

## **Environmental Data Summary**

The environmental survey program provides data on agricultural fertilizer and pesticide usage, pest management practices, and postharvest chemical applications. Agricultural chemical use data are released for selected major field crops, fruits and nuts, vegetables, and livestock and their facilities. Postharvest chemical use data are released for off-farm pesticide applications and pest management practices for selected crops, such as apples, oranges, potatoes, corn, wheat, rice, and peanuts. Pest management practices data provide information on practices farmers use to reduce their dependency on agricultural chemicals (such as practices which improve the effectiveness of pesticides or are an alternative to pesticides). Pest management practices are categorized into four areas: prevention, avoidance, monitoring, and suppression. Pests include weeds, insects, and fungi.

Following is a list of environmental products released during the past year:

Agricultural Chemical Usage Postharvest Applications are released in March. For the March 2004 release, corn and soybeans were the targeted crops.

Agricultural Chemical Usage 2003 Field Crops Summary was released May 2004. The agricultural chemical use data consists of on-farm usage of commercial fertilizers and pesticides as well as pest management practices for targeted crops in selected states. The targeted crops were: barley, corn, fall potatoes, sorghum, and upland cotton.

Agricultural Chemical Usage 2003 Fruit Summary was released August 2004. Data published consists of on-farm usage of commercial fertilizers and pesticides as well as pest management practices for targeted crops in selected states. Data were published on 27 fruit crops.

Agricultural Chemical Usage 2003 Nursery and Floriculture Summary was released September 2004. Data were published on 23 categories of nursery and floriculture crops.

**Fertilizer Usage: Corn<sup>1</sup>**

State and Year Surveyed	Percent Treated and Amount Applied						
	Nitrogen		Phosphate		Potash		
	Area Applied	Pounds Applied	Area Applied	Pounds Applied	Area Applied	Pounds Applied	
	<i>percent</i>	<i>millions</i>	<i>percent</i>	<i>millions</i>	<i>percent</i>	<i>millions</i>	
Colorado	1999	98	165.6	65	30.3	16	3.4
	2000	95	182.0	78	42.2	17	7.4
	2001	93	141.5	65	32.1	24	10.8
	2003	89	138.2	59	30.0	31	8.3
Georgia	2001	97	28.6	91	12.6	87	20.8
Illinois	1999	98	1,639.8	80	603.2	81	1,003.0
	2000	99	1,797.7	83	739.3	82	1,028.5
	2001	99	1,682.8	81	720.6	85	1,092.2
	2002	94	1,698.3	77	754.1	77	1,028.7
	2003	98	1,758.5	83	751.4	78	963.9
Indiana	1999	99	881.8	92	299.1	88	593.3
	2000	99	868.8	90	366.1	85	625.9
	2001	98	837.4	85	331.7	86	660.0
	2002	99	786.7	92	350.4	84	567.1
	2003	99	854.4	85	376.4	83	640.0
Iowa	1999	98	1,502.8	75	604.9	75	734.7
	2000	95	1,533.0	74	503.2	74	603.9
	2001	87	1,272.8	62	415.8	60	482.4
	2002	94	1,408.0	72	515.8	69	607.4
	2003	93	1,544.3	59	468.6	65	670.6
Kansas	1999	99	443.3	70	86.2	22	20.5
	2000	100	506.0	74	97.3	39	37.1
	2001	97	444.4	71	93.5	19	24.8
	2003	99	453.9	81	92.7	30	33.5
Kentucky	1999	100	234.9	81	66.6	50	64.5
	2000	99	198.7	81	88.3	80	92.0
	2001	91	173.4	87	92.5	82	99.9
	2003	98	189.0	83	81.0	78	76.1
Michigan	1999	100	277.9	92	91.9	91	174.4
	2000	99	240.1	96	96.9	83	154.3
	2001	91	251.3	78	85.9	78	175.2
	2003	99	281.8	86	95.3	88	201.6
Minnesota	1999	92	702.9	90	299.6	86	312.9
	2000	97	786.4	91	404.2	76	377.9
	2001	97	750.2	90	283.4	81	340.5
	2002	95	839.9	86	330.1	78	344.8
	2003	95	835.9	89	309.2	73	349.2
Missouri	1999	100	422.3	84	136.1	84	169.4
	2000	100	422.7	82	136.3	82	169.1
	2001	99	411.6	82	129.6	83	161.2
	2003	99	482.2	91	162.0	88	210.7

See footnote(s) at end of table.

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### Fertilizer Usage: Corn<sup>1</sup> (continued)

State and Year Surveyed	Percent Treated and Amount Applied						
	Nitrogen		Phosphate		Potash		
	Area Applied	Pounds Applied	Area Applied	Pounds Applied	Area Applied	Pounds Applied	
	<i>percent</i>	<i>millions</i>	<i>percent</i>	<i>millions</i>	<i>percent</i>	<i>millions</i>	
Nebraska	1999	99	1,115.2	75	232.8	18	22.1
	2000	99	1,260.7	82	243.2	22	21.5
	2001	100	1,067.0	77	219.4	25	42.8
	2002	97	1,195.5	70	220.3	21	32.3
	2003	95	1,005.1	76	232.1	25	39.3
New York	2000	99	71.2	89	45.6	78	41.8
	2001	100	76.8	98	49.4	90	45.6
	2003	98	81.7	81	43.3	75	50.9
North Carolina	1999	99	83.2	82	36.3	88	66.3
	2000	96	86.0	88	37.5	86	52.7
	2001	98	81.8	85	41.6	84	56.6
	2003	99	95.9	89	37.9	86	61.8
North Dakota	2000	98	103.1	80	38.8	29	8.7
	2001	94	89.9	83	33.8	38	10.1
	2003	98	157.2	87	62.8	37	20.0
Ohio	1999	100	527.0	97	236.1	94	324.2
	2000	100	572.8	92	224.1	83	287.0
	2001	100	572.1	92	210.8	89	338.9
	2002	99	500.1	85	183.2	78	283.1
	2003	100	538.6	91	225.7	85	284.6
Pennsylvania	2000	95	103.8	87	59.9	67	35.9
	2001	98	130.2	79	55.8	76	43.4
	2003	91	98.6	72	52.2	66	33.5
South Dakota	1999	98	334.6	88	136.2	49	42.5
	2000	99	418.9	92	153.6	39	36.1
	2001	95	393.8	69	119.4	32	38.9
	2003	92	396.5	78	159.8	25	27.9
Texas	1999	100	304.5	80	74.5	40	22.4
	2000	98	304.0	85	80.3	27	15.9
	2001	100	245.6	83	66.3	40	18.4
	2003	98	261.4	85	70.9	37	17.1
Wisconsin	1999	98	305.1	82	104.2	91	177.8
	2000	97	300.7	89	120.6	90	161.0
	2001	98	353.3	95	120.9	89	169.5
	2002	98	325.0	87	102.2	88	202.2
	2003	99	380.1	90	138.6	89	233.6

<sup>1</sup> Data not available for all States for all years. NASS, Environmental, Economics, and Demographics Branch, (202) 720-6146.

**Fertilizer Usage: Upland Cotton<sup>1</sup>**

State and Year Surveyed	Percent Treated and Amount Applied						
	Nitrogen		Phosphate		Potash		
	Area Applied	Pounds Applied	Area Applied	Pounds Applied	Area Applied	Pounds Applied	
	<i>percent</i>	<i>millions</i>	<i>percent</i>	<i>millions</i>	<i>percent</i>	<i>millions</i>	
Alabama	1999	97	46.5	94	36.3	95	45.3
	2000	100	60.5	95	35.2	91	46.7
	2003	97	51.9	84	31.2	83	33.4
Arizona	1999	99	39.6	22	5.0	15	0.7
	2000	98	35.6	30	4.7	8	0.9
	2003	93	35.3	35	4.6	11	0.8
Arkansas	1999	97	88.0	82	31.8	85	63.5
	2000	100	84.2	78	30.5	84	66.1
	2001	93	80.3	63	24.6	68	54.0
California	1999	97	89.7	84	33.5	90	79.90
	2000	99	92.6	51	19.1	19	11.1
	2001	98	105.4	29	12.6	12	5.3
Georgia	2001	*	*	*	*	*	*
	2003	94	72.9	47	14.3	25	11.6
	1999	100	127.6	98	81.3	100	160.3
Louisiana	2000	96	124.9	94	77.6	93	117.7
	2001	99	116.2	92	71.9	93	119.3
	2003	100	124.5	90	65.8	91	105.8
Mississippi	1999	100	52.4	43	14.7	45	18.9
	2000	100	60.7	64	20.1	66	33.0
	2001	95	70.8	50	18.40	52	35.1
Missouri	2003	99	45.1	45	8.8	59	16.1
	1999	100	133.3	36	21.2	65	85.8
	2000	100	147.7	44	29.5	68	86.1
North Carolina	2001	99	179.9	31	25.8	46	72.5
	2003	99	119.8	45	23.0	70	82.2
	2001	100	40.4	86	11.7	95	33.5
South Carolina	2003	100	35.5	73	11.6	81	26.2
	1999	96	66.3	89	37.0	96	90.3
	2000	96	76.0	80	34.9	91	98.5
Tennessee	2001	*	*	*	*	*	*
	2003	97	59.9	74	24.4	93	79.7
	1999	100	51.2	99	30.2	100	50.9
Texas	2000	99	47.5	93	29.8	98	50.4
	2003	97	50.0	92	27.3	96	46.4
	1999	63	263.4	54	136.9	26	31.1
	2000	52	195.9	37	85.2	14	16.4
	2003	61	258.0	50	141.7	20	28.6

<sup>1</sup> Data not available for all States for all years. \* Insufficient number of reports to publish data. NASS, Environmental, Economics, and Demographics Branch, (202) 720-6146.

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### Fertilizer Usage: Fall Potatoes<sup>1</sup>

State and Year Surveyed	Percent Treated and Amount Applied						
	Nitrogen		Phosphate		Potash		
	Area Applied	Pounds Applied	Acres Treated	Pounds Applied	Acres Treated	Pounds Applied	
	<i>percent</i>	<i>millions</i>	<i>percent</i>	<i>millions</i>	<i>percent</i>	<i>millions</i>	
Colorado							
	1999	98	14.6	95	13.3	74	5.6
Idaho	2003	98	15.9	96	9.7	90	7.0
	1999	100	91.0	99	78.5	82	42.7
	2001	99	79.6	97	63.2	77	35.1
Indiana	2003	100	81.4	95	63.2	86	37.3
	1999	100	0.6	100	0.5	100	0.5
Maine	1999	100	11.5	100	12.3	100	12.4
	2001	98	11.0	98	11.4	98	11.8
	2003	100	12.0	100	12.3	100	13.8
Michigan	1999	100	10.1	98	6.6	100	10.0
	2003	100	8.5	98	4.0	98	9.1
Minnesota	1999	99	8.0	91	5.3	91	9.6
	2001	93	6.4	89	4.5	89	7.6
	2003	100	8.6	94	4.9	92	8.5
North Dakota	1999	99	15.4	98	10.9	83	9.2
	2001	*	*	*	*	*	*
	2003	97	16.5	92	10.0	84	13.7
Oregon	1999	100	13.5	100	8.2	91	7.5
	2001	*	*	*	*	*	*
	2003	100	10.7	96	7.4	84	8.8
Pennsylvania	1999	97	2.2	97	1.8	97	2.0
	2003	100	1.9	99	1.3	99	1.4
Washington	1999	100	55.5	99	40.7	97	43.7
	2001	97	37.6	90	33.0	92	37.4
	2003	100	43.1	85	33.2	82	30.7
Wisconsin	1999	100	20.8	100	12.0	99	20.4
	2001	100	22.0	98	13.7	100	24.3
	2003	100	19.9	99	12.2	100	25.5

<sup>1</sup> Data not available for all States for all years. \* Insufficient number of reports to publish data. NASS, Environmental, Economics, and Demographics Branch, (202) 720-6146.

**Fertilizer Usage: Soybeans<sup>1</sup>**

State and Year Surveyed	Nitrogen		Phosphate		Potash	
	Area Applied	Pounds Applied	Area Applied	Pounds Applied	Area Applied	Pounds Applied
	<i>percent</i>	<i>millions</i>	<i>percent</i>	<i>millions</i>	<i>percent</i>	<i>millions</i>
Arkansas						
1999	17	17.3	43	78.0	40	90.0
2000	10	21.0	30	43.4	31	73.0
2001	3	3.4	30	42.8	24	54.9
2002	7	5.2	36	57.8	35	66.1
Illinois						
1999	7	16.2	14	64.1	28	304.0
2000	11	16.8	16	77.5	29	286.0
2001	10	42.8	12	95.80	22	250.5
2002	18	37.5	25	143.1	38	422.6
Indiana						
1999	28	33.6	36	105.3	36	219.8
2000	7	11.0	15	53.9	33	207.8
2001	12	11.4	20	58.1	36	222.4
2002	18	17.4	24	67.9	46	276.0
Iowa						
1999	7	23.5	17	103.5	22	173.7
2000	15	81.0	22	110.1	22	138.0
2001	5	9.9	9	47.9	10	71.3
2002	3	9.3	7	48.3	12	163.7
Kansas						
1999	22	14.9	22	19.4	15	7.6
2000	18	10.3	16	16.9	*	*
2002	24	12.2	25	28.7	8	5.9
Kentucky						
1999	17	4.8	25	18.3	26	24.2
2000	13	7.7	40	31.7	39	37.7
2002	21	9.6	37	30.3	38	46.6
Louisiana						
1999	5	1.4	14	7.2	11	6.8
2000	6	1.5	20	7.3	26	15.6
2002	2	0.1	18	5.5	18	7.5
Maryland						
2002	23	2.7	17	2.9	26	7.0
Michigan						
1999	31	9.5	45	27.7	65	109.5
2000	37	11.1	40	44.8	72	131.2
2002	44	24.4	34	32.0	67	119.1
Minnesota						
1999	13	18.7	13	29.5	13	54.5
2000	8	10.2	9	24.1	24	118.6
2001	13	15.3	13	32.3	12	41.5
2002	11	16.1	12	34.2	10	39.1

See footnote(s) at end of table.

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### Fertilizer Usage: Soybeans<sup>1</sup> (continued)

State and Year Surveyed	Nitrogen		Phosphate		Potash	
	Area Applied	Pounds Applied	Area Applied	Pounds Applied	Area Applied	Pounds Applied
Mississippi	percent	millions	percent	millions	percent	millions
1999	10	4.2	15	14.1	22	23.9
2000	9	3.4	19	14.3	20	23.5
2002	12	3.7	20	15.8	20	25.7
Missouri						
1999	15	11.7	23	54.8	23	87.3
2000	20	27.5	28	98.1	27	94.2
2001	6	5.4	24	52.2	22	61.7
2002	13	11.8	29	62.9	36	158.1
Nebraska						
1999	25	17.8	25	31.7	16	17.0
2000	30	19.8	20	36.7	15	6.2
2001	22	23.4	21	38.3	10	6.2
2002	31	23.1	36	79.9	11	14.6
North Carolina						
1999	54	15.8	71	53.9	71	85.0
2000	38	12.6	62	54.7	47	47.7
2002	36	14.4	36	25.0	41	51.3
North Dakota					*	*
2000	46	27.8	41	25.3		
2002	64	44.1	59	50.5	11	3.3
Ohio						
1999	21	14.4	35	81.6	47	205.6
2000	25	21.7	32	70.2	47	192.8
2001	17	19.1	30	63.9	41	164.7
2002	20	14.1	27	62.6	56	276.4
Pennsylvania						
2000	37	2.8	41	7.5	43	10.0
South Dakota						
1999	47	41.3	47	88.3	48	21.3
2000	38	24.3	43	66.0	12	12.2
2002	37	32.5	41	102.0	15	24.4
Tennessee						
1999	34	7.1	46	25.9	48	38.4
2000	18	3.0	29	14.3	31	22.2
2002	42	14.5	47	31.1	57	48.6
Virginia						
2002	25	3.6	33	7.3	46	18.4
Wisconsin						
2000	24	6.5	30	16.6	40	46.2
2002	40	9.2	35	18.9	48	54.7

<sup>1</sup> Data not available for all States for all years. \* Insufficient number of reports to publish data. NASS, Environmental, Economics, and Demographics Branch, (202) 720-6146.

**Fertilizer Usage: Wheat<sup>1</sup>**

Type, State, and Year Surveyed	Percent Treated and Amount Applied					
	Nitrogen		Phosphate		Potash	
	Area Treated	Pounds Applied	Area Treated	Pounds Applied	Area Treated	Pounds Applied
	<i>percent</i>	<i>millions</i>	<i>percent</i>	<i>millions</i>	<i>percent</i>	<i>millions</i>
Winter Wheat						
Arkansas						
2000	92	110.1	28	12.3	28	16.0
Colorado						
2000	87	85.2	14	5.6	*	*
2002	64	55.1	31	18.2	*	0.0
Idaho						
1999	97	93.6	67	20.6	23	7.0
2000	90	75.5	54	12.1	13	2.7
Illinois						
2000	98	80.1	82	55.5	78	65.7
2002	96	59.4	76	37.0	74	46.8
Indiana						
1999	97	46.3	91	31.6	90	39.0
Kansas						
2000	94	522.9	65	178.7	6	11.2
2002	91	487.4	64	162.2	8	24.5
Kentucky						
2000	80	52.0	62	25.9	60	29.2
Missouri						
2000	96	86.8	76	39.9	84	59.1
2002	97	65.9	75	31.8	74	40.8
Montana						
2000	82	74.2	77	34.0	43	8.2
2002	88	38.4	81	18.5	46	4.8
Nebraska						
1999	85	69.9	59	25.3	12	1.0
2000	90	76.5	68	31.5	*	*
2002	79	57.6	45	22.6	4	2.1
North Carolina						
1999	91	63.9	76	24.1	84	53.8
2000	88	78.3	48	15.8	56	30.9
Ohio						
2000	94	107.0	81	64.1	82	74.0
2002	98	66.4	89	46.8	88	51.4
Oklahoma						
2000	97	393.3	62	148.4	5	8.3
2002	92	203.6	59	65.9	4	6.4
Oregon						
2000	99	46.1	11	1.8	7	1.4

See footnote(s) at end of table.

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### Fertilizer Usage: Wheat<sup>1</sup> (continued)

Type, State, and Year Surveyed	Percent Treated and Amount Applied					
	Nitrogen		Phosphate		Potash	
	Area Treated	Pounds Applied	Area Treated	Pounds Applied	Area Treated	Pounds Applied
	percent	millions	percent	millions	percent	millions
Winter Wheat(contd.)						
South Dakota						
1999	94	79.7	92	36.6	*	*
2000	91	60.8	61	26.6	12	1.3
Texas						
1999	75	337.2	50	111.7	22	24.6
2000	55	280.7	35	79.7	14	32.0
2002	62	124.0	28	30.3	7	5.4
Washington						
1999	100	155.8	30	14.7	10	3.8
2000	100	111.7	30	10.2	6	1.3
2002	99	126.5	39	12.3	11	3.5
Durum Wheat						
North Dakota						
1999	98	175.0	79	49.0	3	1.7
2000	86	173.8	66	47.6	5	2.1
2002	88	116.1	58	31.6	5	1.2
Other Spring						
Idaho						
1999	96	59.4	83	17.9	33	2.9
Minnesota						
1999	100	166.5	97	65.3	64	37.8
2000	94	169.8	85	51.8	73	29.3
2002	89	129.0	83	60.8	68	44.7
Montana						
1999	61	129.6	55	64.5	22	10.3
2000	90	167.6	84	75.5	36	15.6
2002	66	97.8	54	47.0	21	14.9
North Dakota						
1999	97	472.8	87	166.8	20	9.0
2000	97	501.8	83	170.1	12	2.8
2002	97	499.8	83	197.7	19	30.6
South Dakota						
1999	84	92.2	66	45.0	11	5.7
2000	95	98.1	83	36.7	12	2.8

<sup>1</sup> Data not available for all States for all years. \* Insufficient number of reports to publish data. NASS, Environmental, Economics, and Demographics Branch, (202) 720-6146.

**Pesticide Usage: Corn<sup>1</sup>**

State and Year Surveyed	Percent Treated and Amount Applied			
	Herbicide		Insecticide <sup>2</sup>	
	Area Applied	Pounds Applied	Area Applied	Pounds Applied
	percent	1,000	percent	1,000
Colorado				
	1999	93	1,763	45
	2000	97	1,501	59
	2001	92	1,506	51
	2003	77	1,099	39
Georgia	2001	95	398	34
Illinois	1999	98	28,467	38
	2000	100	28,190	43
	2001	100	31,868	42
	2002	90	25,157	36
	2003	98	28,926	58
Indiana	1999	99	14,819	36
	2000	99	15,460	30
	2001	99	16,007	47
	2002	90	11,535	39
	2003	93	13,064	52
Iowa	1999	99	27,966	25
	2000	100	24,518	16
	2001	99	20,627	7
	2002	91	22,485	12
	2003	96	25,328	14
Kansas	1999	98	6,619	32
	2000	93	7,765	31
	2001	95	9,958	24
	2003	97	6,041	29
Kentucky	1999	94	3,487	50
	2000	95	2,600	26
	2001	97	2,834	18
	2003	97	2,716	16
Michigan	1999	99	6,128	22
	2000	99	5,658	10
	2001	88	4,944	22
	2003	98	4,934	14
Minnesota	1999	98	11,126	11
	2000	99	10,597	8
	2001	99	13,446	*
	2002	96	10,002	6
	2003	95	10,927	13
Missouri	1999	98	7,988	38
	2000	87	5,988	20
	2001	97	7,232	37
	2003	98	7,733	33

See footnote(s) at end of table.

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### Pesticide Usage: Corn<sup>1</sup> (continued)

State and Year Surveyed	Percent Treated and Amount Applied			
	Herbicide		Insecticide <sup>2</sup>	
	Area Applied	Pounds Applied	Area Applied	Pounds Applied
	percent	1,000	percent	1,000
Nebraska				
1999	99	19,747	39	1,295
2000	97	16,862	55	1,470
2001	99	15,159	48	1,104
2002	83	12,869	38	986
2003	93	15,209	36	742
New York				
2000	92	2,312	31	204
2001	96	2,610	19	69
2003	96	2,107	28	141
North Carolina				
1999	82	1,340	35	222
2000	93	1,732	46	363
2001	96	1,558	37	181
2003	97	1,854	28	213
North Dakota				
2000	71	1,284	*	*
2001	90	745	*	*
2003	96	1,564	*	*
Ohio				
1999	99	10,136	7	98
2000	99	10,339	24	603
2001	99	9,986	26	647
2002	91	8,424	14	125
2003	96	9,198	11	110
Pennsylvania				
2000	100	4,419	57	302
2001	99	4,484	60	550
2003	92	3,620	31	179
South Dakota				
1999	95	5,862	18	520
2000	100	5,790	15	44
2001	96	5,622	8	87
2003	96	6,003	*	*
Texas				
1999	93	3,190	54	458
2000	81	2,039	55	426
2001	90	1,990	76	664
2003	87	2,273	53	594
Wisconsin				
1999	96	5,421	31	473
2000	95	6,410	20	365
2001	98	6,265	16	155
2002	81	5,304	20	356
2003	98	6,533	22	273

<sup>1</sup> Data not available for all States for all years. <sup>2</sup> Amount applied excludes Bt (bacillus thurengiensis). \* Insufficient number of reports to publish data. NASS, Environmental, Economics, and Demographics Branch, (202) 720-6146.

**Pesticide Usage: Upland Cotton<sup>1</sup>**

State and Year Surveyed	Percent Treated and Amount Applied			
	Herbicide		Insecticide <sup>2</sup>	
	Area Applied	Pounds Applied	Area Applied	Pounds Applied
	percent	1,000	percent	1,000
Alabama				
1999	99	1,154	87	436
2000	97	1,435	67	270
2003	99	1,336	84	260
Arizona				
1999	90	519	60	360
2000	94	497	66	455
2003	94	382		74
Arkansas				
1999	96	1,949	85	900
2000	95	1,993	82	1,610
2001	96	2,312	53	2,038
2003	96	2,703	89	3,575
California				
1999	98	1,006	94	861
2000	99	1,475	90	1,051
2001	*	*	*	*
2003	97	1,005	95	899
Georgia				
1999	98	4,249	92	816
2000	98	3,526	81	725
2001	93	2,958	59	366
2003	96	2,994	73	746
Louisiana				
1999	98	1,763	98	4,206
2000	96	1,825	98	4,795
2001	95	2,552	93	2,217
2003	100	1,448	97	2,007
Mississippi				
1999	100	3,821	98	6,580
2000	98	3,557	99	6,112
2001	99	3,913	92	3,306
2003	100	3,475	94	1,534
Missouri				
2001	94	677	90	360
2003	96	636	74	146
North Carolina				
1999	96	2,079	91	533
2000	99	2,375	94	510
2001	*	*	*	*
2003	97	2,118	88	420
South Carolina				
2003	92	470	97	141
Tennessee				
1999	96	1,385	95	1,222
2000	99	1,347	100	4,333
2003	98	1,270	88	422
Texas				
1999	97	7,081	76	23,417
2000	92	7,847	69	20,639
2001	85	5,921	58	14,587
2003	99	7,701	36	3,102

See footnote(s) at end of table.

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### Pesticide Usage: Upland Cotton<sup>1</sup> (continued)

State and Year Surveyed	Percent Treated and Amount Applied			
	Fungicide		Other Chemicals	
	Area Applied	Pounds Applied	Area Applied	Pounds Applied
	percent	1,000	percent	1,000
Alabama				
1999	30	130	78	617
2000	16	84	58	398
2003	15	44	93	930
Arizona				
1999	( <sup>3</sup> )	( <sup>3</sup> )	95	1,361
2000	10	31	79	670
2003	*	*	80	323
Arkansas				
1999	17	140	97	2,372
2000	17	57	89	1,459
2001	8	9	78	1,395
2003	17	64	92	1,947
California				
1999	1	7	100	2,406
2000	1	9	99	2,714
2001	*	*	*	*
2003	7		13	96
Georgia				
1999	*	3	78	2,992
2000	( <sup>3</sup> )	( <sup>3</sup> )	78	3,258
2001	( <sup>3</sup> )	( <sup>3</sup> )	65	1,902
2003	4	43	91	2,709
Louisiana				
1999	9	40	88	707
2000	23	229	88	749
2001	16	70	88	931
2003	17	11	99	690
Mississippi				
1999	17	180	99	1,980
2000	15	131	99	1,986
2001	5	22	95	2,461
2003	17	63	99	1,590
Missouri				
2001	*	*	97	695
2003	*	*	95	822
North Carolina				
1999	6	42	57	996
2000	4	19	91	1,921
2001	*	*	*	*
2003	7	41	90	2,041
South Carolina				
2003	3	4	79	307
Tennessee				
1999	27	132	89	585
2000	20	77	93	691
2003	20	33	90	863
Texas				
1999	1	49	32	1,840
2000	( <sup>3</sup> )	( <sup>3</sup> )	29	1,593
2001	1	19	20	1,330
2003	2	22	31	1,400

<sup>1</sup> Data not available for all States for all years. <sup>2</sup> Amount applied excludes Bt (*bacillus thurengiensis*). <sup>3</sup> No reports received for this pesticide class. \* Insufficient number of reports to publish data. NASS, Environmental, Economics, and Demographics Branch, (202) 720-6146.

**Pesticide Usage: Fall Potatoes<sup>1</sup>**

State and Year Surveyed	Percent Treated and Amount Applied			
	Herbicide		Insecticide <sup>2</sup>	
	Area Treated	Pounds Applied	Area Treated	Pounds Applied
	percent	1,000	percent	1,000
Colorado				
1999	86	175	76	39
2003	84	168	71	40
Idaho				
1999	92	953	92	1,066
2001	75	714	93	853
2003	89	693	78	458
Indiana				
1999	67	9	99	2
Maine				
1999	100	25	97	29
2001	92	28	88	13
2003	100	34	88	18
Michigan				
1999	100	101	100	52
2003	94	68	99	19
Minnesota				
1999	86	82	91	54
2001	78	53	95	18
2003	94	42	69	6
North Dakota				
1999	83	94	95	121
2001	*	*	*	*
2003	82	57	80	29
Oregon				
1999	100	129	89	183
2001	*	*	*	*
2003	95	71	83	140
Pennsylvania				
1999	94	35	99	47
2003	91	28	99	23
Washington				
1999	98	360	99	810
2001	92	290	95	647
2003	94	339	97	701
Wisconsin				
1999	98	84	100	193
2001	88	73	100	110
2003	94	72	99	133

See footnote(s) at end of table.

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### Pesticide Usage: Fall Potatoes<sup>1</sup> (continued)

State and Year Surveyed	Percent Treated and Amount Applied			
	Fungicide		Other Chemicals	
	Area Treated	Pounds Applied	Area Treated	Pounds Applied
	percent	1,000	percent	1,000
Colorado				
1999	98	387	57	14,056
2003	90	122	57	14,815
Idaho				
1999	92	1,502	56	53,358
2001	70	691	59	46,698
2003	78	606	57	31,892
Indiana				
1999	29	10	*	*
Maine				
1999	100	553	24	89
2001	98	530	97	405
2003	100	576	21	52
Michigan				
1999	99	609	56	137
2003	96	382	48	696
Minnesota				
1999	93	577	16	2,103
2001	97	431	56	456
2003	98	461	4	1,294
North Dakota				
1999	99	966	5	1,315
2001	*	*	*	*
2003	99	1,350	3	311
Oregon				
1999	97	314	65	7,489
2001	*	*	*	*
2003	94	169	70	3,626
Pennsylvania				
1999	95	125	3	4
2003	96	126	6	3
Washington				
1999	97	1,206	75	19,377
2001	91	1,108	78	14,470
2003		99	1,704	77
Wisconsin				
1999	98	921	16	1,104
2001	97	1,193	86	2,644
2003	99	1,038	38	1,846

<sup>1</sup> Data not available for all States for all years. <sup>2</sup> Amount applied excludes Bt (*bacillus thurengiensis*). \* Insufficient number of reports to publish data. NASS, Environmental, Economics, and Demographics Branch, (202) 720-6146.

**Pesticide Usage: Soybeans<sup>1,2</sup>**

State and Year Surveyed	Percent Treated and Amount Applied			
	Herbicide		Insecticide <sup>3</sup>	
	Area Applied	Pounds Applied	Area Applied	Pounds Applied
	<i>percent</i>	<i>1,000</i>	<i>percent</i>	<i>1,000</i>
Arkansas				
1999	94	3,670	9	17
2000	86	2,918	3	4
2001	80	2,440	*	*
2002	90	2,945	14	112
Illinois				
1999	96	10,290	*	20
2000	98	10,582	1	3
2001	96	10,102	*	*
2002	100	12,939		
Indiana				
1999	89	5,750		
2000	99	5,414	*	*
2001	98	5,612	*	*
2002	100	7,853		
Iowa				
1999	99	11,995		
2000	98	13,053	*	*
2001	95	11,704	*	*
2002	99	13,143	9	58
Kansas				
1999	97	3,273	*	1
2000	94	2,953	*	*
2001	98	2,931		
Kentucky				
1999	94	1,037		
2000	88	1,151	1	6
2001	100	1,479		
Louisiana				
1999	94	1,123	53	229
2000	96	1,091	56	173
2001	98	1,257	72	470
Maryland				
2002	98	753	3	
Michigan				
1999	97	2,342		
2000	98	2,094	*	*
2001	98	2,496		
Minnesota				
1999	97	6,203	( <sup>3</sup> )	( <sup>3</sup> )
2000	95	7,151	*	*
2001	99	6,969		
2002	99	7,073		

See footnote(s) at end of table.

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### Pesticide Usage: Soybeans (continued)<sup>1 2</sup>

State and Year Surveyed	Area Treated and Amount Applied			
	Herbicide		Insecticide <sup>3</sup>	
	Area Applied	Pounds Applied	Area Applied	Pounds Applied
	percent	1,000	percent	1,000
Mississippi				
1999	99	2,967	9	78
2000	99	2,096	5	23
2002	98	2,392	24	24
Missouri				
1999	97	5,556		
2000	98	5,867	( <sup>3</sup> )	( <sup>3</sup> )
2001	95	4,691	( <sup>3</sup> )	( <sup>3</sup> )
2002	99	5,924		
Nebraska				
1999	96	4,758	1	10
2000	98	5,795	*	*
2001	96	5,336	*	*
2002	100	6	14	4
North Carolina				
1999	88	1,283	3	3
2000	92	1,016	7	15
2002	95	1,361	25	89
North Dakota				
2000	99	2,046	( <sup>3</sup> )	( <sup>3</sup> )
Ohio				
1999	99	4,758	*	3
2000	98	4,586	1	2
2001	96	4,216	( <sup>3</sup> )	( <sup>3</sup> )
2002	100	6,365		
Pennsylvania				
2000	99	429	11	20
South Dakota				
1999	98	3,943		
2000	98	4,863	( <sup>3</sup> )	( <sup>3</sup> )
2002	100	5,117	19	97
Tennessee				
1999	98	1,405	2	19
2000	95	1,319	1	8
2002	100	1,496	10	1
Virginia				
2002	94	591	46	25
Wisconsin				
2000	85	1,169	( <sup>3</sup> )	( <sup>3</sup> )
2002	86	1,253		

<sup>1</sup> Data not available for all States for all years. <sup>2</sup> Amount applied excludes Bt (*bacillus thurengiensis*). <sup>3</sup> Insufficient number of reports to publish data for fungicides and other chemicals. \* Insufficient number of reports to publish data. NASS, Environmental, Economics, and Demographics Branch, (202) 720-6146.

**Pesticide Usage: Wheat<sup>1 2</sup>**

Type, State, and Year Surveyed	Area Treated and Amount Applied					
	Herbicide		Insecticide <sup>3</sup>		Fungicide	
	Area Applied	Pounds Applied	Area Applied	Pounds Applied	Area Applied	Pounds Applied
	<i>percent</i>	<i>1,000</i>	<i>percent</i>	<i>1,000</i>	<i>percent</i>	<i>1,000</i>
Winter Wheat						
Arkansas						
2000	41	239	*	*	*	*
Colorado						
2000	23	281	*	*	*	*
2002	12	68	*	*		
Idaho						
1999	88	495	*	*	*	*
2000	89	411	4	15	*	*
Illinois						
2000	44	21	*	*	*	*
2002	39	10	*	*	*	8
Indiana						
1999	39	28	*	*	*	*
Kansas						
2000	31	478	8	395	*	*
2002	32	347	7	30	*	*
Kentucky						
2000	51	57	8	15	6	5
Missouri						
2000	51	47	*	*	2	4
2002	12	12	*	*	*	*
Montana						
2000	91	745	*	*	*	*
2002	80	433	*	*	*	*
Nebraska						
1999	52	320	*	*	*	*
2000	26	248	*	*	*	*
2002	49	225	*	*	*	*
North Carolina						
1999	60	92	13	11	15	13
2000	65	206	19	3	*0	*
Ohio						
2000	18	53	*	*	*	*
2002	31	72	*	*	*	*
Oklahoma						
2000	25	94	*	*	*	*
2002	36	155	32	285	*	*
Oregon						
2000	99	550	*	*	13	62

See footnote(s) at end of table.

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### Pesticide Usage: Wheat (continued)<sup>1 2</sup>

Type, State, and Year Surveyed	Area Treated and Amount Applied					
	Herbicide		Insecticide <sup>3</sup>		Fungicide	
	Area Treated	Pounds Applied	Area Treated	Pounds Applied	Area Treated	Pounds Applied
	<i>percent</i>	<i>1,000</i>	<i>percent</i>	<i>1,000</i>	<i>percent</i>	<i>1,000</i>
Winter Wheat(contd.)						
South Dakota						
1999	88	589	*	*	*	*
2000	56	415	*	*	*	*
Texas						
1999	27	435	7	177	*	*
2000	12	441	1	26	*	*
2002	34	274	21	291		
Washington						
1999	97	1,718	*	*	3	49
2000	95	847	*	*	*	*
2002	87	856	*	*	3	37
Durum Wheat						
North Dakota						
1999	98	2,631	*	*	*	*
2000	97	2,807	*	*	*	*
2002	100	1,238	*	*	*	*
Other Spring						
Idaho						
1999	95	392	*	*	*	*
Minnesota						
1999	97	1,396	11	65	37	100
2000	92	1,845	*	*	*	*
2002	84	858	*	*	8	15
Montana						
1999	81	1,816	*	*	*	*
2000	92	2,955	*	*	*	*
2002	89	2,171	*	*	*	*
North Dakota						
1999	98	4,053	7	176	7	52
2000	97	4,205	*	*	*	*
2002	95	3,749	*	*	8	53
South Dakota						
1999	73	698	*	*	*	*
2000	93	619	*	*	*	*

<sup>1</sup> Data not available for all States for all years. <sup>2</sup> Amount applied excludes Bt (*bacillus thurengiensis*). <sup>3</sup> No reports received for this pesticide class. \* Insufficient number of reports to publish data. NASS, Environmental, Economics, and Demographics Branch, (202) 720-6146.