APPLES

Apples: Fertilizer Use by State, 1999
Percent of Acres Treated and Total Amount Applied

State	Bearing Acreage	Percent of Acres Treated and Total Applied					
		Nitrogen		Phosphate		Potash	
	Acres	Percent	1,000 Lbs	Percent	1,000 Lbs	Percent	1,000 Lbs
AZ 1/	4,000	2	3				
CA	36,500	72	1,016	24	389	25	594
GA	1,300	83	124	25	21	79	39
MI	52,500	85	2,887	48	545	70	2,107
NJ	3,300	34	64	20	22	34	78
NY	55,000	74	2,167	13	389	82	4,430
NC	9,000	85	531	86	444	87	438
OR	8,700	65	464	41	107	41	51
PA	23,000	65	342	40	247	44	393
SC	2,400	68	32	65	24	67	33
WA	172,000	65	4,292	42	1,694	38	2,244
Total	367,700	70	11,922	37	3,882	49	10,408

1/ Insufficient reports to publish data for one or more of the fertilizer classes.

Apples: Fertilizer Primary Nutrient Applications, States Surveyed and Total, 1999

Primary Nutrient	Bearing Acreage	Area Applied	Applications	Rate per Application	Rate per Crop Year	Total Applied
	Acres	Percent	Number	Pounds per Acre		1,000 Lbs
Arizona:	4,000					
Nitrogen		2	1.6	16	26	3
Phosphate 1/						
Potash 1/						
California:	36,500					
Nitrogen		72	1.2	32	38	1,016
Phosphate		24	1.4	32	45	389
Potash		25	1.3	47	65	594
Georgia:	1,300					
Nitrogen		83	2.1	54	114	124
Phosphate		25	1.8	34	65	21
Potash		79	1.2	30	38	39
Michigan:	52,500					
Nitrogen		85	2.9	22	65	2,887
Phosphate		48	3.3	6	22	545
Potash		70	2.8	20	58	2,107
New Jersey:	3,300					
Nitrogen		34	1.2	46	57	64
Phosphate		20	1.0	30	33	22
Potash		34	1.0	64	69	78
New York:	55,000					
Nitrogen		74	1.2	43	54	2,167
Phosphate		13	1.1	48	53	389
Potash		82	1.0	90	98	4,430
North Carolina:	9,000					
Nitrogen		85	1.2	56	70	531
Phosphate		86	1.0	53	57	444
Potash		87	1.1	51	56	438
Oregon:	8,700					
Nitrogen		65	1.1	73	82	464
Phosphate		41	1.0	29	30	107
Potash		41	1.0	14	14	51
Pennsylvania:	23,000					
Nitrogen		65	1.5	15	23	342
Phosphate		40	1.5	17	27	247
Potash		44	1.5	25	39	393
South Carolina:	2,400					
Nitrogen		68	1.0	18	20	32
Phosphate		65	1.0	15	15	24
Potash		67	1.0	20	20	33
Washington:	172,000					
Nitrogen		65	2.0	19	38	4,292
Phosphate		42	1.3	17	23	1,694
Potash		38	1.5	22	34	2,244
Total:	367,700					
Nitrogen		70	1.8	25	47	11,922
Phosphate		37	1.7	17	28	3,882
Potash		49	1.6	35	57	10,408

1/ Insufficient reports to publish data for one or more of the fertilizer classes.

Apples: Pesticide, Total Acreage, Percent of Area Receiving Applications and Total Applied, States Surveyed and Total, 1999

State	Bearing Acreage	Area Receiving and Total Applied 1/							
		Herbicide		Insecticide 2/		Fungicide		Other Chemical	
	Acres	Percent	1,000 Lbs	Percent	1,000 Lbs	Percent	1,000 Lbs	Percent	1,000 Lbs
AZ 3/	4,000			96	102.8			57	0.3
CA	36,500	35	16.5	86	936.0	80	322.2	14	38.9
GA	1,300	91	0.5	96	41.5	95	33.9	11	**
MI	52,500	74	64.7	98	816.6	98	1,561.0	41	1.8
NJ	3,300	26	2.1	84	76.2	86	52.4	42	0.2
NY	55,000	56	80.7	99	1,026.1	99	1,171.6	56	2.2
NC	9,000	17	13.0	99	331.3	99	467.4	13	0.1
OR	8,700	68	20.3	97	312.1	95	72.2	70	5.5
PA	23,000	65	24.0	97	208.6	98	213.7	44	0.9
SC	2,400	12	1.1	97	11.5	97	78.8	24	**
WA	172,000	66	193.1	99	5,036.9	88	1,185.5	86	225.8
Total	367,700	60	416.0	97	8,899.6	85	5,314.4	62	275.6

** Total applied is less than 50 lbs.

1/ Acreage in California includes non-bearing acres. Total applied may include applications of some active ingredients made only to non-bearing acres.

2/ Total Applied excludes Bt's *(Bacillus thuringiensis)*. Quantities are not available because amounts of active ingredient are not comparable between products.

3/ Insufficient reports to publish data for one or more of the pesticide classes.

Apples: Agricultural Chemical Applications, States Surveyed, 1999 1/

Agricultural Chemical	Area Applied	Applications	Rate per Application	Rate per Crop Year	Total Applied
	Percent	Number	Pounds per Acre		1,000 Lbs
Herbicides:					
2,4-D	14	1.1	0.74	0.84	42.8
Diuron	11	1.3	0.65	0.91	35.3
Glufosinate-ammonium	*	1.0	0.39	0.39	0.6
Glyphosate	36	1.4	0.77	1.10	144.8
Norflurazon	8	1.0	0.98	1.07	32.2
Oryzalin	3	1.0	1.35	1.41	17.7
Oxyfluorfen	3	1.0	0.78	0.80	9.8
Paraquat	22	1.4	0.43	0.63	51.3
Pendimethalin	*	1.1	1.17	1.28	2.3
Simazine	16	1.0	1.00	1.08	61.7
Terbacil	2	1.0	0.48	0.50	4.1
Insecticides:					
Abamectin	9	1.2	0.008	0.01	0.3
Azinphos-methyl	73	3.0	0.71	2.15	572.8
Bt*(Bacillus thur.)* 2/	21	2.0			
Carbaryl	45	1.3	1.07	1.40	230.0
Chlorpyrifos	60	1.5	1.30	1.97	433.1
Clofentezine	9	1.1	0.11	0.13	4.4
Diazinon	4	1.4	0.72	1.02	13.6
Dicofol	*	1.2	1.42	1.75	2.7
Dimethoate	3	1.2	0.81	1.01	10.5
Endosulfan	15	1.3	0.88	1.19	66.6
Esfenvalerate	18	1.6	0.03	0.05	3.2
Fenbutatin-oxide	3	1.0	0.90	0.94	11.6
Formetanate hydro.	8	1.0	0.61	0.65	20.4
Hexythiazox	3	1.1	0.10	0.11	1.2
Imidacloprid	46	1.4	0.05	0.07	12.7
Kaolin	*	1.4	32.06	44.94	22.9
Malathion	6	1.1	0.91	1.05	22.8
Methidathion	*	1.5	0.93	1.42	2.7
Methomyl	10	1.5	0.45	0.70	25.8
Methoxychlor	6	1.3	0.79	1.07	21.8
Methyl parathion	12	2.4	0.55	1.34	60.8
Oxamyl	4	1.2	0.51	0.61	8.3
Permethrin	5	1.1	0.11	0.13	2.3
Petroleum distillate	59	1.6	19.34	32.13	6,976.5
Phosmet	28	2.3	1.36	3.25	330.7
Phosphamidon	*	1.2	0.49	0.63	0.7
Potassium salts	*	1.1	2.70	2.96	3.7
Pyridaben	18	1.0	0.16	0.17	11.5
Spinosad	28	1.6	0.09	0.14	14.7
Tebufenozide	5	2.0	0.13	0.27	5.1
Fungicides:					
Basic Cupric Zinc Su.	*	1.0	0.10	0.11	**
Basic copper sulfate	*	1.1	1.96	2.21	4.7
Benomyl	11	2.4	0.23	0.56	22.9
Calcium polysulfide	3	1.2	16.99	20.34	253.9
Captan	37	5.0	1.63	8.27	1,128.8
Chlorothalonil	*	1.8	0.78	1.46	5.1
Copper hydroxide	17	1.2	2.03	2.46	152.4
Copper oxychlo. sul.	7	1.3	1.87	2.48	65.3
Copper resinate	*	1.0	0.26	0.26	0.3

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Apples: Agricultural Chemical Applications, States Surveyed, 1999 1/*(continued)*

Agricultural Chemical	Area Applied	Appli-cations	Rate per Application	Rate per Crop Year	Total Applied
	Percent	Number	Pounds per Acre		1,000 Lbs
Fungicides: *(continued)*					
Copper sulfate	*	1.4	1.23	1.75	5.5
Cyprodinil	9	1.8	0.10	0.19	6.0
Dodine	3	1.4	0.96	1.40	14.5
Fenarimol	22	1.9	0.06	0.11	8.5
Ferbam	*	5.8	2.60	15.09	3.2
Fosetyl-al	8	1.1	1.50	1.67	49.6
Kresoxim-methyl	9	1.2	0.16	0.19	6.1
Mancozeb	34	3.2	2.04	6.72	830.5
Maneb	1	3.8	2.21	8.49	32.4
Mefenoxam	4	1.1	0.37	0.43	6.2
Metiram	17	3.4	2.61	9.06	573.9
Myclobutanil	42	2.3	0.10	0.23	35.0
Oxytetracycline	5	1.4	0.11	0.17	2.9
Pseudomonas fluores.	5	1.1	0.23	0.26	4.5
Streptomycin	19	1.5	0.15	0.22	15.4
Sulfur	35	2.4	5.23	12.67	1,653.3
Thiophanate-methyl	11	2.7	0.30	0.84	33.1
Thiram	4	1.6	2.85	4.66	72.4
Triadimefon	4	1.8	0.07	0.14	2.2
Triflumizole	17	1.4	0.21	0.30	19.5
Triforine	*	1.9	0.39	0.75	0.2
Ziram	13	2.2	2.50	5.72	268.8
Other Chemicals:					
6-benzyladenine	3	1.3	0.03	0.05	0.6
Butenoic Acid Hydro.	6	1.0	0.08	0.08	1.7
Chlorophacinone	1	1.0	0.13	0.13	0.5
Cytokinins	17	1.1	0.02	0.03	1.7
Dodecanol	6	1.0	0.03	0.03	0.7
E,E-8, 10-Dodecadien	6	1.1	0.05	0.06	1.3
Ethephon	10	1.1	0.56	0.64	24.3
Gibberellic acid	20	1.2	0.02	0.03	2.0
Gibberellins A4A7	1	1.3	0.03	0.05	0.2
Monocarbamide dihyd.	1	1.1	5.84	6.56	31.0
NAD	6	1.1	0.05	0.05	1.2
Naphthaleneacetic ac.	34	1.2	0.04	0.04	5.4
Strychnine	*	1.0	0.02	0.02	0.1
Tetradecanol	6	1.0	0.007	0.007	0.2
Tetradecen-1-OL (Z)	*	1.1	0.04	0.05	**
Zinc phosphide	3	1.0	0.13	0.13	1.4

* Area applied is less than one percent.
** Total applied is less than 50 lbs.
1/ Bearing acres in 1999 for the 11 States surveyed were 367,700 acres. States included are AZ, CA, GA, MI, NJ, NY, NC, OR, PA, SC and WA. Acreage in Arizona and California includes non-bearing acres.
2/ Rates and total applied are not available because amounts of active ingredient are not comparable between products.

Apples: Agricultural Chemical Applications, New York, 1999 1/

Agricultural Chemical	Area Applied	Appli-cations	Rate per Application	Rate per Crop Year	Total Applied
	Percent	Number	Pounds per Acre		1,000 lbs
Herbicides:					
2,4-D	20	1.1	1.04	1.14	12.9
Diuron	19	1.0	1.02	1.09	11.3
Glyphosate	37	1.2	0.96	1.21	24.7
Paraquat	24	1.0	0.56	0.59	7.8
Pendimethalin	2	1.0	1.51	1.56	1.7
Simazine	24	1.0	1.35	1.46	19.6
Insecticides:					
Abamectin	9	1.0	0.010	0.010	**
Azinphos-methyl	67	3.1	0.62	1.95	72.0
Bt *(Bacillus thur.)* 2/	24	1.6			
Carbaryl	56	1.1	1.10	1.29	39.6
Chlorpyrifos	60	1.8	1.00	1.80	59.7
Clofentezine	17	1.0	0.13	0.13	1.2
Dicofol	2	1.1	1.54	1.69	1.8
Dimethoate	5	1.1	1.08	1.22	3.5
Endosulfan	29	1.3	0.87	1.20	19.2
Esfenvalerate	26	1.2	0.04	0.04	0.6
Imidacloprid	46	1.4	0.06	0.09	2.1
Methomyl	15	1.0	0.77	0.83	7.0
Methyl parathion	25	1.4	0.85	1.25	17.3
Oxamyl	12	1.1	0.54	0.61	4.1
Permethrin	8	1.4	0.09	0.12	0.5
Petroleum distillate	53	1.5	15.86	25.09	725.7
Phosmet	43	2.2	1.12	2.54	59.7
Pyridaben	22	1.1	0.17	0.19	2.4
Spinosad	20	1.6	0.08	0.13	1.5
Fungicides:					
Benomyl	33	2.7	0.22	0.60	10.7
Captan	95	4.4	1.64	7.27	381.5
Copper hydroxide	17	1.1	2.39	2.71	25.2
Copper oxychlo. sul.	28	1.2	2.14	2.72	41.8
Cyprodinil	7	1.0	0.14	0.14	0.5
Dodine	7	1.2	1.38	1.65	6.5
Fenarimol	20	2.6	0.06	0.16	1.8
Mancozeb	77	3.7	2.27	8.58	362.7
Metiram	16	3.0	2.62	7.86	71.0
Myclobutanil	57	2.5	0.10	0.25	8.0
Streptomycin	24	1.9	0.14	0.27	3.6
Sulfur	39	2.7	3.80	10.36	220.8
Thiophanate-methyl	38	1.9	0.31	0.62	13.1
Triadimefon	5	2.3	0.08	0.18	0.5
Triflumizole	7	2.0	0.24	0.49	2.0
Ziram	6	1.1	1.75	1.93	6.4
Other Chemicals:					
6-benzyladenine	2	1.2	0.03	0.04	**
Butenoic Acid Hydro.	*	1.0	0.10	0.10	**
Cytokinins	3	1.4	0.006	0.008	**
Ethephon	3	1.0	0.29	0.29	0.5
Gibberellic acid	7	1.6	0.008	0.010	**
Naphthaleneacetic ac.	50	1.2	0.04	0.05	1.4

* Area applied is less than one percent.
** Total applied is less than 50 lbs.
1/ Bearing acres in 1999 for New York were 55,000 acres.
2/ Rates and total applied are not available because amounts of active ingredient are not comparable between products.