

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	Iowa	Adair	Adams	Allamakee	Appanoose	Audubon	Benton
Commercial fertilizer, lime, and soil conditioners ¹							
farms, 2002	56,912	543	321	473	388	380	841
1997	67,510	632	380	609	457	512	817
acres treated, 2002	16,295,095	148,419	86,425	97,754	66,490	121,705	232,824
1997	15,153,429	140,929	79,188	71,124	61,718	138,508	227,316
Cropland fertilized, except cropland pastured							
farms, 2002	55,204	533	282	473	322	350	817
1997	65,609	605	334	597	403	502	807
acres treated, 2002	15,667,911	135,393	77,318	92,800	50,462	115,437	227,238
1997	14,551,870	127,084	62,897	66,389	49,942	132,461	225,903
Pastureland and rangeland fertilized							
farms, 2002	8,953	147	155	124	153	111	138
1997	9,369	194	154	108	142	101	46
acres treated, 2002	627,184	13,026	9,107	4,954	16,028	6,268	5,586
1997	601,559	13,845	16,291	4,735	11,776	6,047	1,413
Manure							
farms, 2002	26,512	175	127	384	138	216	461
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	2,333,984	14,067	12,457	27,831	5,603	18,383	35,792
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control-							
Insects ²							
farms, 2002	20,331	52	105	252	28	176	379
1997	25,613	261	107	356	20	200	382
acres treated, 2002	3,714,004	5,104	16,444	32,992	3,285	44,653	57,589
1997	3,372,025	43,515	15,804	37,363	3,221	15,025	51,465
Weeds, grass, or brush							
farms, 2002	46,334	362	267	403	238	380	737
1997	55,600	459	333	376	325	476	766
acres treated, 2002	16,716,673	150,467	94,050	63,916	45,294	163,640	260,914
1997	17,526,559	135,923	96,825	40,229	48,869	180,990	279,078
Nematodes							
farms, 2002	1,782	9	-	39	-	-	21
1997	1,440	-	-	20	-	1	24
acres treated, 2002	292,947	99	-	1,725	-	-	426
1997	180,135	-	-	1,395	-	(D)	1,893
Diseases in crops and orchards							
farms, 2002	834	1	-	23	3,506	-	12
1997	1,186	-	-	17	27	-	35
acres treated, 2002	113,930	(D)	-	2,911	801	-	1,475
1997	137,737	-	-	406	2,059	-	3,908
Chemicals used to control growth, thin fruit, or defoliate							
farms, 2002	190	-	-	1	-	-	-
1997	48	-	-	-	1	-	-
acres on which used, 2002	3,196	-	-	(D)	-	-	-
1997	1,850	-	-	-	(D)	-	-
Item	Black Hawk	Boone	Bremer	Buchanan	Buena Vista	Butler	Calhoun
Commercial fertilizer, lime, and soil conditioners ¹							
farms, 2002	671	527	599	751	598	684	563
1997	801	677	785	919	735	821	741
acres treated, 2002	173,487	190,503	153,044	185,327	195,145	193,405	181,760
1997	168,500	163,204	140,756	205,800	180,186	172,888	187,316
Cropland fertilized, except cropland pastured							
farms, 2002	657	504	592	742	585	684	563
1997	801	665	768	913	729	795	741
acres treated, 2002	171,040	183,730	151,732	184,392	192,251	190,024	181,305
1997	168,047	161,552	139,721	204,156	179,900	170,934	185,394
Pastureland and rangeland fertilized							
farms, 2002	57	78	49	33	57	104	22
1997	38	49	60	73	15	84	53
acres treated, 2002	2,447	6,773	1,312	935	2,894	3,381	455
1997	453	1,652	1,035	1,644	286	1,954	1,922
Manure							
farms, 2002	285	190	300	383	297	355	212
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	15,950	21,191	24,081	32,750	40,977	27,470	16,420
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control-							
Insects ²							
farms, 2002	340	132	307	356	213	304	148
1997	272	152	316	391	90	346	129
acres treated, 2002	45,028	42,078	35,193	58,650	54,648	51,287	25,665
1997	25,678	25,390	26,316	62,484	17,604	36,587	34,702
Weeds, grass, or brush							
farms, 2002	530	431	491	542	479	665	483
1997	680	529	672	844	653	681	638
acres treated, 2002	165,408	233,036	152,476	173,665	216,664	203,400	228,871
1997	213,866	214,415	163,578	228,297	268,364	211,209	262,711
Nematodes							
farms, 2002	21	42	1	26	65	31	-
1997	7	12	21	34	13	19	7
acres treated, 2002	4,078	14,167	(D)	1,522	13,748	2,609	-
1997	1,233	1,558	1,290	2,350	1,355	1,323	365
Diseases in crops and orchards							
farms, 2002	13	21	19	22	8	26	-
1997	27	9	2	17	2	19	6
acres treated, 2002	1,898	(D)	47	1,006	3,327	9,352	-
1997	770	(D)	(D)	284	(D)	2,845	300
Chemicals used to control growth, thin fruit, or defoliate							
farms, 2002	1	-	-	9	-	-	-
1997	1	-	-	-	15	-	-
acres on which used, 2002	(D)	-	-	36	-	-	-
1997	(D)	-	-	-	627	-	-

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	Carroll	Cass	Cedar	Cerro Gordo	Cherokee	Chickasaw	Clarke
Commercial fertilizer, lime, and soil conditioners ¹ farms, 2002	771	514	689	558	678	612	359
1997	931	673	722	622	722	672	421
acres treated, 2002	225,620	161,409	193,168	187,265	168,528	160,288	60,052
1997	201,378	162,753	183,793	163,359	161,015	132,925	52,927
Cropland fertilized, except cropland pastured farms, 2002	750	497	664	547	653	611	341
1997	908	646	722	616	722	672	371
acres treated, 2002	222,613	143,740	189,150	186,976	159,818	157,450	(D)
1997	197,569	142,885	180,750	162,883	154,272	131,863	41,143
Pastureland and rangeland fertilized farms, 2002	62	186	113	54	131	63	124
1997	70	225	60	34	108	34	160
acres treated, 2002	3,007	17,669	4,018	289	8,710	2,838	(D)
1997	3,809	19,868	3,043	476	6,743	1,062	11,784
Manure farms, 2002	378	244	360	260	355	385	128
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	35,498	17,543	29,778	20,884	23,797	37,585	12,029
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control-							
Insects ² farms, 2002	221	118	265	122	317	183	56
1997	309	274	438	217	305	259	82
acres treated, 2002	41,808	21,414	42,187	16,769	74,775	27,365	3,117
1997	23,523	38,493	52,174	28,589	27,230	29,490	11,665
Weeds, grass, or brush farms, 2002	684	380	569	478	533	469	307
1997	802	553	622	506	640	499	347
acres treated, 2002	265,039	158,659	170,764	220,016	179,272	162,385	60,550
1997	234,933	169,809	220,195	190,241	208,701	165,511	60,214
Nematodes farms, 2002	-	-	-	-	-	-	-
1997	11	8	26	2	2	3	-
acres treated, 2002	-	-	3,230	57	1,950	-	-
1997	-	-	4,254	-	(D)	416	-
Diseases in crops and orchards farms, 2002	1,817	1,209	10	15	1	1	16
1997	19	8	8	16	8	10	1
acres treated, 2002	(D)	-	80	475	(D)	(D)	16
1997	1,286	(D)	1,325	1,275	80	5,735	(D)
Chemicals used to control growth, thin fruit, or defoliate farms, 2002	-	-	-	23	-	-	-
1997	-	-	2	2	-	-	1
acres on which used, 2002	-	-	-	168	-	-	-
1997	-	-	(D)	(D)	-	-	(D)

Item	Clay	Clayton	Clinton	Crawford	Dallas	Davis	Decatur
Commercial fertilizer, lime, and soil conditioners ¹ farms, 2002	490	764	837	601	568	484	357
1997	577	1,056	940	844	597	550	405
acres treated, 2002	174,936	181,700	233,410	263,069	151,491	93,214	104,699
1997	135,137	184,600	199,128	221,695	147,324	83,826	63,637
Cropland fertilized, except cropland pastured farms, 2002	490	748	830	578	548	439	310
1997	576	1,040	920	822	589	495	335
acres treated, 2002	173,460	178,100	228,559	253,728	148,388	77,250	78,689
1997	130,471	181,138	195,591	202,281	144,270	66,897	(D)
Pastureland and rangeland fertilized farms, 2002	27	110	102	119	69	174	193
1997	121	79	91	243	90	213	199
acres treated, 2002	1,476	3,600	4,851	9,341	3,103	15,964	26,010
1997	4,666	3,462	3,537	19,414	3,054	16,929	(D)
Manure farms, 2002	194	552	426	271	218	204	98
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	19,248	52,679	27,461	22,116	11,421	10,355	7,808
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control-							
Insects ² farms, 2002	182	369	483	222	101	93	75
1997	145	728	636	343	196	162	88
acres treated, 2002	39,542	74,706	83,189	41,654	11,656	26,215	21,193
1997	19,086	90,674	78,030	44,711	20,921	14,671	9,482
Weeds, grass, or brush farms, 2002	388	557	774	495	510	259	226
1997	495	842	825	729	519	348	272
acres treated, 2002	206,645	121,017	225,400	236,952	221,927	69,618	64,671
1997	195,827	157,880	199,882	258,235	200,198	62,694	51,172
Nematodes farms, 2002	-	29	21	-	18	22	12
1997	9	35	49	15	20	5	1
acres treated, 2002	-	2,593	3,133	-	2,758	435	180
1997	124	3,167	7,999	2,985	4,442	60	(D)
Diseases in crops and orchards farms, 2002	-	31	4	1	19	22	-
1997	9	4	34	7	21	15	7
acres treated, 2002	-	2,206	1,690	(D)	4,009	8,404	-
1997	224	(D)	1,099	105	1,612	218	378
Chemicals used to control growth, thin fruit, or defoliate farms, 2002	-	1	1	-	-	-	-
1997	-	-	8	-	-	-	-
acres on which used, 2002	-	(D)	(D)	-	-	-	-
1997	-	-	16	-	-	-	-

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	Delaware	Des Moines	Dickinson	Dubuque	Emmet	Fayette	Floyd	Franklin
Commercial fertilizer, lime, and soil conditioners ¹ farms, 2002	928	446	309	947	375	832	602	571
1997	991	496	386	1,080	413	1,009	645	715
acres treated, 2002	220,971	86,425	101,054	142,423	128,732	228,383	161,570	193,219
1997	184,987	92,164	109,536	152,622	115,314	228,261	172,443	202,898
Cropland fertilized, except cropland pastured farms, 2002	907	446	309	894	375	830	592	571
1997	983	485	375	1,072	413	992	631	705
acres treated, 2002	217,321	84,013	99,228	138,540	126,899	223,623	160,860	192,076
1997	183,203	89,231	108,244	149,156	112,881	224,792	172,092	202,371
Pastureland and rangeland fertilized farms, 2002	116	45	25	132	33	76	41	35
1997	70	70	26	107	46	66	19	20
acres treated, 2002	3,650	2,412	1,826	3,883	1,833	4,760	710	1,143
1997	1,784	2,933	1,292	3,466	2,433	3,469	351	527
Manure farms, 2002	757	133	189	825	105	446	318	306
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	85,730	6,938	19,695	65,863	13,806	43,041	24,064	29,664
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control-								
Insects ² farms, 2002	528	204	133	558	69	336	181	96
1997	681	201	87	696	53	512	189	269
acres treated, 2002	75,514	23,441	43,084	61,161	17,357	59,794	24,362	19,653
1997	80,660	15,444	12,906	76,356	5,902	77,570	20,728	42,495
Weeds, grass, or brush farms, 2002	763	373	304	697	301	665	528	458
1997	788	422	328	675	332	773	584	596
acres treated, 2002	174,587	98,037	144,536	95,836	136,482	203,176	202,216	225,916
1997	157,988	107,843	117,401	98,453	124,577	205,442	216,848	230,119
Nematodes farms, 2002	42	22	22	50	48	11	15	20
1997	75	1	-	78	8	29	-	-
acres treated, 2002	8,523	2,450	11,000	3,627	10,315	540	1,125	5,697
1997	9,485	(D)	-	7,130	430	2,860	-	-
Diseases in crops and orchards farms, 2002	17	7	-	62	-	10	13	-
1997	18	28	7	28	-	11	4	10
acres treated, 2002	572	3,500	-	4,701	-	730	650	-
1997	2,104	1,129	28	1,465	-	2,129	10	3,188
Chemicals used to control growth, thin fruit, or defoliate farms, 2002	-	-	-	-	-	-	-	-
1997	-	-	-	1	-	-	1	-
acres on which used, 2002	-	-	-	-	-	-	-	-
1997	-	-	-	(D)	-	-	(D)	-
Item	Fremont	Greene	Grundy	Guthrie	Hamilton	Hancock	Hardin	Harrison
Commercial fertilizer, lime, and soil conditioners ¹ farms, 2002	396	520	545	498	571	621	597	542
1997	443	656	648	603	660	728	688	734
acres treated, 2002	163,980	219,660	200,944	119,783	191,091	176,151	200,689	245,718
1997	140,148	165,020	182,931	119,810	179,659	191,023	178,725	221,409
Cropland fertilized, except cropland pastured farms, 2002	395	508	545	454	559	613	597	513
1997	427	649	648	567	660	728	688	717
acres treated, 2002	154,886	215,650	200,585	111,685	189,886	176,002	194,609	236,047
1997	131,793	164,021	181,739	103,996	165	190,855	176,887	212,943
Pastureland and rangeland fertilized farms, 2002	67	48	14	115	65	12	41	154
1997	130	16	27	150	1	9	43	104
acres treated, 2002	9,094	4,010	359	8,098	1,205	149	6,080	9,671
1997	8,355	999	1,192	15,814	(D)	168	1,838	8,466
Manure farms, 2002	37	85	189	205	233	252	343	111
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	6,277	10,939	17,314	21,719	35,010	22,570	50,879	9,719
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control-								
Insects ² farms, 2002	167	90	327	123	164	150	187	221
1997	150	74	320	169	141	184	234	248
acres treated, 2002	52,260	16,368	85,790	27,337	41,368	33,021	28,983	42,832
1997	29,463	12,770	47,908	19,888	26,159	18,569	47,464	36,854
Weeds, grass, or brush farms, 2002	356	431	479	402	434	414	471	418
1997	423	628	604	532	597	645	586	526
acres treated, 2002	187,505	251,855	230,546	151,651	212,055	173,312	233,045	211,090
1997	188,787	245,453	253,910	155,570	251,594	240,850	205,941	201,635
Nematodes farms, 2002	29	-	8	-	39	40	18	11
1997	17	1	2	6	-	1	7	34
acres treated, 2002	6,168	-	1,600	-	8,703	6,700	2,956	5,983
1997	5,535	(D)	(D)	126	-	(D)	1,960	5,445
Diseases in crops and orchards farms, 2002	12	1	40	8	-	8	-	1
1997	16	11	46	6	8	-	27	16
acres treated, 2002	5,550	(D)	13,205	8	-	4,000	-	(D)
1997	6,085	733	12,348	300	(D)	-	2,297	1,040
Chemicals used to control growth, thin fruit, or defoliate farms, 2002	-	-	-	8	-	-	-	11
1997	-	-	-	-	7	-	-	1
acres on which used, 2002	-	-	-	8	-	-	-	550
1997	-	-	-	-	7	-	-	(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	Henry	Howard	Humboldt	Ida	Iowa	Jackson	Jasper	Jefferson
Commercial fertilizer, lime, and soil conditioners ¹ farms, 2002	395	566	475	414	573	638	798	409
1997	565	660	538	545	674	869	949	450
acres treated, 2002	127,209	140,227	148,982	159,470	145,700	101,901	208,881	93,746
1997	129,034	150,868	148,228	147,539	146,883	128,326	196,424	72,850
Cropland fertilized, except cropland pastured farms, 2002	395	566	475	404	573	616	757	409
1997	565	660	538	528	659	844	921	425
acres treated, 2002	125,282	134,510	(D)	152,973	140,144	98,236	201,702	86,270
1997	127,549	148,950	147,800	142,362	132,266	118,522	191,207	67,080
Pastureland and rangeland fertilized farms, 2002	49	71	1	109	123	116	207	91
1997	54	53	8	110	164	185	115	99
acres treated, 2002	1,927	5,717	(D)	6,497	5,556	3,665	7,179	7,476
1997	1,485	1,918	428	5,177	14,617	9,804	5,217	5,770
Manure farms, 2002	165	338	114	178	343	506	380	196
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	11,080	22,256	13,938	22,416	24,559	32,722	27,161	10,876
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control- Insects ² farms, 2002	220	177	78	166	326	347	335	125
1997	214	194	90	197	426	456	432	113
acres treated, 2002	47,721	21,544	21,901	30,022	55,207	39,668	63,834	30,365
1997	30,964	21,725	19,810	30,741	56,341	62,962	32,907	9,954
Weeds, grass, or brush farms, 2002	338	400	390	315	540	523	603	280
1997	479	546	496	433	566	562	694	300
acres treated, 2002	114,370	149,586	176,803	175,740	148,570	70,736	218,109	86,866
1997	141,716	169,498	204,955	177,609	136,038	75,998	224,647	80,094
Nematodes farms, 2002	31	1	13	-	1	7	9	10
1997	2	16	8	11	26	17	17	8
acres treated, 2002	(D)	(D)	1,365	-	(D)	350	270	510
1997	7,270	2,503	2,560	2,245	1,548	3,813	2,335	352
Diseases in crops and orchards farms, 2002	9	1	-	-	20	1	9	-
1997	2	-	6	13	22	7	7	12
acres treated, 2002	63	(D)	-	-	2,208	(D)	1,800	-
1997	-	(D)	12	2,373	1,920	532	602	1,680
Chemicals used to control growth, thin fruit, or defoliate farms, 2002	-	-	-	-	-	-	1	-
1997	-	1	-	-	1	-	-	-
acres on which used, 2002	-	-	-	-	-	-	(D)	-
1997	-	(D)	-	-	(D)	-	-	-

Item	Johnson	Jones	Keokuk	Kossuth	Lee	Linn	Louisa	Lucas
Commercial fertilizer, lime, and soil conditioners ¹ farms, 2002	727	670	576	1,041	489	784	374	319
1997	790	780	621	1,202	616	1,058	397	409
acres treated, 2002	133,884	164,803	157,777	339,018	117,026	174,139	100,651	66,516
1997	119,268	185,187	136,117	325,658	115,797	174,604	94,087	72,943
Cropland fertilized, except cropland pastured farms, 2002	713	659	560	1,041	469	784	358	275
1997	758	763	606	1,195	592	1,051	380	375
acres treated, 2002	131,104	162,263	147,254	334,794	114,338	172,177	99,395	51,898
1997	115,838	182,637	130,627	325,251	114,188	173,531	92,685	51,859
Pastureland and rangeland fertilized farms, 2002	90	45	114	34	86	58	40	125
1997	89	57	128	12	106	55	31	122
acres treated, 2002	2,780	2,540	10,523	4,224	2,688	1,962	1,256	14,618
1997	3,430	2,550	5,490	407	1,609	1,073	1,402	21,084
Manure farms, 2002	549	397	225	385	194	385	156	109
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	33,745	43,766	19,370	42,831	13,885	21,974	14,474	5,806
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control- Insects ² farms, 2002	341	237	177	166	199	272	93	87
1997	341	514	277	264	231	411	167	91
acres treated, 2002	31,242	41,037	31,416	21,619	32,299	29,035	18,792	8,771
1997	41,975	84,310	40,449	35,510	35,519	45,208	21,146	6,264
Weeds, grass, or brush farms, 2002	559	570	408	874	385	652	353	215
1997	612	627	531	1,096	441	839	342	277
acres treated, 2002	141,119	136,222	124,069	407,443	95,676	150,416	116,757	41,415
1997	125,708	171,574	131,446	451,169	126,838	188,242	123,567	42,752
Nematodes farms, 2002	22	11	24	54	20	11	1	19
1997	14	6	36	12	1	12	15	-
acres treated, 2002	1,000	1,200	402	6,353	5,190	90	(D)	468
1997	3,029	2,168	3,708	3,380	(D)	199	2,652	-
Diseases in crops and orchards farms, 2002	39	13	1	11	2	10	11	8
1997	11	5	10	6	41	37	2	1
acres treated, 2002	2,425	1,834	(D)	1,155	(D)	209	350	152
1997	495	50	741	60	4,575	380	(D)	(D)
Chemicals used to control growth, thin fruit, or defoliate farms, 2002	-	-	-	-	-	10	28	8
1997	-	-	-	-	1	-	-	-
acres on which used, 2002	-	-	-	-	-	67	122	281
1997	-	-	-	-	(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	Lyon	Madison	Mahaska	Marion	Marshall	Mills	Mitchell	Monona
Commercial fertilizer, lime, and soil conditioners ¹ farms, 2002	752	605	611	489	537	309	611	495
1997	862	612	695	629	646	406	596	577
acres treated, 2002	179,680	109,175	176,747	108,130	193,787	126,502	154,813	217,515
1997	165,256	102,115	136,543	114,194	155,084	112,750	131,234	230,272
Cropland fertilized, except cropland pastured farms, 2002	730	523	577	469	524	309	581	487
1997	833	563	669	601	630	365	596	543
acres treated, 2002	172,807	85,612	172,076	101,696	188,355	126,067	154,463	202,319
1997	162,923	85,847	133,886	107,535	151,997	103,301	129,845	211,775
Pastureland and rangeland fertilized farms, 2002	103	225	91	72	64	31	44	112
1997	89	175	86	135	66	153	36	143
acres treated, 2002	6,873	23,563	4,671	6,434	5,432	435	350	15,196
1997	2,333	16,268	2,657	6,659	3,087	9,449	1,389	18,497
Manure farms, 2002	476	121	273	164	234	21	275	183
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	45,735	6,324	20,337	10,161	20,634	1,152	31,405	18,326
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control-								
Insects ² farms, 2002	230	130	294	104	223	97	141	282
1997	304	157	431	187	356	153	284	248
acres treated, 2002	57,404	11,763	57,193	17,596	52,626	28,078	19,429	69,582
1997	47,575	13,465	52,783	24,301	46,555	21,566	43,364	62,627
Weeds, grass, or brush farms, 2002	690	502	533	399	456	242	508	428
1997	721	492	550	453	551	325	539	499
acres treated, 2002	194,760	109,194	183,803	101,975	230,221	144,124	181,841	235,128
1997	218,198	120,477	148,858	116,188	202,631	153,099	169,791	230,533
Nematodes farms, 2002	9	9	2	26	12	-	22	28
1997	1	-	38	24	33	-	2	53
acres treated, 2002	(D)	-	(D)	1,615	485	-	911	7,840
1997	330	777	1,631	4,347	4,167	-	(D)	-
Diseases in crops and orchards farms, 2002	-	-	1	8	1	-	2	15
1997	20	2	9	22	28	-	2	14
acres treated, 2002	-	-	(D)	12	(D)	-	(D)	4,579
1997	6,008	(D)	140	1,395	3,994	-	(D)	5,369
Chemicals used to control growth, thin fruit, or defoliate farms, 2002	-	-	-	1	-	-	-	-
1997	-	-	-	-	-	-	3	-
acres on which used, 2002	-	-	-	(D)	-	-	-	-
1997	-	-	-	-	-	-	(D)	-

Item	Monroe	Montgomery	Muscatine	O'Brien	Osceola	Page	Palo Alto	Plymouth
Commercial fertilizer, lime, and soil conditioners ¹ farms, 2002	361	373	445	770	456	675	534	1,043
1997	398	431	576	844	572	648	673	1,125
acres treated, 2002	68,656	96,747	120,794	200,682	149,408	179,205	157,659	306,860
1997	55,211	125,178	114,928	179,296	147,591	128,713	152,476	265,784
Cropland fertilized, except cropland pastured farms, 2002	325	335	438	746	456	610	534	1,026
1997	363	415	556	842	572	636	659	1,107
acres treated, 2002	57,420	87,964	119,290	198,494	149,408	143,050	157,340	299,298
1997	45,063	113,965	113,728	177,107	146,241	111,372	151,078	257,458
Pastureland and rangeland fertilized farms, 2002	165	132	45	59	-	328	17	140
1997	125	147	45	33	45	201	43	119
acres treated, 2002	11,236	8,783	1,504	2,188	-	36,155	319	7,562
1997	10,148	11,213	1,200	2,189	1,350	17,341	1,398	8,326
Manure farms, 2002	192	122	163	384	194	237	244	469
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	8,951	10,612	11,531	35,504	26,068	9,074	42,997	60,994
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control-								
Insects ² farms, 2002	76	108	146	289	230	214	128	388
1997	90	126	302	284	172	169	129	467
acres treated, 2002	10,985	32,433	26,718	48,371	51,967	29,215	19,917	79,235
1997	5,303	33,173	36,728	38,845	35,037	23,976	19,396	54,856
Weeds, grass, or brush farms, 2002	280	360	308	596	369	603	492	813
1997	315	357	456	731	437	572	615	991
acres treated, 2002	59,466	135,142	103,053	218,953	163,834	198,671	188,484	283,599
1997	47,360	110,560	129,048	251,192	169,359	154,990	247,106	316,706
Nematodes farms, 2002	-	21	10	11	2	1	53	28
1997	12	14	24	15	2	8	25	60
acres treated, 2002	-	10,011	2,274	905	(D)	(D)	5,361	4,637
1997	1,228	2,417	5,621	7,420	(D)	1,615	3,962	3,660
Diseases in crops and orchards farms, 2002	-	-	10	-	-	-	11	23
1997	13	6	40	15	-	2	16	12
acres treated, 2002	-	-	2,600	-	-	1,200	306	1,115
1997	485	701	1,475	7,303	-	(D)	3,446	288
Chemicals used to control growth, thin fruit, or defoliate farms, 2002	-	1	-	-	-	-	-	9
1997	-	-	-	-	-	-	-	-
acres on which used, 2002	-	(D)	-	-	-	-	-	132
1997	-	-	-	-	-	-	-	-

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	Pocahontas	Polk	Pottawattamie	Poweshiek	Ringgold	Sac	Scott	Shelby
Commercial fertilizer, lime, and soil conditioners ¹ farms, 2002	586	426	850	547	380	613	514	721
1997	758	500	1,165	615	379	712	701	826
acres treated, 2002	216,654	156,461	322,868	161,002	100,868	206,531	173,334	210,228
1997	209,651	107,040	319,619	132,040	71,091	193,369	153,280	230,748
Cropland fertilized, except cropland pastured farms, 2002	577	417	839	508	362	613	505	706
1997	758	500	1,130	597	337	694	701	789
acres treated, 2002	216,094	154,774	307,286	151,085	69,820	204,593	172,974	201,062
1997	209,157	103,642	306,691	121,197	55,457	189,703	152,696	222,376
Pastureland and rangeland fertilized farms, 2002	21	36	189	167	172	38	47	138
1997	26	54	231	135	153	70	50	233
acres treated, 2002	560	1,687	15,582	9,917	31,048	1,938	360	9,166
1997	494	3,398	12,928	10,843	15,634	3,666	584	8,372
Manure farms, 2002	199	92	351	298	87	230	216	234
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	26,073	5,915	19,267	15,288	13,840	29,120	16,333	12,898
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control- Insects ² farms, 2002	179	157	460	205	85	245	213	246
1997	92	215	460	283	65	185	471	450
acres treated, 2002	50,359	38,316	70,790	27,147	13,500	53,888	62,671	56,929
1997	11,866	24,421	49,635	24,979	3,460	30,609	65,053	48,910
Weeds, grass, or brush farms, 2002	473	282	758	511	272	530	473	590
1997	647	473	932	517	282	610	579	654
acres treated, 2002	256,355	131,420	324,182	149,767	70,670	263,717	165,354	188,570
1997	281,464	147,225	359,236	150,126	65,319	260,462	160,688	205,928
Nematodes farms, 2002	71	22	23	-	14	61	14	24
1997	13	6	36	13	1	6	27	22
acres treated, 2002	20,580	3,316	2,351	-	2,241	3,917	5,603	3,266
1997	1,035	36	3,325	953	(D)	510	1,676	894
Diseases in crops and orchards farms, 2002	9	18	-	8	-	1	8	13
1997	-	14	-	7	-	3	11	-
acres treated, 2002	5,400	143	8	328	7	(D)	(D)	1,070
1997	-	473	624	1,558	21	(D)	6,401	-
Chemicals used to control growth, thin fruit, or defoliate farms, 2002	-	17	-	-	-	-	-	-
1997	-	2	-	-	-	-	-	-
acres on which used, 2002	-	119	-	-	-	-	-	-
1997	-	(D)	-	-	-	-	-	-
Item	Sioux	Story	Tama	Taylor	Union	Van Buren	Wapello	Warren
Commercial fertilizer, lime, and soil conditioners ¹ farms, 2002	1,085	693	692	389	300	393	404	546
1997	1,325	783	799	429	415	467	465	727
acres treated, 2002	277,632	217,560	234,221	121,921	76,692	90,126	92,537	113,372
1997	267,795	187,145	193,909	107,315	72,005	63,342	67,050	92,600
Cropland fertilized, except cropland pastured farms, 2002	1,055	684	676	361	275	385	342	521
1997	1,304	776	766	383	370	448	431	707
acres treated, 2002	276,424	216,578	228,604	101,584	60,856	84,336	88,773	99,203
1997	265,335	186,232	189,410	83,494	57,267	55,250	61,322	85,837
Pastureland and rangeland fertilized farms, 2002	49	22	97	161	140	73	153	129
1997	94	32	117	137	150	137	113	107
acres treated, 2002	1,208	982	5,617	20,337	15,836	5,790	3,764	14,169
1997	2,460	913	4,499	23,821	14,738	8,092	5,728	6,763
Manure farms, 2002	902	205	370	128	111	188	130	99
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	107,313	14,129	24,513	12,056	8,151	8,284	2,888	5,580
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control- Insects ² farms, 2002	466	223	237	101	65	106	119	121
1997	579	169	413	95	76	160	137	250
acres treated, 2002	97,878	57,851	66,032	14,257	7,497	20,635	16,209	15,877
1997	84,626	50,538	56,245	26,798	3,309	13,338	14,943	15,986
Weeds, grass, or brush farms, 2002	951	622	580	301	277	284	245	520
1997	1,165	641	660	392	387	354	293	586
acres treated, 2002	285,324	261,800	215,975	106,008	99,650	55,862	75,475	94,520
1997	323,309	242,720	219,112	103,404	86,142	72,896	67,988	125,645
Nematodes farms, 2002	34	51	2	1	10	1	1	18
1997	23	6	18	13	-	16	-	-
acres treated, 2002	3,177	16,864	(D)	(D)	(D)	800	(D)	144
1997	3,570	330	1,579	170	-	1,341	-	-
Diseases in crops and orchards farms, 2002	2	14	10	-	9	-	-	19
1997	3	18	27	12	-	14	-	8
acres treated, 2002	(D)	1,034	1,965	-	27	-	-	414
1997	(D)	2,760	3,222	3,373	-	140	-	377
Chemicals used to control growth, thin fruit, or defoliate farms, 2002	1	7	-	-	-	-	-	43
1997	-	-	-	-	-	-	-	-
acres on which used, 2002	(D)	44	-	-	-	-	-	834
1997	-	-	-	-	-	-	-	-

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	Washington	Wayne	Webster	Winnebago	Winneshiek	Woodbury	Worth	Wright
Commercial fertilizer, lime, and soil conditioners ¹ farms, 2002	646	319	674	407	887	691	368	546
1997	727	523	815	477	1,001	926	458	591
acres treated, 2002	170,699	82,679	233,153	162,308	204,024	259,465	122,723	195,817
1997	162,571	71,294	228,902	140,229	163,674	266,320	118,643	205,479
Cropland fertilized, except cropland pastured farms, 2002	627	307	667	407	876	653	353	546
1997	701	453	807	466	957	841	458	591
acres treated, 2002	166,267	76,620	232,915	160,528	198,133	241,238	122,378	195,297
1997	160,375	56,747	228,674	139,955	153,564	247,078	117,567	205,235
Pastureland and rangeland fertilized farms, 2002	81	67	26	20	144	199	15	8
1997	70	201	14	18	202	213	31	4
acres treated, 2002	4,432	6,059	238	1,780	5,891	18,227	345	520
1997	2,196	14,547	228	274	10,110	19,242	1,076	244
Manure farms, 2002	396	153	233	165	575	243	149	256
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
acres treated, 2002	36,559	14,146	15,285	34,162	44,829	22,470	7,368	32,469
1997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Chemicals used to control-								
Insects ² farms, 2002	397	36	160	80	440	215	95	121
1997	316	145	125	67	604	320	133	114
acres treated, 2002	69,384	5,861	29,840	9,115	61,822	46,496	4,800	29,334
1997	45,490	10,230	22,592	13,408	69,754	60,142	13,624	21,685
Weeds, grass, or brush farms, 2002	582	219	534	370	560	574	315	398
1997	660	300	688	391	748	789	408	529
acres treated, 2002	161,948	79,724	284,639	181,424	147,529	210,983	169,385	203,687
1997	200,337	61,884	310,969	182,133	123,495	278,740	154,758	262,395
Nematodes farms, 2002	23	-	89	10	17	20	11	44
1997	8	9	1	2	56	17	1	40
acres treated, 2002	3,259	-	19,606	470	5,397	5,530	374	4,445
1997	583	396	(D)	(D)	3,440	5,465	(D)	7,030
Diseases in crops and orchards farms, 2002	22	-	11	9	10	-	1	-
1997	30	-	9	1	25	42	-	7
acres treated, 2002	655	-	3,850	18	3,650	-	(D)	-
1997	4,478	-	1,712	(D)	83	5,057	-	118
Chemicals used to control growth, thin fruit, or defoliate farms, 2002	-	-	-	-	9	-	-	-
1997	-	-	-	-	-	-	-	-
acres on which used, 2002	-	-	-	-	405	-	-	-
1997	-	-	-	-	-	-	-	-

¹ Data for 1997 exclude lime.

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