms, 2002	1	11	-	-	1	-	-	-
1997	1	17	-	-	-	1	-	-
acres treated, 2002	(D)	2,840	-	-	(D)	-	-	-
1997	(D)	6,907	-	-	-	(D)	-	-
Diseases in crops and orchards . . . . . farms, 2002	29	33	4	2	24	-	4	14
1997	13	77	17	11	10	8	6	13
acres treated, 2002	29,600	22,992	7,733	(D)	29,350	-	(D)	18,590
1997	16,380	34,044	16,203	3,509	8,659	2,303	3,880	9,852
Chemicals used to control growth, thin fruit, or defoliate . . . . . farms, 2002	4	4	1	2	1	-	1	14
1997	13	43	-	19	1	-	4	5
acres on which used, 2002	750	4,329	(D)	(D)	(D)	-	(D)	6,958
1997	7,398	16,116	-	4,436	(D)	-	1,408	800

See footnote(s) at end of table.

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**Table 39. Fertilizers and Chemicals Applied: 2002 and 1997 - Con.**

[Data are based on a sample of farms. For meaning of abbreviations and symbols, see introductory text]

Item	Steele	Stutsman	Towner	Trail	Walsh	Ward	Wells	Williams
Commercial fertilizer, lime, and soil conditioners <sup>1</sup>								
farms, 2002	219	404	272	346	472	527	314	492
1997	227	484	323	439	581	887	451	496
acres treated, 2002	288,843	520,478	311,963	420,761	490,172	673,803	376,203	482,701
1997	295,548	540,347	399,183	408,589	508,212	665,777	455,188	294,258
Cropland fertilized, except cropland pastured								
farms, 2002	219	392	272	346	472	527	314	491
1997	227	484	323	439	581	887	451	496
acres treated, 2002	288,843	518,428	311,048	420,761	(D)	673,103	376,203	482,344
1997	(D)	540,347	(D)	(D)	507,609	(D)	(D)	293,572
Pastureland and rangeland fertilized								
farms, 2002	-	13	5	-	2	8	-	3
1997	1	-	10	2	9	2	1	13
acres treated, 2002	-	2,050	915	-	(D)	700	-	357
1997	(D)	-	(D)	(D)	603	(D)	(D)	686
Manure								
farms, 2002	13	170	42	24	75	80	81	86
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	775	14,746	2,511	1,647	2,054	3,658	7,915	3,776
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control-								
Insects <sup>2</sup>								
farms, 2002	68	32	62	163	195	131	41	59
1997	46	148	78	214	170	60	117	31
acres treated, 2002	19,249	10,853	19,739	90,575	104,157	57,845	21,782	22,870
1997	27,115	59,300	27,573	74,268	71,732	22,237	39,346	14,659
Weeds, grass, or brush								
farms, 2002	214	426	231	277	460	475	271	383
1997	216	465	262	366	495	762	350	443
acres treated, 2002	296,418	409,342	266,860	385,481	383,362	598,977	293,174	386,244
1997	266,412	475,034	333,775	388,501	388,530	563,524	382,192	248,610
Nematodes								
farms, 2002	1	1	1	2	17	-	1	6
1997	-	8	9	11	12	-	9	-
acres treated, 2002	(D)	(D)	(D)	(D)	8,517	-	(D)	6,600
1997	-	3,433	16,296	2,163	7,833	(D)	360	-
Diseases in crops and orchards								
farms, 2002	46	6	44	99	193	66	14	39
1997	58	44	28	124	179	60	30	24
acres treated, 2002	33,765	5,285	20,308	69,337	179,432	35,555	10,455	40,048
1997	28,689	17,061	17,438	54,514	111,680	31,303	9,308	15,278
Chemicals used to control growth, thin fruit, or defoliate								
farms, 2002	12	35	4	32	58	5	3	11
1997	1	13	19	24	48	3	10	15
acres on which used, 2002	8,001	18,455	2,423	7,697	34,421	4,395	2,600	6,944
1997	(D)	7,967	11,011	3,715	20,593	2,909	3,122	3,954

<sup>1</sup> Data for 1997 exclude lime.

<sup>2</sup> Data for 1997 include treatment of crops, including hay, but not other land.