

## **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, 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 to be released and released during 2005 and 2006.

Agricultural Chemical Usage Postharvest Applications are released in March. For the March 2005 release, oranges were the targeted crop. Peanuts were the target crop for the March 2006 release.

Agricultural Chemical Usage 2004 Field Crops Summary was released May 2005. 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: peanuts, soybeans, durum wheat, other spring wheat, and winter wheat. Agricultural Chemical Usage 2005 Field Crops Summary will be released May 2006. The targeted crops are: corn, fall potatoes, oats, soybeans, and upland cotton.

Agricultural Chemical Usage 2004 Vegetable Summary was released July 2005. 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 29 vegetable crops.

Agricultural Chemical Usage 2005 Fruit Summary is scheduled for release July 2006. Data collection is targeted for 24 fruit crops in 13 States. The report will contain statistics for on-farm use of agricultural chemicals and pest management practices. Starting in 2006, rate distribution tables will be included as part of the Field Crops, Vegetable, and Fruit Summary releases.

Agricultural Chemical Usage Field and Vegetable Crops Rate Distribution was released December 2005. Data published provide the 10th percentile, mean, median, and 90th percentile for percent of crop receiving chemical treatments, number of applications, rater per application, and rate per crop year.

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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## Environmental

### 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
2003	97	89.7	84	33.5	90	79.9
California						
1999	99	92.6	51	19.1	19	11.1
2000	98	105.4	29	12.6	12	5.3
2001	*	*	*	*	*	*
2003	94	72.9	47	14.3	25	11.6
Georgia						
1999	100	127.6	98	81.3	100	160.3
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
Louisiana						
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	18.4	52	35.1
2003	99	45.1	45	8.8	59	16.1
Mississippi						
1999	100	133.3	36	21.2	65	85.8
2000	100	147.7	44	29.5	68	86.1
2001	99	179.9	31	25.8	46	72.5
2003	99	119.8	45	23.0	70	82.2
Missouri						
2001	100	40.4	86	11.7	95	33.5
2003	100	35.5	73	11.6	81	26.2
North Carolina						
1999	96	66.3	89	37.0	96	90.3
2000	96	76.0	80	34.9	91	98.5
2001	*	*	*	*	*	*
2003	97	59.9	74	24.4	93	79.7
South Carolina						
2003	95	16.0	78	7.9	90	21.6
Tennessee						
1999	100	51.2	99	30.2	100	50.9
2000	99	47.5	93	29.8	98	50.4
2003	97	50.0	92	27.3	96	46.4
Texas						
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.

## Environmental

### 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
	2003	98	15.9	96	9.7	90	7.0
Idaho	1999	100	91.0	99	78.5	82	42.7
	2001	99	79.6	97	63.2	77	35.1
	2003	100	81.4	95	63.2	86	37.3
Indiana	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
	2004	10	9.3	38	67.2	38	98.4
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	95.8	22	250.5
	2002	18	37.5	25	143.1	38	422.6
	2004	14	49.5	18	185.1	32	525.2
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
	2004	15	30.7	25	121.4	40	331.5
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
	2004	10	38.4	11	99.8	15	157.2
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
	2004	22	22.0	25	34.2	5	7.1
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
	2004	19	41.3	18	81.2	16	85.6

See footnote(s) at end of table.

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## Environmental

### 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
	<i>percent</i>	<i>millions</i>	<i>percent</i>	<i>millions</i>	<i>percent</i>	<i>millions</i>
Mississippi						
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
2004	20	23.4	35	128.1	38	206.3
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
2004	25	24.6	28	76.8	7	12.4
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
2004	64	61.3	63	113.1	11	15.7
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
2004	20	19.0	24	73.0	43	282.0
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
2004	42	38.6	45	116.0	8	12.5
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
2004	59	51.2	31	15.8	5	2.7
Idaho						
1999	97	93.6	67	20.6	23	7.0
2000	90	75.5	54	12.1	13	2.7
2004	89	89.2	62	18.5	31	6.1
Illinois						
2000	98	80.1	82	55.5	78	65.7
2002	96	59.4	76	37.0	74	46.8
2004	98	103.2	85	74.2	77	92.3
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
2004	90	788.6	62	281.8	6	23.4
Kentucky						
2000	80	52.0	62	25.9	60	29.2
Michigan						
2004	97	73.5	71	27.5	77	38.4
Missouri						
2000	96	86.8	76	39.9	84	59.1
2002	97	65.9	75	31.8	74	40.8
2004	97	125.9	84	52.9	86	70.0
Montana						
2000	82	74.2	77	34.0	43	8.2
2002	88	38.4	81	18.5	46	4.8
2004	92	83.0	83	47.3	21	3.9
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
2004	73	76.4	42	24.3	3	1.2
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
2004	100	91.6	95	65.8	90	69.5
Oklahoma						
2000	97	393.3	62	148.4	5	8.3
2002	92	203.6	59	65.9	4	6.4
2004	92	571.0	62	147.8	13	22.0
Oregon						
2000	99	46.1	11	1.8	7	1.4
2004	96	64.7	11	5.3	6	2.5

See footnote(s) at end of table.

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# Environmental

## 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
	<i>percent</i>	<i>millions</i>	<i>percent</i>	<i>millions</i>	<i>percent</i>	<i>millions</i>
Winter Wheat(contd.)						
South Dakota						
1999	94	79.7	92	36.6	*	*
2000	91	60.8	61	26.6	12	1.3
2004	77	105.8	58	44.6	7	5.1
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
2004	64	347.7	35	116.6	9	9.6
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
2004	97	161.2	24	11.6	3	1.4
Durum Wheat						
Montana						
2004	96	32.5	84	11.8	10	0.6
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
2004	95	115.3	70	35.1	6	1.1
Other Spring						
Idaho						
1999	96	59.4	83	17.9	33	2.9
2004	93	56.1	63	12.7	23	4.4
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
2004	98	180.1	91	75.5	54	34.8
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
2004	79	134.6	69	72.6	13	9.0
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
2004	98	691.9	86	269.0	27	39.9
Oregon						
2004	91	9.7	28	1.7	9	0.5
South Dakota						
1999	84	92.2	66	45.0	11	5.7
2000	95	98.1	83	36.7	12	2.8
2004	92	132.5	68	53.2	19	8.5
Washington						
2004	100	45.4	67	7.4	9	2.1

<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
	<i>percent</i>	<i>thousand</i>	<i>percent</i>	<i>thousand</i>
Colorado				
1999	93	1,763	45	479
2000	97	1,501	59	505
2001	92	1,506	51	431
2003	77	1,099	39	278
Georgia				
2001	95	398	34	431
Illinois				
1999	98	28,467	38	1,883
2000	100	28,190	43	3,131
2001	100	31,868	42	1,787
2002	90	25,157	36	1,088
2003	98	28,926	58	1,640
Indiana				
1999	99	14,819	36	1,156
2000	99	15,460	30	797
2001	99	16,007	47	1,103
2002	90	11,535	39	729
2003	93	13,064	52	1,323
Iowa				
1999	99	27,966	25	2,462
2000	100	24,518	16	635
2001	99	20,627	7	864
2002	91	22,485	12	432
2003	96	25,328	14	623
Kansas				
1999	98	6,619	32	385
2000	93	7,765	31	287
2001	95	9,958	24	657
2003	97	6,041	29	337
Kentucky				
1999	94	3,487	50	22
2000	95	2,600	26	65
2001	97	2,834	18	43
2003	97	2,716	16	52
Michigan				
1999	99	6,128	22	214
2000	99	5,658	10	131
2001	88	4,944	22	288
2003	98	4,934	14	206
Minnesota				
1999	98	11,126	11	280
2000	99	10,597	8	369
2001	99	13,446	*	*
2002	96	10,002	6	212
2003	95	10,927	13	454
Missouri				
1999	98	7,988	38	218
2000	87	5,988	20	114
2001	97	7,232	37	167
2003	98	7,733	33	139

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
	<i>percent</i>	<i>thousand</i>	<i>percent</i>	<i>thousand</i>
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
	<i>percent</i>	<i>thousand</i>	<i>percent</i>	<i>thousand</i>
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	374
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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# Environmental

## 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
	<i>percent</i>	<i>thousand</i>	<i>percent</i>	<i>thousand</i>
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		96	2,091
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
	<i>percent</i>	<i>thousand</i>	<i>percent</i>	<i>thousand</i>
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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# Environmental

## 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
	<i>percent</i>	<i>thousand</i>	<i>percent</i>	<i>thousand</i>
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	20,847
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 thuringiensis*). \* Insufficient number of reports to publish data. NASS, Environmental, Economics, and Demographics Branch, (202) 720-6146.

Pesticide Usage: Soybeans <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
	<i>percent</i>	<i>thousand</i>	<i>percent</i>	<i>thousand</i>
Arkansas				
1999	94	3,670	9	17
2000	86	2,918	3	4
2001	80	2,440	*	*
2002	90	2,945	14	112
2004	92	3,642	7	57
Illinois				
1999	96	10,290	*	20
2000	98	10,582	1	3
2001	96	10,102	*	*
2002	100	12,939		
2004	98	10,832	1	15
Indiana				
1999	89	5,750		
2000	99	5,414	*	*
2001	98	5,612	*	*
2002	100	7,853		
2004	99	7,037	*	*
Iowa				
1999	99	11,995	*	*
2000	98	13,053	*	*
2001	95	11,704	9	58
2002	99	13,143		
2004	98	11,964	1	5
Kansas				
1999	97	3,273	*	1
2000	94	2,953	*	*
2001	98	2,931		
2004	97	3,225	*	*
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		
2000	95	7,151	*	*
2001	99	6,969	*	*
2002	99	7,073		
2004	98	8,289	*	*

See footnote(s) at end of table.

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# Environmental

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

State and Year Surveyed	Area Treated and Amount Applied			
	Herbicide		Insecticide <sup>2</sup>	
	Area Applied	Pounds Applied	Area Applied	Pounds Applied
	<i>percent</i>	<i>thousand</i>	<i>percent</i>	<i>thousand</i>
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	*	*
2001	95	4,691	*	*
2002	99	5,924		
2004	98	5,394	*	*
Nebraska				
1999	96	4,758	1	10
2000	98	5,795	*	*
2001	96	5,336	*	*
2002	100	6	14	4
2004	94	5,625	15	274
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	*	*
2004	99	4,460	*	*
Ohio				
1999	99	4,758	*	3
2000	98	4,586	1	2
2001	96	4,216	*	*
2002	100	6,365		
2004	98	5,597	3	6
Pennsylvania				
2000	99	429	11	20
South Dakota				
1999	98	3,943		
2000	98	4,863	*	*
2002	100	5,117	19	97
2004	96	4,763	19	70
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	*	*
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). \* 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>thousand</i>	<i>percent</i>	<i>thousand</i>	<i>percent</i>	<i>thousand</i>
Winter Wheat						
Arkansas						
2000	41	239	*	*	*	*
Colorado						
2000	23	281	*	*	*	*
2002	12	68	*	*	*	*
2004	54	908	*	*	*	*
Idaho						
1999	88	495	*	*	*	*
2000	89	411	4	15	*	*
2004	94	380	1	2	*	*
Illinois						
2000	44	21	*	*	*	*
2002	39	10	*	*	*	8
2004	35	41	*	*	9	11
Indiana						
1999	39	28	*	*	*	*
Kansas						
2000	31	478	8	395	*	*
2002	32	347	7	30	*	*
2004	38	1,138	*	*	*	*
Kentucky						
2000	51	57	8	15	6	5
Michigan						
2004	50	94	11	3	11	11
Missouri						
2000	51	47	*	*	2	4
2002	12	12	*	*	*	*
2004	35	109	8	9	*	*
Montana						
2000	91	745	*	*	*	*
2002	80	433	*	*	*	*
2004	95	2,533	*	*	*	*
Nebraska						
1999	52	320	*	*	*	*
2000	26	248	*	*	*	*
2002	49	225	*	*	*	*
2004	51	537	*	*	*	*
North Carolina						
1999	60	92	13	11	15	13
2000	65	206	19	3	*0	*
Ohio						
2000	18	53	*	*	*	*
2002	31	72	*	*	*	*
2004	29	96	*	*	*	*
Oklahoma						
2000	25	94	*	*	*	*
2002	36	155	32	285	*	*
2004	34	267	24	511	*	*
Oregon						
2000	99	550	*	*	13	62
2004	98	694	3	7	3	5

See footnote(s) at end of table.

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# Environmental

## 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>thousand</i>	<i>percent</i>	<i>thousand</i>	<i>percent</i>	<i>thousand</i>
Winter Wheat(contd.)						
South Dakota						
1999	88	589	*	*	*	*
2000	56	415	*	*	*	*
2004	66	646	*	*	13	21
Texas						
1999	27	435	7	177	*	*
2000	12	441	1	26	*	*
2002	34	274	21	291		
2004	19	810	7	189		
Washington						
1999	97	1,718	*	*	3	49
2000	95	847	*	*	*	*
2002	87	856	*	*	3	37
2004	88	1,007	*	*	4	17
Durum Wheat						
Montana						
2004	99	508				
North Dakota						
1999	98	2,631	*	*	*	*
2000	97	2,807	*	*	*	*
2002	100	1,238	*	*	*	*
2004	99	1,216	*	*	*	*
Other Spring						
Idaho						
1999	95	392	*	*	*	*
2004	92	288	4	6	*	*
Minnesota						
1999	97	1,396	11	65	37	100
2000	92	1,845	*	*	*	*
2002	84	858	*	*	8	15
2004	99	1,054	10	28	46	84
Montana						
1999	81	1,816	*	*	*	*
2000	92	2,955	*	*	*	*
2002	89	2,171	*	*	*	*
2004	95	1,652	*	*	*	*
North Dakota						
1999	98	4,053	7	176	7	52
2000	97	4,205	*	*	*	*
2002	95	3,749	*	*	8	53
2004	97	3,452	*	*	28	190
Oregon						
2004	95	133	4	1	9	2
South Dakota						
1999	73	698	*	*	*	*
2000	93	619	*	*	*	*
2004	89	702	*	*	14	26
Washington						
2004	99	364	4	8	3	2

<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.