

CHAPTER XIV

STATISTICS OF FERTILIZERS AND PESTICIDES

This chapter contains statistics on percentages of crop acres treated by various types of fertilizers and pesticides. Nitrogen, phosphate, and potash are the most common fertilizers; herbicides, insecticides, fungicides, and other chemicals are the main categories of pesticides. Other chemicals include soil fumigants, vine killers, and desiccants. The tables show data for field crops for 1994–97, fruits for 1997, and vegetables for 1996. NASS collects data for field crops on an annual basis and data for fruits and vegetables on a bi-yearly alternating basis. The surveyed States are generally the major producing States for each crop shown in the tables and represent 65–95 percent of the U.S. planted acres, depending on the selected crop. Quantities and rates of active chemical ingredients applied to each crop at State levels are available in the NASS series of “Agricultural Chemical Usage” reports.

Table 14-1.—Field crops: Fertilizer, total acreage, and percent of area receiving applications, all States surveyed, 1994–97¹

Crop	Area Planted ²	Nitrogen	Phosphate	Potash
	<i>1,000 Acres</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
1994:				
Corn	62,500	97	83	72
Cotton, Upland	10,023	86	54	37
Potatoes, Fall	1,139.6	100	98	91
Soybeans	43,975	13	20	25
Wheat, Winter ³	34,590	86	49	15
Wheat, Durum	2,450	85	69	4
Wheat, Other Spring	17,250	88	77	23
1995:				
Corn	64,105	97	81	70
Cotton, Upland	11,650	87	56	40
Potatoes, Fall	1,147.0	99	98	89
Soybeans	51,840	17	22	25
Wheat, Winter ³	34,265	86	54	16
Wheat, Durum	2,950	92	78	10
Wheat, Other Spring	15,750	87	78	23
1996:				
Corn	70,250	98	85	73
Cotton, Upland	11,915	77	55	43
Potatoes, Fall	797	99	97	90
Soybeans	50,050	15	25	27
Wheat, Winter ³	28,520	86	51	4
Wheat, Durum	3,000	93	73	8
Wheat, Other Spring	16,350	89	79	24
1997:				
Corn	62,150	99	84	72
Cotton, Upland	13,075	90	67	58
Potatoes, Fall	943.5	100	98	91
Soybeans	66,215	20	28	33
Wheat, Winter ³	35,065	84	53	15
Wheat, Durum	2,700	95	77	8
Wheat, Other Spring	18,100	92	82	25

¹ Refers to acres receiving one or more applications of a specific fertilizer ingredient. See tables 14-2 through 14-11 for surveyed States. ² Acres are the estimates as of the survey period and may not reflect subsequent revisions to the published estimates for a given crop. ³ Area harvested for winter wheat.

NASS, Crops Branch, (202) 720–2127.

Table 14-2.—Corn: Pesticide usage, 1994–97¹

State and Year	Acres treated and amount applied			
	Herbicide ²		Insecticide ³	
	Acres treated ⁴	Pounds applied	Acres treated ⁴	Pounds applied
	Thousands	Thousands	Thousands	Thousands
DE:..				
1995	139	427	62	26
GA:..				
1995	356	712	76	88
IL:..				
1994	11,484	37,870	3,596	3,009
1995	9,996	30,811	2,856	2,118
1996	10,890	34,223	2,970	2,143
1997	10,976	32,733	4,928	4,266
IN:..				
1994	5,917	19,601	1,464	1,191
1995	5,238	16,842	1,080	759
1996	5,488	18,856	1,960	1,466
1997	5,640	18,127	1,860	1,023
IA:..				
1994	12,870	38,199	3,510	2,947
1995	11,583	32,957	3,276	2,821
1996	12,573	36,109	2,159	1,779
1997	11,956	36,144	2,318	2,323
KS:..				
1995	1,978	4,397	839	645
1996	2,350	5,784	1,000	515
KY:..				
1995	1,203	3,537	192	56
1996	1,287	4,159	312	43
MI:..				
1994	2,474	6,987	612	575
1995	2,450	6,791	441	370
1996	2,597	7,250	557	318
1997	2,500	6,912	286	200
MN:..				
1994	6,860	15,218	560	491
1995	6,566	15,822	402	400
1996	7,275	17,819	975	614
1997	6,370	13,956	700	291
MO:..				
1994	2,304	6,749	384	170
1995	1,551	4,443	495	242
1996	2,650	7,547	743	492
1997	2,700	8,203	1,033	475
NE:..				
1994	8,342	18,735	4,558	3,468
1995	7,600	18,804	4,320	3,104
1996	8,330	19,817	4,335	3,068
1997	8,820	19,970	5,580	3,531
NC:..				
1995	784	1,679	232	286
1996	970	2,565	370	376
OH:..				
1994	3,626	11,382	703	537
1995	3,234	10,233	561	419
1996	2,900	10,029	812	591
1997	3,600	12,971	648	711
PA:..				
1995	1,283	4,169	400	295
1996	1,421	4,371	783	419
SC:..				
1996	392	1,017	104	84
SD:..				
1994	3,534	7,022	266	402
1995	2,576	4,691	196	153
1996	3,640	7,091	1,000	422
1997	3,534	6,346	380	317
TX:..				
1995	1,911	2,840	1,218	843
1996	1,911	2,770	1,554	712
WI:..				
1994	3,638	8,456	938	906
1995	3,504	8,487	913	830
1996	3,627	7,570	1,443	1,176
1997	3,724	8,689	722	433

¹ Data not available for all States for all years. ² Insufficient number of reports to publish data for fungicides and other chemicals. ³ Amount applied excludes Bt (bacillus thuringiensis). ⁴ Acres treated are the estimates as of the survey period.

Table 14-3.—Corn: Fertilizer usage, 1994–97¹

State and Year	Acres treated and amount applied					
	Nitrogen		Phosphate		Potash	
	Acres treated ²	Pounds applied	Acres treated ²	Pounds applied	Acres treated ²	Pounds applied
	Thousands	Millions	Thousands	Millions	Thousands	Millions
DE:.....						
1995	131	13.2	126	8.7	113	11.8
GA:.....						
1995	400	54.1	384	30.4	384	33.7
IL:.....						
1994	11,368	1,742.7	9,976	756.4	10,092	1,036.0
1995	10,098	1,543.1	8,466	635.3	8,568	902.9
1996	11,000	1,823.9	8,690	737.5	9,130	1,056.0
1997	11,088	1,689.5	9,744	747.9	9,744	1,046.8
IN:.....						
1994	5,917	879.5	5,612	416.3	5,002	559.3
1995	5,238	691.6	4,806	324.4	4,428	476.1
1996	5,600	774.7	5,432	346.1	4,928	542.4
1997	5,900	876.7	5,760	410.9	4,920	525.9
IA:.....						
1994	12,740	1,547.8	9,750	564.3	9,620	677.9
1995	11,349	1,364.6	9,009	534.5	8,892	643.0
1996	12,446	1,631.7	10,541	627.7	10,287	786.1
1997	12,078	1,464.3	9,150	575.4	9,150	668.0
KS:.....						
1995	2,129	306.1	1,505	59.1	516	18.4
1996	2,450	416.5	2,075	79.5	725	26.1
KY:.....						
1995	1,254	196.5	973	72.2	909	74.0
1996	1,274	186.9	1,118	87.2	1,157	94.1
MI:.....						
1994	2,499	288.3	2,270	112.4	2,244	200.3
1995	2,426	306.8	2,083	104.8	2,083	215.1
1996	2,600	307.9	2,385	112.7	2,253	226.5
1997	2,500	309.2	2,366	117.9	2,444	263.8
MN:.....						
1994	6,720	729.5	6,160	313.9	5,810	382.2
1995	6,432	755.6	5,829	294.1	5,695	367.5
1996	7,275	784.4	7,050	375.6	6,450	420.9
1997	6,790	750.9	5,530	270.4	5,670	309.6
MO:.....						
1994	2,400	340.5	2,040	114.9	1,968	137.7
1995	1,617	234.3	1,205	63.6	1,122	84.4
1996	2,650	398.5	2,420	132.7	2,393	163.5
1997	2,700	447.1	2,478	131.3	2,478	176.4
NE:.....						
1994	8,428	1,168.7	6,192	203.2	2,064	31.4
1995	7,920	1,097.2	5,440	167.4	2,320	39.3
1996	8,330	1,174.0	6,715	227.6	3,315	75.0
1997	8,900	1,313.1	7,200	205.2	2,340	33.3
NC:.....						
1995	784	169.2	744	61.6	736	62.5
1996	990	113.1	910	53.6	890	88.7
OH:.....						
1994	3,663	546.0	3,515	246.2	3,367	334.6
1995	3,300	539.5	2,970	208.4	2,904	284.9
1996	2,900	425.4	2,813	245.8	2,494	244.0
1997	3,564	567.5	3,204	234.6	3,204	313.6
PA:.....						
1995	1,283	97.5	1,201	58.8	1,173	49.2
1996	1,407	112.2	1,146	67	1,088	43.6
SC:.....						
1996	400	46	388	21.8	400	42.3
SD:.....						
1994	3,496	312.4	2,888	113.3	1,216	34.0
1995	2,520	195.5	2,016	71.7	812	15.7
1996	3,520	312.3	3,080	105.7	1,560	31.8
1997	3,648	303.1	3,040	113.9	1,178	25.5
TX:.....						
1995	2,079	284.8	1,638	74.9	714	18.0
1996	2,079	284.5	1,659	61.6	903	25.4
WI:.....						
1994	3,638	300.7	3,488	151.2	3,450	209.4
1995	3,541	283.0	3,431	149.1	3,358	209.3
1996	3,666	297.0	3,471	134.6	3,432	209.7
1997	3,724	285.2	3,686	154.0	3,534	244.1

¹ Data not available for all States for all years. ² Acres treated are the estimates as of the survey period.
 NASS, Crops Branch, (202) 720-2127.

Table 14-4.—Upland Cotton: Pesticide usage, 1994–97¹

State and Year	Acres treated and amount applied							
	Herbicide		Insecticide ²		Fungicide		Other Chemicals	
	Acres treated ³	Pounds applied	Acres treated ³	Pounds applied	Acres treated ³	Pounds applied	Acres treated ³	Pounds applied
	Thousands	Thousands	Thousands	Thousands	Thousands	Thousands	Thousands	Thousands
AL:.....								
1997	535	1,667	455	469	91	22	369	482
AZ:.....								
1994	235	358	260	1,123	*	*	232	1,098
1995	325	484	354	1,709	*	*	336	1,726
1996	236	357	280	1,029	*	*	224	1,703
1997	283	534	276	705	*	*	280	770
AR:.....								
1994	951	4,057	921	1,584	216	162	843	1,251
1995	1,147	4,208	983	1,527	234	201	644	781
1996	990	2,750	930	1,303	280	157	910	1,206
1997	846	2,882	732	678	95	83	798	1,335
CA:.....								
1994	924	1,613	1,034	1,787	*	*	1,056	4,645
1995	1,030	1,861	1,123	2,835	*	*	1,123	6,713
1996	900	1,856	970	2,031	*	*	950	5,180
1997	818	1,227	810	2,242	*	*	862	3,471
GA:.....								
1996	1,340	4,079	986	633	**	**	648	1,234
1997	1,440	4,623	1,296	895	**	**	1,224	4,397
LA:.....								
1994	783	2,996	900	3,737	189	84	693	724
1995	1,063	2,400	1,063	3,176	184	71	760	752
1996	721	1,957	863	1,486	151	89	614	546
1997	567	2,331	536	1,789	120	85	416	469
MS:.....								
1994	1,280	5,385	1,280	5,217	461	452	1,190	1,819
1995	1,431	6,234	1,358	5,691	438	350	1,329	1,951
1996	1,109	3,981	1,064	2,417	78	45	1,109	2,541
1997	985	3,124	985	3,972	296	447	955	1,556
MO:.....								
1997	380	839	270	210	*	*	376	573
NC:.....								
1997	650	1,832	616	339	*	*	643	1,093
SC:.....								
1997	290	875	284	241	52	5	278	467
TN:.....								
1996	540	1,889	481	505	178	97	470	732
1997	480	1,275	417	417	142	123	387	551
TX:.....								
1994	5,232	6,460	2,725	3,998	55	34	2,616	1,872
1995	6,272	7,430	3,904	5,729	*	*	2,304	1,654
1996	5,130	5,692	3,876	5,832	*	*	2,223	2,064
1997	5,335	6,401	3,410	6,327	**	**	2,915	2,398

¹ Data not available for all States for all years. ² Amount applied excludes Bt (bacillus thurengiensis). ³ Acres treated are the estimates as of the survey period. * Insufficient number of reports to publish data. ** No reports received for this pesticide class.

NASS, Crops Branch, (202) 720-2127.

Table 14-5.—Upland Cotton: Fertilizer usage, 1994–97¹

State and Year	Acres treated and amount applied					
	Nitrogen		Phosphate		Potash	
	Acres treated ²	Pounds applied	Acres treated ²	Pounds applied	Acres treated ²	Pounds applied
	Thousands	Millions	Thousands	Millions	Thousands	Millions
AL:						
1997	535	47.8	498	26.8	508	40.1
AZ:						
1994	310	68.6	141	7.4	69	0.7
1995	347	66.9	124	8.1	*	*
1996	309	45.8	135	6.6	35	1.6
1997	322	41.8	94	5.2	13	0.6
AR:						
1994	911	100.5	686	30.0	794	58.0
1995	1,135	114.6	866	39.4	995	75.1
1996	970	94.0	660	25.2	710	49.3
1997	874	67.2	789	42.5	865	57.6
CA:						
1994	1,056	198.5	385	23.1	264	10.6
1995	1,158	193.3	468	29.5	246	17.8
1996	960	168.1	370	30.6	160	9.5
1997	845	122.7	220	13.4	229	16.7
GA:						
1996	1,337	139.3	1,337	76.7	1,310	139.1
1997	1,368	126.3	1,353.6	81.4	1,426	132.0
LA:						
1994	828	130.1	360	16.2	360	21.2
1995	955	111.9	456	21.4	521	38.1
1996	810	60.1	570	25.7	596	39.5
1997	617	48.5	447	22.8	479	33.8
MS:						
1994	1,280	156.0	576	31.3	845	85.1
1995	1,460	163.2	584	31.5	876	74.7
1996	1,098	110.4	302	14.0	627	63.4
1997	985	107.3	453	22.6	758	72.1
MO:						
1997	380	42.6	274	10.0	361	28.1
NC:						
1997	616	38.4	429	16.6	570	56.8
SC:						
1997	290	26.8	290	15.8	290	34.2
TN:						
1996	540	47.8	173	32.0	535	47.1
1997	490	44.8	485	27.4	485	42.9
TX:						
1994	4,251	302.9	3,270	123.3	1,363	27.4
1995	5,056	312.4	4,032	151.8	2,048	31.1
1996	3,135	252.2	2,679	105.2	1,140	23.6
1997	4,510	280.9	3,410	126.3	1,595	25.8

¹ Data not available for all States for all years. ² Acres treated are the estimates as of the survey period. * Insufficient reports to publish data for one or more of the fertilizer nutrients.

NASS, Crops Branch, (202) 720-2127.

Table 14-6.—Fall potatoes: Pesticide usage, 1994–97 ¹

State and Year	Acres treated and amount applied							
	Herbicide		Insecticide ²		Fungicide		Other Chemicals	
	Acres treated ³	Pounds applied	Acres treated ³	Pounds applied	Acres treated ³	Pounds applied	Acres treated ³	Pounds applied
	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>
CO:.....								
1994	59.2	246	51.8	52	70.3	174	24.4	1,269
1995	68.5	223	50.1	21	72.4	140	20.0	2,192
ID:.....								
1994	373.1	1,058	307.5	897	217.3	411	168.1	35,245
1995	372.0	1,125	304.0	771	252.0	681	164.0	29,233
1996	369.0	1,131	299.3	649	348.5	1,089	159.9	30,529
1997	358.8	962	358.8	1,057	390.0	2,233	230.1	40,356
MA:.....								
1994	73.3	54	72.5	219	78.0	945	77.2	601
1995	74.9	43	78.0	66	78.0	629	72.5	358
1996	76.4	49	70.2	46	78.0	737	76.4	580
1997	68.2	39	68.9	68	70.3	641	68.2	1,609
MI:.....								
1994	42.2	63	44.0	361	44.0	484	34.3	215
1995	46.8	117	55.0	90	52.8	602	34.1	436
MN:.....								
1994	38.5	105	74.0	66	69.6	220	59.9	30
1995	54.8	94	74.7	95	83.0	567	58.9	669
1997	21.6	35	76.2	84	75.5	816	63.1	113
NY:.....								
1994	20.1	43	28.8	385	23.3	195	14.8	8
1995	24.9	52	27.0	68	26.4	211	18.9	16
ND:.....								
1994	77.1	109	131.7	179	133.0	660	70.5	266
1995	75.0	128	125.0	263	125.0	759	51.3	1,671
1997	78.8	134	96.3	161	123.8	1,232	45.0	22
OR:.....								
1994	48.7	168	46.0	253	41.2	177	31.6	4,263
1995	47.8	134	47.8	233	46.8	323	33.3	5,652
1997	51.2	142	46.3	178	50.7	346	37.6	8,306
PA:.....								
1994	12.2	36	19.0	179	18.4	176	8.0	75
1995	16.4	53	17.1	38	17.1	175	9.7	12
WA:.....								
1994	36.8	339	150.5	843	139.8	807	124.6	20,137
1995	36.7	305	144.1	694	135.2	1,458	113.2	16,981
1996	151.6	322	153.2	485	138.6	986	117.4	12,064
1997	125.8	264	146.5	644	140.6	1,084	105.1	9,658
WI:.....								
1994	66.4	81	73.0	143	72.3	854	66.4	1,963
1995	78.0	100	80.5	214	83.0	1,000	73.9	2,654
1997	76.4	70	74.1	95	78.0	1,103	67.9	3,601

¹ Data not available for all States for all years. ² Amount applied excludes Bt (bacillus thuringiensis). ³ Acres treated are the estimates as of the survey period.

NASS, Crops Branch, (202) 720-2127.

Table 14-7.—Fall potatoes: Fertilizer usage, 1994–97 ¹

State and Year	Acres treated and amount applied					
	Nitrogen		Phosphate		Potash	
	Acres treated ²	Pounds applied	Acres treated ²	Pounds applied	Acres treated ²	Pounds applied
	<i>Thousands</i>	<i>Millions</i>	<i>Thousands</i>	<i>Millions</i>	<i>Thousands</i>	<i>Millions</i>
CO:						
1994	74.0	18.4	74.0	16.9	70.3	6.4
1995	77.0	19.9	76.2	15.3	66.2	5.9
ID:						
1994	410.0	107.2	405.9	78.0	356.7	45.2
1995	400.0	98.6	400.0	73.7	336.0	42.5
1996	410.0	84.4	405.9	80.6	348.5	40.7
1997	390.0	103.6	378.3	72.3	343.2	41.7
MA:						
1994	78.0	13.7	77.2	13.7	77.2	13.9
1995	77.2	13.7	77.2	13.9	77.2	14.3
1996	78.0	13.0	77.2	13.4	78.0	13.6
1997	71.0	12.9	71.0	13.3	71.0	13.5
MI:						
1994	44.0	11.1	42.2	4.7	44.0	12.7
1995	55.0	10.3	53.9	6.7	55.0	13.3
MN:						
1994	74.0	5.1	73.3	5.0	73.3	7.0
1995	77.2	9.6	82.2	8.1	72.2	9.8
1997	73.9	11.9	76.2	6.1	74.7	6.6
NY:						
1994	28.8	4.3	28.5	6.2	28.5	5.4
1995	28.0	3.8	28.0	5.6	28.0	5.3
ND:						
1994	133.0	17.1	126.4	9.9	113.1	11.2
1995	125.0	20.1	117.5	10.2	111.3	13.4
1997	125.0	16.7	120.0	11.7	100.0	7.7
OR:						
1994	53.5	24.3	50.8	9.0	40.7	7.9
1995	51.0	12.2	49.9	9.2	45.2	7.5
1997	54.5	15.1	54.5	10.8	47.4	11.1
PA:						
1994	19.0	3.1	19.0	2.3	19.0	3.1
1995	17.6	2.4	17.1	2.0	17.1	2.5
WA:						
1994	152.0	53.7	145.9	40.9	142.9	38.8
1995	147.0	44.1	145.5	36.3	133.8	32.4
1996	154.9	44.3	150.0	29.4	148.3	30.2
1997	148.0	47.9	146.5	42.6	145.0	31.6
WI:						
1994	73.0	17.2	73.0	10.6	73.0	25.0
1995	83.0	16.4	81.3	11.9	83.0	27.5
1997	78.0	15.0	78.0	9.5	78.0	22.2

¹ Data not available for all states for all years. ² Acres treated are the estimates as of the survey period. NASS, Crops Branch, (202) 720-2127.

Table 14-8.—Soybeans: Pesticide usage, 1994-97¹

State and Year	Acres treated and amount applied ²			
	Herbicide		Insecticide ³	
	Acres treated ⁴	Pounds applied	Acres treated ⁴	Pounds applied
	Thousands	Thousands	Thousands	Thousands
AR:..				
1994	3,381	4,469	69	64
1995	3,140	3,564	**	**
1996	3,266	4,491	*	*
1997	3,492	5,019	*	*
DE:..				
1994	196	359	*	*
1997	176	314	*	*
GA:..				
1995	278	245	109	69
IL:..				
1994	9,500	11,622	*	*
1995	9,555	10,181	**	**
1996	9,603	10,670	**	**
1997	9,800	11,136	*	*
IN:..				
1994	4,600	6,292	*	*
1995	4,950	6,019	*	*
1996	5,238	5,845	*	*
1997	5,350	7,062	**	**
IA:..				
1994	8,712	7,643	**	**
1995	9,300	8,936	**	**
1996	9,405	10,821	*	*
1997	10,395	13,691	**	**
KS:..				
1997	2,303	2,947	*	*
KY:..				
1995	1,147	1,377	**	**
1997	1,183	1,460	*	*
LA:..				
1995	1,017	1,394	407	241
1996	1,034	1,645	352	161
1997	1,260	1,843	406	331
MI:..				
1997	1,862	2,452	**	**
MN:..				
1994	5,643	5,275	*	*
1995	5,841	5,471	**	**
1996	5,831	7,826	**	**
1997	6,528	6,902	*	*
MS:..				
1995	1,832	2,587	*	*
1996	1,782	2,287	*	*
1997	2,058	2,453	*	*
MO:..				
1994	4,278	4,454	*	*
1995	4,324	4,918	*	*
1996	4,018	5,373	*	*
1997	4,606	5,521	**	**
NE:..				
1994	2,813	2,916	*	*
1995	2,976	3,001	*	*
1996	3,020	3,459	*	*
1997	3,465	4,093	*	*
NC:..				
1995	1,047	1,228	115	17
1997	1,372	1,625	490	130
OH:..				
1994	3,960	6,357	*	*
1995	3,969	5,923	*	*
1996	4,410	5,692	*	*
1997	4,350	5,307	*	*
PA:..				
1997	318	661	**	**
SD:..				
1997	3,150	3,059	*	*
TN:..				
1995	1,050	1,595	*	*
1996	1,150	1,770	*	*
1997	1,240	1,664	*	*
WI:..				
1996	911	750	*	*
1997	1,000	998	**	**

¹ Data not available for all States for all years. ² Insufficient number of reports to publish data for fungicides and other chemicals. ³ Amount applied excludes Bt (bacillus thuringiensis). ⁴ Acres treated are the estimates as of the survey period. * Insufficient number of reports to publish data. ** No reports received for this pesticide class.

Table 14-9.—Soybeans: Fertilizer usage, 1994–97¹

State and Year	Acres treated and amount applied					
	Nitrogen		Phosphate		Potash	
	Acres treated ²	Pounds applied	Acres treated ²	Pounds applied	Acres treated ²	Pounds applied
	<i>Thousands</i>	<i>Millions</i>	<i>Thousands</i>	<i>Millions</i>	<i>Thousands</i>	<i>Millions</i>
AR:..						
1994	517	17.2	1,070	52.5	1,104	71.1
1995	552	25.5	966	47.9	1,035	66.5
1996	320	8.2	1,598	76.4	1,527	90.5
1997	216	9.3	1,044	60.8	1,080	71.4
DE:..						
1994	138	4.5	95	3.3	122	9.9
1997	83	1.5	86	3.8	65	5.7
GA:..						
1995	195	6.0	214	10.8	211	13.0
IL:..						
1994	960	32.6	1,920	117.3	2,976	290.6
1995	1,658	39.4	2,535	184.9	3,023	337.5
1996	1,485	32.4	2,277	128.3	3,366	329.6
1997	1,100	12.6	2,300	160.3	3,400	352.5
IN:..						
1994	799	15.5	1,316	49.8	1,786	149.3
1995	800	16.7	1,050	46.1	1,700	181.6
1996	1,242	37.9	1,782	79.1	2,376	240.7
1997	872	40.8	1,199	65.2	1,962	213.0
IA:..						
1994	616	17.6	1,056	43.5	1,056	60.5
1995	930	26.4	1,023	44.0	1,116	74.0
1996	760	19.5	1,140	55.2	1,330	99.3
1997	1,680	30.4	2,415	129.3	2,625	205.4
KS:..						
1997	490	12.1	441	14.8	368	18.9
KY:..						
1995	480	15.0	538	32.6	538	40.1
1997	416	22.7	546	36.9	533	59.4
LA:..						
1995	54	1.7	171	7.2	171	9.9
1996	44	0.7	396	17.1	374	26.0
1997	182	5.8	322	13.8	322	21.3
MI:..						
1997	1,197	21.3	931	49.9	1,349	100.9
MN:..						
1994	684	12.2	741	29.4	798	53.8
1995	885	61.8	885	44.8	1,003	77.0
1996	595	9.2	833	38.4	595	42.9
1997	1,088	15.2	1,360	55.6	1,496	141.5
MS:..						
1995	111	1.5	296	13.8	407	24.6
1996	198	2.5	324	14.0	306	19.4
1997	336	5.4	483	25.5	546	48.4
MO:..						
1994	506	15.6	828	36.4	1,058	74.2
1995	598	34.3	920	50.8	920	74.4
1996	943	20.5	1,025	54.9	1,148	81.3
1997	735	17.2	1,372	60.4	1,715	136.2
NE:..						
1994	725	15.2	725	26.2	348	7.5
1995	620	25.4	496	18.4	341	4.6
1996	854	10.2	1,525	64.4	336	5.3
1997	1,085	19.5	1,085	45.9	560	11.3
NC:..						
1995	506	21.1	483	21.7	529	45.8
1997	728	46.7	938	36.8	1,078	103.3
OH:..						
1994	800	13.9	1,280	60.3	1,920	196.6
1995	932	13.1	1,175	58.8	1,499	126.6
1996	900	30.4	1,080	50.1	1,620	164.8
1997	720	11.9	1,170	56.8	2,700	308.4
PA:..						
1997	196	3.4	204	8.7	218	19.5
SD:..						
1997	1,225	43.3	1,190	42.2	630	14.5
TN:..						
1995	215	6.8	407	21.9	407	26.1
1996	324	12.8	516	27.5	636	51.5
1997	383	7.4	634	33.1	686	52.6
WI:..						
1997	530	8.2	540	11.7	690	56.0

¹ Data not available for all States for all years. ² Acres treated are the estimates as of the survey period.
 NASS, Crops Branch, (202) 720-2127.

Table 14-10.—Wheat: Pesticide usage, 1994-97¹

State and Year	Acres treated and amount applied ²				State and Year	Acres treated and amount applied ²			
	Herbicide		Insecticide ³			Herbicide		Insecticide ³	
	Acres treated ⁴	Pounds applied	Acres treated ⁴	Pounds applied		Acres treated ⁴	Pounds applied	Acres treated ⁴	Pounds applied
	Thousands	Thousands	Thousands	Thousands		Thousands	Thousands	Thousands	Thousands
Winter.									
CO:.									
1994	867	251	459	275					
1995	1,377	422	*	*					
1996	1,342	756	242	139					
1997	1,824	803	371	321	PA:.				
ID:.					1997	37	8	*	*
1994	656	547	**	**	SD:.				
1995	693	446	**	**	1994	1,134	338	**	**
1996	688	433	**	**	1995	958	368	**	**
1997	853	631	**	**	1996	1,027	390	*	*
IL:.					1997	935	383	**	**
1994	270	23	**	**	TX:.				
1995	361	16	**	**	1994	783	214	870	387
1996	460	16	**	**	1995	896	218	644	253
1997					1996	783	319	1,102	447
KS:.					1997	984	181	738	351
1994	5,472	1,216	*	*	WA:.				
1995	6,710	1,095	*	*	1994	2,047	1,134	*	*
1996	4,136	1,304	616	212	1995	2,000	1,067	**	**
1997	3,410	819	**	**	1996	2,256	1,304	**	**
MO:.					1997	2,107	1,584	*	*
1994	88	14	*	*	Durum.				
1995	74	14	**	**	ND:.				
1996	343	67	**	**	1994	2,328	1,378	**	**
1997					1995	2,832	1,821	**	**
MT:.					1996	2,940	2,087	*	*
1994	1,758	1,175	130	14	1997	2,511	2,221	54	12
1995	1,356	685	*	*	Other.				
1996	1,841	1,385	*	*	MN:.				
1997	1,276	1,089	*	*	1994	2,548	1,745	*	*
NE:.					1995	2,183	1,410	*	*
1994	1,197	361	**	**	1996	2,448	1,547	*	*
1995	1,113	235	**	**	1997	2,303	1,434	**	**
1996	1,281	332	*	*	MT:.				
1997	1,007	189	**	**	1994	3,243	1,394	**	**
OH:.					1995	3,555	2,118	**	**
1994	260	74	**	**	1996	3,192	2,122	**	**
1995	194	51	*	*	1997	4,089	3,254	*	*
1996	218	56	**	**	ND:.				
1997					1994	8,736	4,758	**	**
OK:.					1995	7,802	4,165	**	**
1994	1,431	172	2,173	827	1996	8,832	6,170	*	*
1995	2,600	278	884	255	1997	7,744	4,583	*	*
1996	1,715	655	1,323	391	SD:.				
1997	2,052	435	702	234	1994	1,743	633	**	**
OR:.					1995	1,213	431	**	**
1994	853	556	*	*	1996	2,123	886	**	**
1995	809	513	*	*	1997	2,150		**	**
1996	830	503	*	*					
1997	840	516	*	*					

¹ Data not available for all States for all years. ² Insufficient number of reports to publish data for fungicides and other chemicals. ³ Amount applied excludes Bt (bacillus thuringiensis). ⁴ Acres treated are the estimates as of the survey period. * Insufficient number of reports to publish data. ** No reports received for this pesticide class.

NASS, Crops Branch, (202) 720-2127.

Table 14-11.—Wheat: Fertilizer usage, 1994–97¹

State and Year	Acres treated and amount applied					
	Nitrogen		Phosphate		Potash	
	Acres treated ²	Pounds applied	Acres treated ²	Pounds applied	Acres treated ²	Pounds applied
	Thousands	Millions	Thousands	Millions	Thousands	Millions
Winter:						
CO:						
1994	1,709	71.4	612	12.8	*	*
1995	1,674	81.0	621	16.7	*	*
1996	1,694	70.2	836	18.0	*	*
1997	1,938	69.0	1,112	18.7	*	*
ID:						
1994	719	68.9	450	15.8	55	2.2
1995	724	81.8	531	21.7	62	1.1
1996	834	96.2	413	22.1	129	5.0
1997	853	105.4	539	19.4	96	4.3
IL:						
1994	873	91.8	774	62.0	711	67.8
1995	1,321	121.7	1,168	89.2	987	89.9
1997	1,047	103.8	794	62.1	886	86.9
KS:						
1994	10,146	593.0	5,586	177.9	684	22.2
1995	9,900	560.7	6,710	215.8	770	25.0
1996	8,272	461.6	5,720	162.3	*	*
1997	8,580	509.0	6,160	186.8	880	19.5
MO:						
1994	1,078	93.4	847	38.8	891	53.6
1995	1,082	109.2	800	42.5	824	57.1
1997	957	98.2	842	45.4	728	49.4
MT:						
1994	1,536	90.8	1,462	44.2	3,145	3.4
1995	1,219	69.7	1,123	31.3	397	4.7
1996	1,624	84.7	1,584	46.9	238	4.3
1997	1,378	64.5	1,131	31.4	334	4.3
NE:						
1994	1,680	72.8	987	29.5	*	*
1995	1,680	80.0	882	27.3	*	*
1996	1,600	78.6	1,071	34.8	*	*
1997	1,748	94.6	1,406	47.8	*	*
OH:						
1994	1,168	95.3	1,074	69.4	1,133	85.9
1995	1,210	102.6	1,125	72.3	113	79.1
1997	1,090	93.1	1,003	63.7	1,068	87.6
OK:						
1994	5,035	347.2	3,127	113.1	530	18.9
1995	4,992	356.3	3,016	96.3	624	10.3
1996	3,675	199.2	2,205	70.8	539	26.1
1997	4,860	317.5	2,538	83.6	378	6.4
OR:						
1994	861	54.5	96	3.2	*	*
1995	809	55.9	140	4.5	83	2.1
1996	850	65.0	85	2.5	43	1.1
1997	840	75.3	126	4.7	*	*
PA:						
1997	142	7.3	105	5.2	103	5.2
SD:						
1994	716	36.7	419	9.1	*	*
1995	806	30.3	654	20.6	*	*
1996	1,232	60.8	1,027	29.2	*	*
1997	819	38.7	609	15.3	*	*
TX:						
1994	2,059	182.4	1,015	41.4	232	4.1
1995	2,044	172.6	1,008	38.3	252	3.9
1996	2,262	183.6	899	39.4	*	*
1997	3,198	267.2	1,476	49.1	656	10.8
WA:						
1994	2,277	160.2	667	15.2	*	*
1995	2,064	158.1	645	12.9	215	6.4
1996	2,350	194.9	588	12.2	235	5.4
1997	2,107	145.4	731	16.5	258	7.6
Durum:						
ND:						
1994	2,083	145.8	1,691	44.7	98	0.9
1995	2,714	177.8	2,301	54.8	295	4.6
1996	2,790	168.6	2,190	50.9	240	4.9
1997	2,565	170.9	2,079	48.7	216	4.1
Other:						
MN:						
1994	2,548	240.4	2,340	88.6	1,560	42.5
1995	2,138	177.7	2,025	74.7	1,620	43.2
1996	2,499	227.0	2,219	82.1	1,224	33.8
1997	2,401	209.1	2,230	77.4	1,789	73.9
MT:						
1994	2,657	103.5	2,174	47.6	587	5.4
1995	3,081	118.2	2,844	64.8	672	10.8
1996	3,486	173.5	3,276	89.6	378	3.6
1997	3,437	153.5	2,871	68.2	653	10.2
ND:						
1994	8,281	626.8	7,462	283.7	1,547	31.1
1995	7,304	458.8	6,640	198.0	1,162	16.0
1996	8,640	582.9	7,488	227.4	2,304	46.0
1997	8,712	621.8	8,096	248.3	2,112	43.8
SD:						
1994	1,659	87.2	1,386	31.9	210	3.1
1995	1,188	57.8	850	22.2	150	2.2
1997	2,250	140.2	1,750	61.6	*	*

¹ Data not available for all States for all years. ² Acres treated are the estimates as of the survey period. * Insufficient number of reports to publish data.
 NASS, Crops Branch, (202) 720-2127.

Table 14-12.—Fruits: Percent of acres receiving applications, for surveyed States, 1997¹

Crop	Herbicide	Insecticide	Fungicide
Apples	60	96	90
Apricots	30	62	52
Avocados	44	33	12
Blackberries	94	79	87
Blueberries	67	83	88
Cherries, Sweet	61	84	80
Cherries, Tart	78	98	99
Dates	**	4	18
Figs	48	1	*
Grapefruit	91	91	71
Grapes	75	60	87
Kiwifruit	41	20	15
Lemons	78	73	66
Limes	98	100	100
Nectarines	73	82	79
Olives	53	16	30
Oranges	91	88	65
Peaches	54	82	84
Pears	57	90	85
Plums	74	85	69
Prunes	48	71	58
Raspberries	90	90	95
Tangelos	96	97	91
Tangerines	80	79	56
Temples	96	98	94

¹ Refers to acres receiving one or more applications of a specific agricultural chemical. * Insufficient reports to publish data. Blank entries indicate none reported for sample. ** No reports received for this pesticide class.
NASS, Crops Branch, (202) 720-2127.

Table 14-13.—Vegetables: Percent of acres receiving applications, for surveyed States, 1996¹

Crop	Herbicide	Insecticide	Fungicide
Asparagus	88	56	33
Beans, Lima, Fresh	93	47	34
Beans, Lima, Processing ...	49	60	18
Beans, Snap, Fresh	49	75	73
Beans, Snap, Processing ...	90	72	49
Broccoli	64	96	37
Cabbage, Fresh	62	94	57
Cabbage, Processing	95	89	11
Carrots	89	40	78
Cauliflower	31	97	18
Celery	68	97	86
Corn, Sweet, Fresh	79	89	42
Corn, Sweet, Processing ...	90	74	11
Cucumbers, Fresh	60	68	77
Cucumbers, Processing	76	36	34
Eggplant	33	89	84
Lettuce, Head	52	98	76
Lettuce, Other	52	86	73
Melons, Other	36	85	47
Melons, Watermelon	43	41	65
Onions, Bulb	88	83	89
Peas, Green, Processing ...	89	35	2
Peppers, Bell	67	88	75
Spinach, Fresh	56	72	49
Spinach, Processing	61	63	50
Strawberries	37	85	86
Tomatoes, Fresh	54	93	90
Tomatoes, Processing	78	71	90

¹ Refers to acres receiving one or more applications of a specific agricultural chemical.
NASS, Crops Branch, (202) 720-2127.