

Table 7. Agricultural Chemicals Used, Including Fertilizer and Lime: 1982 and 1978

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

Chemicals used	Iowa	Adair	Adams	Allamakee	Appanoose	Audubon	Benton
Commercial fertilizer ----- farms, 1982--	86 653	740	489	828	572	674	1 250
1978--	93 317	867	574	953	547	757	1 295
acres on which used, 1982--	14 661 266	129 420	80 777	92 808	49 371	143 064	210 306
1978--	15 184 915	139 790	81 906	88 226	52 126	136 189	199 807
Cropland fertilized, except pastureland ----- farms, 1982--	85 398	733	463	805	518	660	1 242
1978--	92 907	858	569	949	536	748	1 295
acres on which used, 1982--	14 181 267	111 154	67 779	89 891	40 598	131 076	206 255
1978--	14 620 714	123 880	72 756	84 267	39 403	127 148	195 570
Pastureland and rangeland fertilized ----- farms, 1982--	8 855	227	156	85	117	93	92
1978--	10 443	235	114	145	200	100	79
acres on which used, 1982--	479 999	18 266	12 998	2 917	8 773	11 988	4 051
1978--	564 201	15 910	9 150	3 959	12 723	9 041	4 237
Lime ----- farms, 1982--	11 172	151	96	251	100	96	147
1978--	14 577	195	119	278	111	132	283
acres on which used, 1982--	588 678	10 158	5 409	9 784	3 137	4 931	10 260
1978--	810 259	13 050	9 574	8 548	3 717	10 474	15 528
tons, 1982--	1 389 986	19 165	11 855	23 745	6 182	9 056	27 080
1978--	1 942 275	28 337	20 097	20 125	8 933	20 572	46 366
Sprays, dusts, granules, fumigants, etc., to control--							
Insects on hay and other crops ----- farms, 1982--	41 193	488	267	587	204	399	699
1978--	44 090	547	334	614	294	441	677
acres on which used, 1982--	6 062 166	59 631	31 048	59 254	21 242	81 434	93 043
1978--	6 640 743	63 055	45 214	51 178	22 159	86 167	100 287
Nematodes in crops ----- farms, 1982--	3 419	34	9	103	1	30	34
1978--	4 561	58	41	60	12	66	80
acres on which used, 1982--	415 428	5 480	1 390	7 410	(D)	2 564	2 691
1978--	517 125	6 380	10 135	4 959	2 532	4 683	5 594
Diseases in crops and orchards ----- farms, 1982--	1 331	9	6	7	1	10	30
1978--	1 886	22	11	5	3	12	59
acres on which used, 1982--	177 125	1 290	360	385	(D)	1 598	1 694
1978--	219 621	2 764	1 035	425	9	1 825	5 746
Weeds, grass, or brush in crops and pasture ----- farms, 1982--	73 116	626	446	620	381	529	1 066
1978--	73 497	701	482	526	427	539	963
acres on which used, 1982--	16 269 261	138 728	89 380	59 756	43 525	142 738	248 586
1978--	14 215 869	125 565	75 046	39 124	43 817	95 058	180 909
Chemicals used for defoliation or for growth control of crops or thinning of fruit ----- farms, 1982--	1 726	16	22	37	12	10	4
1978--	1 412	35	12	21	-	11	13
acres on which used, 1982--	242 520	628	1 389	2 880	1 644	2 750	256
1978--	169 928	3 313	992	2 070	-	3 315	1 222
Chemicals used	Black Hawk	Boone	Bremer	Buchanan	Buena Vista	Butler	Calhoun
Commercial fertilizer ----- farms, 1982--	1 017	851	1 035	1 163	981	1 114	884
1978--	1 062	961	1 131	1 199	1 078	1 197	1 009
acres on which used, 1982--	173 064	151 012	133 464	201 181	183 502	174 724	144 908
1978--	181 091	170 352	147 723	195 469	187 987	172 719	182 720
Cropland fertilized, except pastureland ----- farms, 1982--	1 017	851	1 022	1 142	981	1 101	868
1978--	1 062	961	1 127	1 199	1 066	1 196	1 009
acres on which used, 1982--	171 690	150 880	133 003	198 516	182 379	173 083	141 437
1978--	179 910	169 379	147 093	193 621	183 596	170 448	180 359
Pastureland and rangeland fertilized ----- farms, 1982--	85	12	42	77	37	53	56
1978--	56	31	29	79	68	68	76
acres on which used, 1982--	1 374	132	461	2 665	1 123	1 641	3 471
1978--	1 181	973	630	1 848	4 391	2 271	2 361
Lime ----- farms, 1982--	136	23	234	189	80	138	57
1978--	154	53	200	279	98	235	48
acres on which used, 1982--	7 950	1 355	7 728	8 055	5 175	6 112	3 619
1978--	8 470	5 278	6 727	14 582	6 315	9 479	1 661
tons, 1982--	18 468	3 086	19 417	22 205	10 365	16 439	3 726
1978--	22 936	12 957	17 905	42 612	10 055	25 767	3 758
Sprays, dusts, granules, fumigants, etc., to control--							
Insects on hay and other crops ----- farms, 1982--	420	251	447	530	398	472	178
1978--	451	346	380	460	436	515	333
acres on which used, 1982--	59 634	31 035	54 413	81 442	61 057	64 665	24 941
1978--	76 935	64 544	40 821	68 770	88 463	64 665	66 098
Nematodes in crops ----- farms, 1982--	53	20	30	29	15	82	33
1978--	62	28	70	60	73	41	26
acres on which used, 1982--	2 898	1 133	2 459	4 381	2 414	8 572	4 076
1978--	4 664	4 077	9 365	6 953	4 630	3 455	3 258
Diseases in crops and orchards ----- farms, 1982--	13	18	25	4	25	-	-
1978--	31	23	4	24	21	44	-
acres on which used, 1982--	188	1 755	2 512	1 030	1 910	-	-
1978--	3 426	7 596	24	1 400	3 166	4 152	-
Weeds, grass, or brush in crops and pasture ----- farms, 1982--	935	815	752	988	961	983	880
1978--	878	799	903	933	870	922	778
acres on which used, 1982--	199 979	209 121	130 308	187 697	258 196	185 947	230 048
1978--	181 450	192 155	126 700	178 853	210 566	157 850	193 814
Chemicals used for defoliation or for growth control of crops or thinning of fruit ----- farms, 1982--	17	42	7	15	35	12	40
1978--	7	21	12	23	16	39	22
acres on which used, 1982--	1 685	9 154	7	820	5 718	2 642	11 978
1978--	56	1 230	2 150	1 785	2 625	7 685	5 217

Table 7. Agricultural Chemicals Used, Including Fertilizer and Lime: 1982 and 1978—Con.

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

Chemicals used	Carroll	Cass	Cedar	Cerro Gordo	Cherokee	Chickasaw	Clarke
Commercial fertilizer ----- farms, 1982..	1 049	793	1 022	822	907	875	488
1978..	1 119	863	1 067	879	1 026	969	505
acres on which used, 1982..	169 679	161 840	204 672	174 533	135 505	160 989	64 750
1978..	188 681	149 745	195 029	191 791	172 900	156 471	56 181
Cropland fertilized, except pastureland ----- farms, 1982..	1 042	776	1 021	822	899	854	486
1978..	1 109	855	1 067	879	1 020	964	484
acres on which used, 1982..	165 905	148 010	202 825	173 899	133 255	159 880	61 249
1978..	179 613	135 963	190 654	189 681	168 434	154 775	48 692
Pastureland and rangeland fertilized ----- farms, 1982..	100	198	65	17	58	48	45
1978..	117	169	109	26	84	63	106
acres on which used, 1982..	3 774	13 830	1 847	634	2 250	1 109	3 501
1978..	9 068	13 782	4 375	2 110	4 466	1 696	7 489
Lime ----- farms, 1982..	76	97	211	36	70	151	96
1978..	113	147	169	150	174	249	146
acres on which used, 1982..	5 904	5 933	18 281	2 456	3 885	6 138	4 581
1978..	7 704	7 590	13 016	9 641	11 267	13 289	7 174
tons, 1982..	8 212	11 070	43 655	6 464	6 597	17 336	10 147
1978..	16 075	15 257	32 368	22 379	20 834	36 727	20 567
Sprays, dusts, granules, fumigants, etc., to control—							
Insects on hay and other crops ----- farms, 1982..	438	424	753	408	369	484	172
1978..	609	454	635	343	483	380	236
acres on which used, 1982..	60 583	74 748	133 475	75 220	49 758	82 443	27 353
1978..	80 135	71 161	106 396	86 151	77 987	58 902	19 851
Nematodes in crops ----- farms, 1982..	35	13	65	36	50	29	7
1978..	43	40	104	46	73	20	23
acres on which used, 1982..	1 890	1 840	16 232	3 588	3 640	2 132	350
1978..	6 232	6 063	15 149	4 107	9 044	984	3 013
Diseases in crops and orchards ----- farms, 1982..	21	2	16	3	14	7	1
1978..	34	10	49	4	16	6	—
acres on which used, 1982..	1 973	(D)	3 049	1 585	3 781	35	(D)
1978..	5 428	155	8 659	1 666	2 645	867	—
Weeds, grass, or brush in crops and pasture ----- farms, 1982..	886	678	843	739	863	740	348
1978..	807	710	843	689	874	768	366
acres on which used, 1982..	183 654	156 403	200 169	228 849	183 250	164 993	53 125
1978..	164 365	142 167	163 493	191 920	162 557	129 228	47 011
Chemicals used for defoliation or for growth control of crops or thinning of fruit ----- farms, 1982..	14	23	26	9	13	3	8
1978..	15	27	26	2	14	42	12
acres on which used, 1982..	3 106	4 644	977	2 077	1 644	1 230	1 856
1978..	1 776	4 020	1 510	(D)	2 107	6 185	864
Chemicals used	Clay	Clayton	Clinton	Crawford	Dallas	Davis	Decatur
Commercial fertilizer ----- farms, 1982..	833	1 351	1 287	1 139	809	682	519
1978..	902	1 407	1 349	1 247	902	680	549
acres on which used, 1982..	164 525	196 424	247 403	178 679	147 927	77 602	81 054
1978..	155 302	164 295	230 695	195 346	149 452	76 692	84 053
Cropland fertilized, except pastureland ----- farms, 1982..	827	1 317	1 276	1 115	789	658	494
1978..	897	1 407	1 338	1 236	896	665	549
acres on which used, 1982..	161 257	192 435	244 202	168 304	145 844	69 361	65 588
1978..	152 107	158 280	226 578	180 194	146 254	69 631	69 499
Pastureland and rangeland fertilized ----- farms, 1982..	66	118	74	249	49	138	129
1978..	55	184	108	295	64	138	140
acres on which used, 1982..	3 268	3 989	3 201	10 375	2 083	8 241	15 466
1978..	3 195	6 015	4 117	15 152	3 198	7 061	14 554
Lime ----- farms, 1982..	81	417	262	57	69	156	129
1978..	88	310	283	107	104	180	173
acres on which used, 1982..	3 196	15 805	13 269	4 104	3 652	4 930	6 272
1978..	7 191	10 926	11 865	5 338	5 379	9 602	14 014
tons, 1982..	6 684	41 010	39 145	8 965	7 752	14 495	17 050
1978..	12 994	33 966	34 299	10 195	10 981	24 780	36 199
Sprays, dusts, granules, fumigants, etc., to control—							
Insects on hay and other crops ----- farms, 1982..	274	819	943	588	218	341	235
1978..	376	712	828	699	513	326	279
acres on which used, 1982..	47 228	119 316	173 226	72 725	36 321	43 966	34 551
1978..	69 557	66 664	142 859	89 565	73 638	45 524	28 496
Nematodes in crops ----- farms, 1982..	25	92	91	15	1	73	15
1978..	47	84	87	59	61	29	20
acres on which used, 1982..	6 735	11 054	13 892	1 574	(D)	7 292	2 474
1978..	6 324	6 979	12 985	8 304	9 454	1 362	5 079
Diseases in crops and orchards ----- farms, 1982..	6	12	29	6	15	6	26
1978..	1	36	23	14	16	9	27
acres on which used, 1982..	18	1 555	7 253	690	(D)	60	3 590
1978..	(D)	2 900	1 917	1 080	3 033	336	1 565
Weeds, grass, or brush in crops and pasture ----- farms, 1982..	769	887	1 041	943	864	488	424
1978..	741	926	1 012	960	713	508	414
acres on which used, 1982..	249 175	119 541	201 199	174 861	214 724	83 041	60 431
1978..	180 592	96 509	174 873	142 233	164 146	63 297	61 146
Chemicals used for defoliation or for growth control of crops or thinning of fruit ----- farms, 1982..	1	20	40	25	7	25	15
1978..	12	31	1	14	18	17	1
acres on which used, 1982..	(D)	3 618	1 407	5 360	350	666	358
1978..	913	3 023	(D)	2 300	4 281	580	(D)

Table 7. Agricultural Chemicals Used, Including Fertilizer and Lime: 1982 and 1978—Con.

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

Chemicals used	Delaware	Des Moines	Dickinson	Dubuque	Emmet	Fayette	Floyd	Franklin
Commercial fertilizer ----- farms, 1982..	1 159	594	525	1 322	596	1 343	876	949
1978..	1 245	658	514	1 419	656	1 456	887	1 079
acres on which used, 1982..	206 308	102 246	102 884	147 585	119 550	230 000	161 183	177 188
1978..	198 508	116 658	100 544	139 884	127 464	229 261	143 655	198 306
Cropland fertilized, except pastureland ----- farms, 1982..	1 148	577	524	1 290	592	1 325	876	949
1978..	1 245	657	514	1 407	656	1 456	887	1 079
acres on which used, 1982..	204 368	99 704	100 779	143 003	116 737	226 036	160 789	175 735
1978..	195 912	114 389	97 431	136 900	125 241	225 638	142 902	195 881
Pastureland and rangeland fertilized ----- farms, 1982..	78	58	35	123	51	102	20	25
1978..	84	60	32	129	27	93	20	44
acres on which used, 1982..	1 940	2 542	2 105	4 582	2 813	3 964	394	1 453
1978..	2 596	2 269	3 113	2 984	2 223	3 623	753	2 415
Lime ----- farms, 1982..	219	133	21	393	22	196	80	66
1978..	319	110	42	299	28	419	150	128
acres on which used, 1982..	11 182	8 750	1 711	16 548	484	7 921	3 662	5 143
1978..	12 047	17 889	4 342	7 880	4 236	19 782	8 674	7 070
tons, 1982..	31 801	23 814	2 248	44 215	1 372	21 048	11 825	15 130
1978..	36 817	41 278	4 507	25 376	4 349	57 673	23 946	17 004
Sprays, dusts, granules, fumigants, etc., to control—								
Insects on hay and other crops ----- farms, 1982..	731	390	125	898	157	679	216	345
1978..	690	333	171	843	194	639	255	355
acres on which used, 1982..	116 350	59 196	23 462	85 383	18 268	103 239	43 795	51 599
1978..	91 984	61 168	40 112	74 641	40 909	80 815	38 361	71 753
Nematodes in crops ----- farms, 1982..	48	30	1	92	17	84	16	22
1978..	89	21	14	102	13	49	11	44
acres on which used, 1982..	4 826	1 504	(D)	8 403	1 489	6 687	2 060	2 399
1978..	11 515	2 883	2 372	7 732	3 701	5 171	1 364	3 434
Diseases in crops and orchards ----- farms, 1982..	2	10	-	36	8	15	1	7
1978..	13	12	7	72	16	12	16	37
acres on which used, 1982..	(D)	462	-	1 501	240	3 115	(D)	1 235
1978..	1 593	286	2 585	2 564	5 582	1 945	5 646	6 586
Weeds, grass, or brush in crops and pasture ----- farms, 1982..	809	456	503	842	596	1 018	796	845
1978..	880	530	431	829	474	1 089	809	887
acres on which used, 1982..	141 446	106 430	136 407	89 085	178 320	199 886	197 524	241 093
1978..	141 541	111 246	117 260	67 120	126 842	178 620	157 328	206 843
Chemicals used for defoliation or for growth control of crops or thinning of fruit ----- farms, 1982..	26	21	4	38	14	15	1	11
1978..	23	24	5	50	13	26	12	20
acres on which used, 1982..	3 319	2 399	296	2 815	1 841	1 226	(D)	2 250
1978..	2 062	1 474	425	4 017	1 647	1 826	3 178	3 156
Chemicals used	Fremont	Greene	Grundy	Guthrie	Hamilton	Hancock	Hardin	Harrison
Commercial fertilizer ----- farms, 1982..	600	815	906	744	943	955	915	979
1978..	629	945	1 005	822	1 047	1 119	1 031	1 038
acres on which used, 1982..	106 382	160 377	160 671	122 404	190 343	173 502	189 383	194 826
1978..	134 153	183 131	175 376	125 817	196 470	208 125	186 478	190 185
Cropland fertilized, except pastureland ----- farms, 1982..	575	796	894	710	943	949	905	974
1978..	629	944	1 005	816	1 047	1 119	1 025	1 027
acres on which used, 1982..	100 910	158 142	159 132	112 885	190 135	172 163	187 461	182 281
1978..	126 808	180 007	172 466	114 305	196 335	206 133	180 840	176 050
Pastureland and rangeland fertilized ----- farms, 1982..	143	53	38	159	16	54	53	242
1978..	132	95	44	151	3	37	74	209
acres on which used, 1982..	5 472	2 235	1 539	9 519	208	1 339	1 922	12 545
1978..	7 345	3 124	2 910	11 512	135	1 992	5 638	14 135
Lime ----- farms, 1982..	68	37	113	146	24	9	53	25
1978..	89	40	251	128	30	68	127	18
acres on which used, 1982..	5 703	1 756	7 472	6 547	2 360	722	2 868	466
1978..	8 799	3 470	17 327	6 322	2 057	2 995	7 087	940
tons, 1982..	9 604	3 643	16 196	12 757	3 325	2 136	7 949	378
1978..	19 558	6 417	40 757	12 062	4 838	5 983	15 756	1 111
Sprays, dusts, granules, fumigants, etc., to control—								
Insects on hay and other crops ----- farms, 1982..	172	157	428	417	165	233	331	532
1978..	321	464	476	388	318	364	382	510
acres on which used, 1982..	32 155	26 182	65 802	54 599	34 344	34 764	58 899	79 786
1978..	71 416	89 134	76 054	57 734	66 737	68 298	74 428	81 914
Nematodes in crops ----- farms, 1982..	6	9	29	9	22	2	14	11
1978..	22	41	25	38	48	26	36	34
acres on which used, 1982..	696	1 313	2 010	2 061	3 485	(D)	1 049	270
1978..	4 558	4 944	6 361	3 551	4 361	4 058	5 513	3 894
Diseases in crops and orchards ----- farms, 1982..	10	2	22	10	2	6	14	12
1978..	17	26	13	4	12	16	29	32
acres on which used, 1982..	920	(D)	7 655	4 078	(D)	12	536	587
1978..	4 544	3 788	1 092	24	1 269	1 700	6 204	2 463
Weeds, grass, or brush in crops and pasture ----- farms, 1982..	568	743	822	653	820	837	851	748
1978..	474	741	842	673	794	896	839	728
acres on which used, 1982..	171 568	216 812	197 844	130 155	230 633	221 460	224 751	190 756
1978..	141 970	208 844	200 222	112 124	229 633	218 129	192 388	171 352
Chemicals used for defoliation or for growth control of crops or thinning of fruit ----- farms, 1982..	17	8	7	16	19	8	15	-
1978..	15	11	13	1	11	9	13	19
acres on which used, 1982..	4 064	2 773	(D)	5 466	4 821	1 824	2 134	-
1978..	3 195	1 780	1 426	(D)	663	2 597	2 195	1 058

Table 7. Agricultural Chemicals Used, Including Fertilizer and Lime: 1982 and 1978—Con.

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

Chemicals used	Henry	Howard	Humboldt	Ida	Iowa	Jackson	Jasper	Jefferson
Commercial fertilizer ----- farms, 1982...	732	830	698	704	882	1 086	1 103	634
1978...	749	936	773	769	931	1 054	1 271	697
acres on which used, 1982...	112 849	128 318	147 641	122 332	160 142	136 484	183 706	92 113
1978...	116 042	149 916	136 243	147 162	151 801	111 206	185 020	89 579
Cropland fertilized, except pastureland ----- farms, 1982...	732	830	698	696	859	1 067	1 090	634
1978...	744	936	773	769	908	1 048	1 266	692
acres on which used, 1982...	111 215	124 392	(D)	118 567	150 755	128 545	178 450	88 806
1978...	113 977	147 332	135 131	138 622	142 094	105 813	176 785	86 368
Pastureland and rangeland fertilized ----- farms, 1982...	36	77	1	78	165	139	114	62
1978...	82	72	26	135	172	116	221	80
acres on which used, 1982...	1 634	3 926	(D)	3 765	9 387	7 939	5 256	3 307
1978...	2 065	2 584	1 112	8 540	9 707	5 393	8 235	3 211
Lime ----- farms, 1982...	167	126	35	93	158	267	223	121
1978...	201	220	50	81	133	279	234	130
acres on which used, 1982...	8 421	4 963	2 211	5 749	8 529	6 833	12 536	5 895
1978...	8 189	16 515	3 896	7 293	6 635	11 705	12 223	6 566
tons, 1982...	22 065	13 438	4 574	12 675	20 216	21 540	30 581	14 898
1978...	19 604	39 024	6 746	11 659	15 726	34 469	28 823	12 660
Sprays, dusts, granules, fumigants, etc., to control—								
Insects on hay and other crops ----- farms, 1982...	452	294	188	385	518	754	694	245
1978...	410	303	250	416	494	686	735	254
acres on which used, 1982...	67 592	30 764	25 536	55 209	106 151	90 576	87 202	34 864
1978...	62 631	40 277	51 291	72 404	81 705	57 271	101 718	32 388
Nematodes in crops ----- farms, 1982...	11	20	7	32	62	61	34	24
1978...	55	31	30	42	75	98	82	26
acres on which used, 1982...	1 121	860	1 080	5 846	9 254	8 351	5 268	3 100
1978...	6 455	1 685	2 340	3 261	8 693	7 217	5 663	2 493
Diseases in crops and orchards ----- farms, 1982...	13	12	—	8	17	9	7	32
1978...	13	17	25	5	32	27	55	9
acres on which used, 1982...	(D)	497	—	1 790	1 794	986	46	3 656
1978...	1 231	1 019	3 326	750	2 259	1 719	6 374	460
Weeds, grass, or brush in crops and pasture ----- farms, 1982...	572	675	635	566	629	723	984	525
1978...	565	714	649	595	593	617	1 035	539
acres on which used, 1982...	111 014	133 648	194 915	120 892	139 982	87 659	203 812	105 825
1978...	108 430	137 194	154 500	127 518	111 310	58 613	171 659	98 868
Chemicals used for defoliation or for growth control of crops or thinning of fruit ----- farms, 1982...	46	14	8	1	41	16	11	19
1978...	33	17	5	1	23	24	22	9
acres on which used, 1982...	1 876	2 031	2 031	(D)	7 799	520	2 346	2 168
1978...	6 147	2 180	999	(D)	2 607	2 077	1 473	71
Chemicals used	Johnson	Jones	Keokuk	Kossuth	Lee	Linn	Louisa	Lucas
Commercial fertilizer ----- farms, 1982...	1 105	1 026	837	1 518	811	1 350	566	431
1978...	1 043	1 078	968	1 683	747	1 353	631	522
acres on which used, 1982...	164 196	169 241	146 457	294 024	106 313	183 969	103 373	52 807
1978...	139 470	168 296	170 313	318 450	101 853	182 471	122 267	66 092
Cropland fertilized, except pastureland ----- farms, 1982...	1 088	1 021	826	1 518	806	1 344	566	422
1978...	1 038	1 078	963	1 679	747	1 341	631	516
acres on which used, 1982...	160 467	164 496	142 885	293 146	103 243	182 190	101 522	44 542
1978...	136 205	164 336	162 358	315 558	96 740	179 946	120 678	50 469
Pastureland and rangeland fertilized ----- farms, 1982...	117	86	84	20	70	38	55	91
1978...	98	81	119	96	120	75	31	146
acres on which used, 1982...	3 729	4 745	3 572	878	3 070	1 779	1 851	8 265
1978...	3 265	3 960	7 955	2 892	5 113	2 525	1 589	15 623
Lime ----- farms, 1982...	261	169	163	3	170	211	76	53
1978...	200	227	250	40	231	226	121	138
acres on which used, 1982...	15 231	9 962	13 915	140	6 337	6 974	5 034	1 599
1978...	9 512	11 501	16 994	2 119	8 276	10 926	6 660	4 745
tons, 1982...	41 792	30 374	35 076	395	14 317	19 574	12 923	5 015
1978...	25 098	29 618	39 512	3 653	23 584	31 253	16 591	11 249
Sprays, dusts, granules, fumigants, etc., to control—								
Insects on hay and other crops ----- farms, 1982...	738	715	495	323	388	635	304	214
1978...	580	642	502	522	367	677	363	272
acres on which used, 1982...	101 413	109 002	83 378	48 823	53 132	85 745	39 351	19 478
1978...	75 053	92 148	78 741	98 799	44 452	84 548	70 953	26 428
Nematodes in crops ----- farms, 1982...	108	70	65	28	27	59	45	37
1978...	63	101	29	18	26	91	43	46
acres on which used, 1982...	18 447	7 734	6 785	4 155	2 209	6 648	10 256	3 651
1978...	5 820	12 534	4 135	3 197	3 570	7 801	8 246	2 678
Diseases in crops and orchards ----- farms, 1982...	48	22	15	14	28	24	20	4
1978...	45	30	15	18	48	29	27	2
acres on which used, 1982...	1 885	879	1 633	3 430	2 231	3 597	7 380	772
1978...	3 244	2 378	2 849	2 003	1 921	1 531	1 523	(D)
Weeds, grass, or brush in crops and pasture ----- farms, 1982...	785	818	793	1 368	635	1 149	545	337
1978...	818	859	773	1 398	618	929	453	284
acres on which used, 1982...	136 392	149 691	159 798	404 199	100 063	203 352	120 472	44 969
1978...	114 920	127 955	151 266	364 998	89 664	138 011	100 863	39 125
Chemicals used for defoliation or for growth control of crops or thinning of fruit ----- farms, 1982...	26	7	32	20	31	17	21	7
1978...	19	11	6	18	18	30	12	15
acres on which used, 1982...	1 410	920	2 423	9 478	4 589	1 005	2 120	14
1978...	2 851	598	431	2 565	2 167	4 808	294	1 870

Table 7. Agricultural Chemicals Used, Including Fertilizer and Lime: 1982 and 1978—Con.

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

Chemicals used	Lyon	Madison	Mahaska	Marion	Marshall	Mills	Mitchell	Monona
Commercial fertilizer ----- farms, 1982..	1 081	698	883	761	897	524	792	761
1978..	1 044	766	1 018	869	927	581	832	814
acres on which used, 1982..	171 432	91 240	135 530	92 854	162 632	109 394	133 098	195 670
1978..	164 124	93 318	140 495	105 523	158 687	111 477	157 628	223 078
Cropland fertilized, except pastureland ----- farms, 1982..	1 081	674	864	741	891	519	785	760
1978..	1 044	760	1 001	869	918	575	832	814
acres on which used, 1982..	166 515	79 025	130 668	89 725	158 808	104 320	132 188	187 433
1978..	160 926	83 651	136 867	102 298	154 140	107 896	156 420	208 944
Pastureland and rangeland fertilized ----- farms, 1982..	77	135	100	94	59	78	18	93
1978..	93	132	86	82	92	103	44	174
acres on which used, 1982..	4 917	12 215	4 862	3 129	3 824	5 074	910	8 237
1978..	3 198	9 667	3 628	3 225	4 547	3 581	1 208	14 134
Lime ----- farms, 1982..	54	96	146	101	93	13	81	7
1978..	45	234	208	142	152	42	279	32
acres on which used, 1982..	3 498	2 352	10 060	6 640	7 092	1 029	5 295	938
1978..	3 778	13 856	13 160	9 609	8 253	3 392	14 143	1 282
tons, 1982..	6 716	5 356	24 259	12 065	17 061	2 391	14 305	1 738
1978..	6 342	31 312	33 101	22 113	19 543	8 094	45 192	1 391
Sprays, dusts, granules, fumigants, etc., to control—								
Insects on hay and other crops ----- farms, 1982..	378	238	629	386	606	213	339	383
1978..	563	404	524	418	503	307	347	484
acres on which used, 1982..	50 822	30 340	78 841	39 482	94 552	47 804	49 362	76 825
1978..	73 214	49 339	68 303	46 146	76 817	63 594	58 371	117 359
Nematodes in crops ----- farms, 1982..	11	42	28	36	20	19	44	28
1978..	57	67	44	68	84	11	8	42
acres on which used, 1982..	1 819	3 964	3 846	5 314	2 130	2 880	4 026	5 729
1978..	4 939	2 234	5 870	6 318	8 855	1 731	332	10 080
Diseases in crops and orchards ----- farms, 1982..	16	2	10	7	19	14	26	1
1978..	6	16	28	25	31	16	10	3
acres on which used, 1982..	5 400	(D)	2 235	(D)	1 812	4 861	4 072	(D)
1978..	780	1 342	4 518	1 008	5 355	1 050	1 484	2 720
Weeds, grass, or brush in crops and pasture ----- farms, 1982..	901	662	734	645	741	472	680	615
1978..	851	696	828	752	801	561	739	636
acres on which used, 1982..	195 602	115 485	142 671	108 404	182 790	167 304	157 916	191 120
1978..	151 670	87 461	140 264	103 858	175 184	129 350	155 561	191 418
Chemicals used for defoliation or for growth control of crops or thinning of fruit ----- farms, 1982..	21	16	9	38	29	11	3	1
1978..	9	13	6	9	13	9	1	-
acres on which used, 1982..	4 497	606	181	1 419	1 874	4 146	1 402	(D)
1978..	999	1 387	430	299	1 810	1 634	(D)	-
Chemicals used	Monroe	Montgomery	Muscataine	O'Brien	Osceola	Page	Palo Alto	Plymouth
Commercial fertilizer ----- farms, 1982..	414	514	786	1 039	673	750	805	1 418
1978..	466	591	801	1 146	697	841	879	1 520
acres on which used, 1982..	44 059	100 118	129 609	165 279	121 640	115 732	148 389	267 285
1978..	57 713	110 490	106 367	195 184	131 478	119 584	180 357	255 441
Cropland fertilized, except pastureland ----- farms, 1982..	376	493	786	1 014	672	717	796	1 398
1978..	450	591	796	1 144	697	836	879	1 520
acres on which used, 1982..	36 153	91 577	126 484	162 460	121 204	99 993	147 729	256 849
1978..	49 283	102 759	104 522	193 550	129 779	109 755	178 377	247 176
Pastureland and rangeland fertilized ----- farms, 1982..	102	134	70	76	20	243	37	212
1978..	152	143	47	64	53	168	62	206
acres on which used, 1982..	7 906	8 541	3 125	2 819	436	15 739	660	10 436
1978..	8 430	7 731	1 845	1 634	1 699	9 829	1 980	8 265
Lime ----- farms, 1982..	69	96	106	113	33	115	12	81
1978..	151	88	109	138	49	93	35	93
acres on which used, 1982..	3 268	5 291	5 204	9 749	1 010	6 609	1 059	5 533
1978..	7 028	6 563	5 393	12 055	2 243	6 968	2 245	5 476
tons, 1982..	8 166	11 216	12 575	17 922	1 376	15 323	1 539	7 785
1978..	19 328	13 749	14 141	18 777	3 204	14 286	3 955	7 075
Sprays, dusts, granules, fumigants, etc., to control—								
Insects on hay and other crops ----- farms, 1982..	178	314	538	310	127	324	252	782
1978..	226	327	363	381	226	373	267	770
acres on which used, 1982..	11 597	43 848	74 979	46 403	20 220	34 704	34 217	107 511
1978..	22 225	50 408	48 868	60 406	40 069	42 870	54 319	127 785
Nematodes in crops ----- farms, 1982..	37	6	62	10	15	13	10	51
1978..	6	45	50	42	17	37	14	117
acres on which used, 1982..	3 150	1 004	5 715	1 910	1 612	4 881	2 915	8 259
1978..	1 250	5 951	3 704	4 380	1 994	3 809	1 863	14 298
Diseases in crops and orchards ----- farms, 1982..	6	16	32	10	1	6	8	26
1978..	15	14	14	15	10	7	3	22
acres on which used, 1982..	28	1 286	2 065	(D)	(D)	1 623	3 685	2 762
1978..	1 141	2 750	476	1 069	3 940	300	948	3 801
Weeds, grass, or brush in crops and pasture ----- farms, 1982..	363	442	554	962	547	659	693	1 240
1978..	397	502	620	1 016	582	743	722	1 167
acres on which used, 1982..	38 154	122 345	101 251	232 875	151 122	147 981	206 757	264 985
1978..	48 888	109 814	100 994	224 637	130 758	133 246	192 952	185 022
Chemicals used for defoliation or for growth control of crops or thinning of fruit ----- farms, 1982..	33	11	35	11	34	-	25	22
1978..	8	2	5	7	11	6	11	24
acres on which used, 1982..	2 067	(D)	1 367	1 447	5 666	-	4 730	3 152
1978..	172	(D)	380	1 926	1 732	540	1 525	4 566

Table 7. Agricultural Chemicals Used, Including Fertilizer and Lime: 1982 and 1978—Con.

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

Chemicals used	Pocahontas	Polk	Pottawattamie	Poweshiek	Ringgold	Sac	Scott	Shelby
Commercial fertilizer ----- farms, 1982..	921	732	1 340	897	569	867	858	1 048
1978..	993	756	1 435	931	597	937	958	1 097
acres on which used, 1982..	163 919	101 556	278 866	137 863	98 890	177 881	160 666	172 535
1978..	169 934	114 580	284 191	146 124	112 425	172 710	140 860	191 037
Cropland fertilized, except pastureland ----- farms, 1982..	921	714	1 322	884	559	867	830	1 034
1978..	993	756	1 430	931	582	937	953	1 096
acres on which used, 1982..	(D)	100 094	270 904	130 988	81 235	175 308	158 256	165 873
1978..	169 315	110 346	272 321	137 519	88 593	169 376	137 878	179 960
Pastureland and rangeland fertilized ----- farms, 1982..	2	63	233	132	217	62	78	146
1978..	16	93	217	174	203	90	86	231
acres on which used, 1982..	(D)	1 462	7 962	6 875	17 655	2 573	2 410	6 662
1978..	619	4 234	11 870	8 605	23 832	3 334	2 982	11 077
Lime ----- farms, 1982..	34	52	132	141	155	174	125	53
1978..	70	34	133	212	189	131	127	104
acres on which used, 1982..	1 140	3 761	9 199	6 445	7 158	11 995	7 528	8 218
1978..	3 909	2 199	9 504	8 384	12 022	8 773	5 623	9 673
tons, 1982..	2 098	9 445	19 865	15 465	18 113	21 596	17 238	16 449
1978..	5 335	4 366	20 490	20 496	31 659	15 087	15 003	18 434
Sprays, dusts, granules, fumigants, etc., to control—								
Insects on hay and other crops ----- farms, 1982..	199	221	837	457	310	399	592	611
1978..	278	367	715	446	309	362	514	696
acres on which used, 1982..	43 650	25 018	136 012	59 774	36 150	73 824	111 582	82 326
1978..	59 723	53 494	144 483	63 721	45 139	70 300	74 206	110 379
Nematodes in crops ----- farms, 1982..	5	20	46	27	7	22	71	27
1978..	19	24	64	59	55	27	63	47
acres on which used, 1982..	1 013	506	6 990	2 011	1 848	6 354	9 620	5 005
1978..	989	3 383	6 251	7 431	5 897	6 009	8 908	5 500
Diseases in crops and orchards ----- farms, 1982..	1	19	20	31	15	13	11	10
1978..	1	29	21	9	8	14	21	37
acres on which used, 1982..	(D)	2 258	4 615	3 872	1 711	4 484	1 840	798
1978..	(D)	2 153	2 113	858	88	2 719	2 555	4 543
Weeds, grass, or brush in crops and pasture ----- farms, 1982..	857	669	1 078	780	469	746	659	777
1978..	828	1 135	834	834	478	809	724	803
acres on which used, 1982..	249 407	157 628	310 986	151 595	78 724	226 065	132 922	146 151
1978..	205 866	116 303	250 690	141 111	87 022	183 527	114 595	133 707
Chemicals used for defoliation or for growth control of crops or thinning of fruit ----- farms, 1982..	17	18	18	14	19	14	8	2
1978..	9	22	12	13	11	-	22	6
acres on which used, 1982..	2 434	966	4 163	6 160	2 513	42	720	(D)
1978..	424	1 615	2 350	1 580	1 648	-	1 346	552
Chemicals used	Sioux	Story	Tama	Taylor	Union	Van Buren	Wapello	Warren
Commercial fertilizer ----- farms, 1982..	1 512	931	1 142	578	537	627	686	807
1978..	1 679	984	1 252	614	526	658	606	818
acres on which used, 1982..	256 376	161 609	179 791	78 476	63 096	79 689	85 430	112 425
1978..	269 297	189 569	189 689	85 217	67 580	90 575	73 671	90 425
Cropland fertilized, except pastureland ----- farms, 1982..	1 505	922	1 118	571	513	615	673	790
1978..	1 673	980	1 251	601	521	658	606	818
acres on which used, 1982..	252 191	160 459	173 951	67 329	51 057	75 467	81 092	105 495
1978..	265 398	187 767	184 617	76 830	55 814	78 261	70 380	84 561
Pastureland and rangeland fertilized ----- farms, 1982..	67	31	150	138	141	85	78	98
1978..	107	47	106	160	136	134	71	123
acres on which used, 1982..	4 185	1 150	5 840	11 147	12 039	4 202	4 338	6 930
1978..	3 899	1 802	5 072	8 387	11 766	12 314	3 291	5 864
Lime ----- farms, 1982..	115	47	162	78	156	110	146	145
1978..	162	44	218	97	135	144	123	183
acres on which used, 1982..	7 721	3 412	9 249	4 185	6 047	3 409	4 990	6 419
1978..	11 378	4 729	11 474	4 767	8 533	5 246	5 820	7 240
tons, 1982..	13 242	8 759	22 843	8 832	13 530	8 730	13 588	13 369
1978..	18 336	14 920	27 552	11 044	16 035	13 442	15 604	19 016
Sprays, dusts, granules, fumigants, etc., to control—								
Insects on hay and other crops ----- farms, 1982..	888	250	586	220	292	239	275	487
1978..	928	372	694	240	275	310	257	514
acres on which used, 1982..	127 481	39 527	86 410	32 969	22 809	38 630	39 786	66 989
1978..	135 848	83 339	103 379	30 860	24 517	29 568	23 886	51 066
Nematodes in crops ----- farms, 1982..	47	13	68	47	6	27	41	72
1978..	79	46	61	45	23	4	6	47
acres on which used, 1982..	8 037	2 015	3 902	4 067	775	2 698	2 272	4 939
1978..	8 571	5 526	6 536	4 732	3 192	470	78	3 400
Diseases in crops and orchards ----- farms, 1982..	37	6	6	15	22	25	9	25
1978..	33	1	30	12	5	14	12	25
acres on which used, 1982..	4 320	(D)	858	1 160	858	2 356	1 992	722
1978..	3 458	(D)	2 703	510	372	889	240	4 205
Weeds, grass, or brush in crops and pasture ----- farms, 1982..	1 234	868	958	574	531	491	639	763
1978..	1 264	887	995	541	471	581	528	670
acres on which used, 1982..	238 926	227 780	205 894	98 433	78 167	84 317	86 613	133 099
1978..	201 440	216 837	188 371	86 260	62 787	76 055	90 802	79 865
Chemicals used for defoliation or for growth control of crops or thinning of fruit ----- farms, 1982..	35	13	24	15	8	5	20	40
1978..	31	10	30	12	3	6	16	20
acres on which used, 1982..	3 636	3 265	3 355	1 000	759	2 200	7 594	1 356
1978..	2 925	1 195	3 399	1 200	56	104	670	898

Table 7. Agricultural Chemicals Used, Including Fertilizer and Lime: 1982 and 1978—Con.

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

Chemicals used	Washington	Wayne	Webster	Winnebago	Winneshiek	Woodbury	Worth	Wright
Commercial fertilizer ----- farms, 1982--	889	615	1 056	619	1 337	1 125	619	837
1978--	1 004	589	1 077	767	1 409	1 341	718	930
acres on which used, 1982--	162 864	92 628	188 185	123 939	161 780	259 200	126 281	171 400
1978--	156 039	87 905	195 950	135 373	158 260	311 641	136 418	191 567
Cropland fertilized, except pastureland ----- farms, 1982--	889	587	1 056	619	1 309	1 074	619	837
1978--	1 004	589	1 077	762	1 409	1 323	718	930
acres on which used, 1982--	159 833	82 862	188 093	123 715	158 653	245 986	126 058	171 127
1978--	150 581	76 125	194 917	134 929	152 037	293 492	134 867	191 042
Pastureland and rangeland fertilized ----- farms, 1982--	55	140	8	14	138	244	14	4
1978--	121	175	19	22	185	332	37	15
acres on which used, 1982--	3 031	9 766	92	224	3 127	13 214	223	273
1978--	5 458	11 780	1 033	444	6 223	18 149	1 551	525
Lime ----- farms, 1982--	133	123	32	7	243	31	50	5
1978--	148	206	71	22	340	73	78	58
acres on which used, 1982--	8 295	4 585	1 981	416	10 223	2 937	4 705	330
1978--	8 661	9 262	5 238	1 330	13 270	6 113	6 083	3 513
tons, 1982--	23 304	12 053	3 302	675	21 129	3 726	5 777	800
1978--	24 260	26 142	9 540	2 870	39 296	8 740	20 136	8 127
Sprays, dusts, granules, fumigants, etc., to control—								
Insects on hay and other crops ----- farms, 1982--	605	303	176	165	945	630	246	139
1978--	481	306	290	228	866	782	302	218
acres on which used, 1982--	112 411	49 535	30 736	21 037	110 803	144 247	26 249	22 913
1978--	74 637	37 572	54 832	30 223	84 179	144 772	54 941	44 079
Nematodes in crops ----- farms, 1982--	82	7	8	21	164	22	9	6
1978--	61	19	12	28	95	50	-	36
acres on which used, 1982--	13 504	1 750	632	1 698	18 599	3 468	1 317	430
1978--	5 912	1 312	1 556	3 306	4 795	13 522	-	5 277
Diseases in crops and orchards ----- farms, 1982--	41	-	8	8	39	7	12	9
1978--	47	1	5	17	27	26	5	18
acres on which used, 1982--	7 933	-	2 062	1 200	3 501	656	1 502	2 890
1978--	3 756	(D)	195	1 576	2 847	4 922	150	1 610
Weeds, grass, or brush in crops and pasture ----- farms, 1982--	767	483	987	612	769	935	589	730
1978--	817	512	980	633	965	1 035	580	765
acres on which used, 1982--	160 224	80 627	296 995	158 517	95 982	248 884	165 714	240 572
1978--	142 317	90 346	239 242	163 850	96 892	239 716	155 043	231 348
Chemicals used for defoliation or for growth control of crops or thinning of fruit ----- farms, 1982--	22	14	5	7	25	6	13	30
1978--	18	1	7	-	15	12	5	5
acres on which used, 1982--	2 105	504	375	4 258	8 480	790	1 489	4 776
1978--	2 757	(D)	2 640	-	1 113	3 072	1 750	242