

**Table 10. Agricultural Chemicals Used, Including Fertilizer: 1997 and 1992**

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

Chemicals used	North Dakota	Adams	Barnes	Benson	Billings	Bottineau
	Commercial fertilizer ..... farms, 1997..	19 428	156	549	441	79
..... farms, 1992..	19 817	176	648	475	69	517
acres on which used, 1997..	16 139 260	137 567	602 279	442 523	38 151	545 114
..... farms, 1992..	13 942 386	94 824	623 049	377 849	18 537	452 247
Cropland fertilized, except pastureland ..... farms, 1997..	19 364	155	549	441	79	557
..... farms, 1992..	19 740	171	642	475	61	516
acres on which used, 1997..	16 111 667	137 047	601 304	442 308	38 151	544 890
..... farms, 1992..	13 900 436	94 449	621 657	(D)	17 589	(D)
Pastureland and rangeland fertilized..... farms, 1997..	334	3	21	8	-	9
..... farms, 1992..	422	7	17	1	9	2
acres on which used, 1997..	27 593	520	975	215	-	224
..... farms, 1992..	41 950	375	1 392	(D)	948	(D)
Sprays, dusts, granules, fumigants, etc., to control—						
Insects on hay and other crops ..... farms, 1997..	4 434	32	184	84	12	139
..... farms, 1992..	4 452	19	182	83	10	169
acres on which used, 1997..	1 509 158	(D)	60 166	29 105	2 850	36 054
..... farms, 1992..	1 317 219	2 285	40 645	27 653	1 283	44 258
Nematodes in crops ..... farms, 1997..	233	-	9	2	-	-
..... farms, 1992..	370	1	2	12	-	3
acres on which used, 1997..	113 699	(D)	(D)	(D)	-	-
..... farms, 1992..	112 017	(D)	(D)	6 844	-	2 075
Diseases in crops and orchards..... farms, 1997..	1 712	20	45	33	3	13
..... farms, 1992..	1 428	8	15	7	-	26
acres on which used, 1997..	886 542	4 690	22 140	11 849	384	9 812
..... farms, 1992..	723 880	4 245	7 428	2 884	-	16 020
Weeds, grass, or brush in crops and pasture ..... farms, 1997..	15 774	101	524	347	33	462
..... farms, 1992..	18 935	175	610	442	49	505
acres on which used, 1997..	13 089 342	80 287	551 587	340 249	21 260	464 830
..... farms, 1992..	13 461 467	96 940	570 617	371 740	13 658	429 915
Chemicals used on crops to control growth, thin fruit, or defoliate ..... farms, 1997..	621	2	22	8	-	12
..... farms, 1992..	589	8	15	1	1	4
acres on which used, 1997..	244 977	(D)	4 695	4 368	-	2 730
..... farms, 1992..	174 001	3 214	4 887	(D)	(D)	955

  

Chemicals used	Bowman	Burke	Burleigh	Cass	Cavalier	Dickey
	Commercial fertilizer ..... farms, 1997..	224	327	288	739	572
..... farms, 1992..	133	297	343	822	640	301
acres on which used, 1997..	133 685	238 759	155 359	764 890	675 942	283 191
..... farms, 1992..	73 776	140 893	112 852	787 521	656 336	267 491
Cropland fertilized, except pastureland ..... farms, 1997..	224	327	278	738	572	344
..... farms, 1992..	133	297	343	822	640	300
acres on which used, 1997..	(D)	238 759	155 159	764 338	(D)	282 711
..... farms, 1992..	(D)	140 893	112 852	786 311	(D)	266 890
Pastureland and rangeland fertilized..... farms, 1997..	2	-	10	6	2	9
..... farms, 1992..	1	-	-	12	1	7
acres on which used, 1997..	(D)	-	200	552	(D)	480
..... farms, 1992..	(D)	-	-	1 210	(D)	601
Sprays, dusts, granules, fumigants, etc., to control—						
Insects on hay and other crops ..... farms, 1997..	37	29	46	376	117	117
..... farms, 1992..	7	39	44	290	72	80
acres on which used, 1997..	9 841	10 364	9 198	162 508	65 489	38 404
..... farms, 1992..	5 972	9 670	6 194	81 996	40 839	44 882
Nematodes in crops ..... farms, 1997..	-	20	11	9	5	2
..... farms, 1992..	-	-	7	12	1	6
acres on which used, 1997..	-	5 159	7 180	5 458	9 569	(D)
..... farms, 1992..	-	-	280	2 943	(D)	1 989
Diseases in crops and orchards..... farms, 1997..	-	14	21	74	47	15
..... farms, 1992..	3	13	1	85	70	12
acres on which used, 1997..	-	7 973	380	28 659	30 337	3 379
..... farms, 1992..	(D)	5 973	(D)	34 687	44 414	4 293
Weeds, grass, or brush in crops and pasture ..... farms, 1997..	118	294	231	691	496	291
..... farms, 1992..	133	245	307	753	545	372
acres on which used, 1997..	70 867	216 817	95 392	783 694	573 594	239 279
..... farms, 1992..	81 003	175 070	139 568	765 586	556 001	256 495
Chemicals used on crops to control growth, thin fruit, or defoliate ..... farms, 1997..	1	9	1	31	11	2
..... farms, 1992..	2	7	2	12	2	14
acres on which used, 1997..	(D)	27	(D)	3 395	12 622	(D)
..... farms, 1992..	(D)	690	(D)	1 406	(D)	5 072

**Table 10. Agricultural Chemicals Used, Including Fertilizer: 1997 and 1992—Con.**

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

Chemicals used	County						
	Divide	Dunn	Eddy	Emmons	Foster	Golden Valley	Grand Forks
Commercial fertilizer ..... farms, 1997..	350	387	186	378	180	154	531
..... farms, 1992..	254	342	221	324	217	171	619
acres on which used, 1997..	245 620	196 493	139 234	229 099	212 951	128 418	567 208
..... acres on which used, 1992..	78 598	146 207	140 737	166 121	227 312	91 061	582 064
Cropland fertilized, except pastureland ..... farms, 1997..	350	387	186	378	176	153	531
..... farms, 1992..	254	335	221	324	217	170	618
acres on which used, 1997..	(D)	196 061	139 234	227 899	211 891	127 318	566 848
..... acres on which used, 1992..	77 655	143 332	140 417	165 856	226 581	89 981	581 572
Pastureland and rangeland fertilized..... farms, 1997..	1	4	—	11	11	7	9
..... farms, 1992..	10	18	12	3	5	4	8
acres on which used, 1997..	(D)	432	—	1 200	1 060	1 100	360
..... acres on which used, 1992..	943	2 875	320	265	731	1 080	492
Sprays, dusts, granules, fumigants, etc., to control—							
Insects on hay and other crops ..... farms, 1997..	22	40	51	57	50	70	142
..... farms, 1992..	51	12	78	19	79	26	175
acres on which used, 1997..	8 534	13 303	16 689	12 950	20 915	20 765	61 648
..... acres on which used, 1992..	17 700	4 020	13 042	10 811	23 533	4 319	82 612
Nematodes in crops ..... farms, 1997..	—	1	—	15	5	1	15
..... farms, 1992..	1	1	—	3	3	—	28
acres on which used, 1997..	—	(D)	—	6 872	1 020	(D)	8 620
..... acres on which used, 1992..	(D)	(D)	—	—	1 379	—	7 822
Diseases in crops and orchards..... farms, 1997..	7	11	4	1	7	11	171
..... farms, 1992..	12	4	3	1	4	8	177
acres on which used, 1997..	11 263	5 763	1 850	(D)	3 225	5 159	97 469
..... acres on which used, 1992..	3 249	1 957	2 621	(D)	3 045	696	107 282
Weeds, grass, or brush in crops and pasture ..... farms, 1997..	347	199	143	230	171	106	406
..... farms, 1992..	362	273	214	341	205	159	581
acres on which used, 1997..	229 263	66 075	104 312	111 090	190 544	87 854	493 540
..... acres on which used, 1992..	204 194	73 624	135 321	162 689	211 607	86 949	505 449
Chemicals used on crops to control growth, thin fruit, or defoliate ..... farms, 1997..	—	1	9	10	5	4	54
..... farms, 1992..	1	—	3	17	4	3	47
acres on which used, 1997..	—	(D)	4 300	8 722	799	52	27 635
..... acres on which used, 1992..	(D)	—	1 993	5 930	(D)	895	15 468

  

Chemicals used	County						
	Grant	Griggs	Hettinger	Kidder	La Moure	Logan	McHenry
Commercial fertilizer ..... farms, 1997..	337	214	249	179	416	268	461
..... farms, 1992..	327	296	327	157	517	207	479
acres on which used, 1997..	174 802	208 361	302 202	74 763	363 665	134 738	339 334
..... acres on which used, 1992..	169 153	251 045	257 604	60 253	353 838	93 534	237 396
Cropland fertilized, except pastureland ..... farms, 1997..	337	214	249	179	416	268	461
..... farms, 1992..	327	296	327	156	517	206	476
acres on which used, 1997..	174 202	208 361	(D)	74 763	362 985	134 318	(D)
..... acres on which used, 1992..	169 153	(D)	257 334	(D)	353 023	92 813	234 988
Pastureland and rangeland fertilized..... farms, 1997..	6	—	2	—	18	7	8
..... farms, 1992..	—	2	4	1	22	14	15
acres on which used, 1997..	600	—	(D)	—	680	420	(D)
..... acres on which used, 1992..	—	(D)	270	(D)	815	721	2 408
Sprays, dusts, granules, fumigants, etc., to control—							
Insects on hay and other crops ..... farms, 1997..	56	65	35	7	132	45	130
..... farms, 1992..	23	47	27	6	117	10	206
acres on which used, 1997..	7 325	13 353	13 133	4 617	39 762	11 733	32 486
..... acres on which used, 1992..	6 202	14 862	12 826	4 516	34 497	5 315	40 029
Nematodes in crops ..... farms, 1997..	5	1	—	—	8	1	—
..... farms, 1992..	—	—	10	2	6	1	13
acres on which used, 1997..	2 000	(D)	—	—	124	(D)	—
..... acres on which used, 1992..	—	—	6 600	(D)	4 634	(D)	730
Diseases in crops and orchards..... farms, 1997..	2	15	11	10	33	2	29
..... farms, 1992..	1	10	12	7	16	2	5
acres on which used, 1997..	(D)	8 695	6 173	3 945	11 937	(D)	21 537
..... acres on which used, 1992..	(D)	5 203	12 610	2 500	4 566	(D)	2 963
Weeds, grass, or brush in crops and pasture ..... farms, 1997..	168	189	169	160	348	199	413
..... farms, 1992..	281	260	281	226	458	266	518
acres on which used, 1997..	78 918	177 402	198 960	50 188	299 337	78 735	241 339
..... acres on which used, 1992..	163 806	228 330	215 169	68 416	317 352	120 903	220 184
Chemicals used on crops to control growth, thin fruit, or defoliate ..... farms, 1997..	6	1	2	—	35	8	10
..... farms, 1992..	16	2	17	3	13	18	14
acres on which used, 1997..	(D)	(D)	(D)	—	5 113	1 090	1 200
..... acres on which used, 1992..	6 388	(D)	6 806	(D)	1 710	1 804	2 038

**Table 10. Agricultural Chemicals Used, Including Fertilizer: 1997 and 1992—Con.**

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

Chemicals used	McIntosh	McKenzie	McLean	Mercer	Morton	Mountrail	Nelson
	Commercial fertilizer ..... farms, 1997..	220	367	598	240	492	466
..... 1992..	177	375	532	226	526	360	379
acres on which used, 1997..	162 451	187 616	499 464	97 823	251 637	357 308	284 796
..... 1992..	87 106	115 259	322 763	90 161	201 297	194 423	347 846
Cropland fertilized, except pastureland ..... farms, 1997..	219	364	598	240	491	465	335
..... 1992..	177	362	521	226	526	360	379
acres on which used, 1997..	162 329	186 353	(D)	(D)	250 489	(D)	(D)
..... 1992..	(D)	109 345	322 327	(D)	200 774	193 789	345 670
Pastureland and rangeland fertilized..... farms, 1997..	10	15	1	1	5	2	4
..... 1992..	2	20	15	1	10	5	17
acres on which used, 1997..	122	1 263	(D)	(D)	1 148	(D)	(D)
..... 1992..	(D)	5 914	436	(D)	523	634	2 176
Sprays, dusts, granules, fumigants, etc., to control—							
Insects on hay and other crops ..... farms, 1997..	49	48	75	31	80	12	106
..... 1992..	48	99	83	6	36	66	67
acres on which used, 1997..	14 979	12 541	18 249	4 647	13 805	12 890	38 608
..... 1992..	11 308	12 618	21 113	1 011	18 564	21 757	8 703
Nematodes in crops ..... farms, 1997..	1	10	1	—	1	—	—
..... 1992..	11	34	1	—	10	5	7
acres on which used, 1997..	(D)	8 685	(D)	—	(D)	—	—
..... 1992..	4 522	3 122	(D)	—	1 280	5 115	679
Diseases in crops and orchards..... farms, 1997..	9	26	15	7	6	5	32
..... 1992..	3	14	6	1	8	25	28
acres on which used, 1997..	1 796	11 879	9 677	2 340	540	6 770	16 414
..... 1992..	2 197	4 217	5 039	(D)	2 047	21 719	15 040
Weeds, grass, or brush in crops and pasture ..... farms, 1997..	164	227	551	165	299	390	269
..... 1992..	232	374	540	196	467	364	361
acres on which used, 1997..	124 021	100 078	429 768	56 368	132 688	281 542	234 268
..... 1992..	114 251	148 932	340 764	59 962	180 974	224 582	325 770
Chemicals used on crops to control growth, thin fruit, or defoliate ..... farms, 1997..	2	3	12	18	1	31	10
..... 1992..	13	2	30	1	2	3	1
acres on which used, 1997..	(D)	809	8 307	3 561	(D)	6 907	3 064
..... 1992..	2 266	(D)	10 717	(D)	(D)	281	(D)
Chemicals used	Oliver	Pembina	Pierce	Ramsey	Ransom	Renville	Richland
Commercial fertilizer ..... farms, 1997..	165	478	356	394	332	346	652
..... 1992..	209	523	337	449	347	273	780
acres on which used, 1997..	72 858	470 963	280 973	435 815	285 413	345 858	476 587
..... 1992..	69 600	447 992	193 117	456 987	234 711	221 399	510 941
Cropland fertilized, except pastureland ..... farms, 1997..	165	478	356	384	332	346	652
..... 1992..	209	523	337	447	347	273	780
acres on which used, 1997..	72 858	(D)	280 235	435 775	285 235	(D)	474 881
..... 1992..	(D)	(D)	192 280	456 813	233 200	221 399	510 476
Pastureland and rangeland fertilized..... farms, 1997..	—	2	12	11	3	1	33
..... 1992..	6	1	16	5	13	—	8
acres on which used, 1997..	—	(D)	738	40	178	(D)	1 706
..... 1992..	(D)	(D)	837	174	1 511	—	465
Sprays, dusts, granules, fumigants, etc., to control—							
Insects on hay and other crops ..... farms, 1997..	4	214	80	163	95	49	230
..... 1992..	6	209	156	82	107	66	200
acres on which used, 1997..	(D)	83 257	19 051	66 324	24 793	19 597	75 986
..... 1992..	5 254	65 534	27 175	24 948	30 853	11 832	62 092
Nematodes in crops ..... farms, 1997..	10	27	—	2	2	1	16
..... 1992..	1	23	7	1	19	10	17
acres on which used, 1997..	1 000	6 707	—	(D)	(D)	(D)	6 847
..... 1992..	(D)	3 732	3 510	(D)	8 752	300	4 999
Diseases in crops and orchards..... farms, 1997..	3	232	17	46	28	13	78
..... 1992..	13	138	8	26	28	20	50
acres on which used, 1997..	(D)	97 013	10 703	39 133	14 222	16 380	34 129
..... 1992..	6 486	67 781	4 942	22 472	9 960	11 871	14 428
Weeds, grass, or brush in crops and pasture ..... farms, 1997..	137	407	332	347	306	284	559
..... 1992..	116	456	347	362	285	319	617
acres on which used, 1997..	36 859	363 635	235 410	379 683	246 199	274 164	514 031
..... 1992..	43 930	375 227	213 290	388 916	209 103	222 672	515 342
Chemicals used on crops to control growth, thin fruit, or defoliate ..... farms, 1997..	—	44	—	15	19	14	41
..... 1992..	—	37	7	1	16	3	36
acres on which used, 1997..	—	30 374	—	8 885	11 185	7 598	16 026
..... 1992..	—	14 417	1 795	(D)	4 055	855	11 779

**Table 10. Agricultural Chemicals Used, Including Fertilizer: 1997 and 1992—Con.**

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

Chemicals used	Rolette	Sargent	Sheridan	Sioux	Slope	Stark	Steele
	Commercial fertilizer ..... farms, 1997..	281	365	252	99	181	429
..... 1992..	274	396	210	53	161	437	304
acres on which used, 1997..	208 584	285 396	170 249	45 750	114 963	237 963	301 207
..... 1992..	183 787	285 379	128 582	15 582	94 272	152 993	335 073
Cropland fertilized, except pastureland ..... farms, 1997..	268	365	252	99	181	419	236
..... 1992..	274	381	210	53	160	437	304
acres on which used, 1997..	206 924	(D)	(D)	45 750	114 288	233 493	(D)
..... 1992..	182 126	280 740	(D)	15 582	(D)	151 320	334 593
Pastureland and rangeland fertilized..... farms, 1997..	15	1	1	—	6	18	1
..... 1992..	15	25	2	—	3	22	8
acres on which used, 1997..	1 660	(D)	(D)	—	675	4 470	(D)
..... 1992..	1 661	4 639	(D)	—	(D)	1 673	480
Sprays, dusts, granules, fumigants, etc., to control—							
Insects on hay and other crops ..... farms, 1997..	56	71	49	22	28	54	49
..... 1992..	42	96	63	9	13	52	33
acres on which used, 1997..	12 947	24 092	9 946	3 194	4 867	10 048	27 735
..... 1992..	6 185	25 641	13 541	3 130	2 565	9 701	16 220
Nematodes in crops ..... farms, 1997..	—	—	—	1	—	—	—
..... 1992..	1	3	—	—	—	2	2
acres on which used, 1997..	—	—	—	(D)	—	—	—
..... 1992..	(D)	1 108	—	—	—	(D)	(D)
Diseases in crops and orchards..... farms, 1997..	16	10	11	8	7	7	63
..... 1992..	16	7	1	1	1	1	21
acres on which used, 1997..	15 403	3 429	8 819	2 303	4 810	6 426	29 509
..... 1992..	10 481	2 800	(D)	(D)	(D)	(D)	11 495
Weeds, grass, or brush in crops and pasture ..... farms, 1997..	254	290	176	49	133	312	218
..... 1992..	239	358	232	60	147	419	286
acres on which used, 1997..	177 685	280 094	119 754	23 336	91 500	134 572	270 775
..... 1992..	162 297	277 004	140 453	26 774	104 450	140 656	311 748
Chemicals used on crops to control growth, thin fruit, or defoliate ..... farms, 1997..	—	20	1	—	6	6	1
..... 1992..	2	6	—	1	13	2	10
acres on which used, 1997..	—	4 578	(D)	—	2 112	960	(D)
..... 1992..	(D)	2 987	—	(D)	4 703	(D)	570

  

Chemicals used	Stutsman	Towner	Traill	Walsh	Ward	Wells	Williams
	Commercial fertilizer ..... farms, 1997..	484	329	421	557	848	444
..... 1992..	617	411	477	627	693	476	309
acres on which used, 1997..	537 063	397 006	401 252	504 472	645 634	456 248	289 563
..... 1992..	549 251	362 660	415 931	532 254	463 113	384 850	84 759
Cropland fertilized, except pastureland ..... farms, 1997..	484	329	421	557	848	444	487
..... 1992..	617	411	477	627	693	476	309
acres on which used, 1997..	537 063	(D)	(D)	503 869	(D)	(D)	288 817
..... 1992..	547 736	362 115	(D)	531 529	462 682	(D)	(D)
Pastureland and rangeland fertilized..... farms, 1997..	—	10	2	9	2	1	14
..... 1992..	7	14	3	12	12	3	2
acres on which used, 1997..	—	(D)	(D)	603	(D)	(D)	746
..... 1992..	1 515	545	(D)	725	431	(D)	(D)
Sprays, dusts, granules, fumigants, etc., to control—							
Insects on hay and other crops ..... farms, 1997..	148	75	211	165	54	113	28
..... 1992..	136	46	235	253	100	166	106
acres on which used, 1997..	59 250	26 881	73 172	71 050	21 699	38 720	14 138
..... 1992..	59 850	16 861	82 529	98 024	22 264	42 811	15 174
Nematodes in crops ..... farms, 1997..	9	9	11	12	1	9	—
..... 1992..	5	19	31	12	2	24	14
acres on which used, 1997..	3 613	16 296	2 163	7 633	(D)	360	—
..... 1992..	3 598	1 187	4 679	6 915	(D)	7 395	5 336
Diseases in crops and orchards..... farms, 1997..	44	29	126	173	50	30	22
..... 1992..	10	24	130	290	36	4	16
acres on which used, 1997..	17 061	17 888	55 285	111 291	25 868	9 308	14 758
..... 1992..	11 490	17 587	55 126	114 527	22 208	3 388	12 251
Weeds, grass, or brush in crops and pasture ..... farms, 1997..	465	259	357	477	728	346	437
..... 1992..	621	365	408	588	675	399	541
acres on which used, 1997..	471 150	329 001	381 972	386 436	544 474	380 975	243 491
..... 1992..	527 559	339 045	362 523	419 845	462 875	335 106	316 831
Chemicals used on crops to control growth, thin fruit, or defoliate ..... farms, 1997..	13	20	26	46	3	10	15
..... 1992..	13	11	11	129	8	2	3
acres on which used, 1997..	7 967	11 934	3 807	20 513	2 909	3 122	3 954
..... 1992..	(D)	1 108	1 516	29 431	6 822	(D)	4 991