USDA,
National Agricultural Statistics Service,
New Jersey Field Office
P.O. Box 330
Trenton, NJ 08625
Phone: 1(800)328-0179
Fax: 1(800)625-7581
www.nass.usda.gov/nj/

Agricultural Chemical Usage 2004 Vegetable Summary

This publication is the eighth Vegetable Summary in the series of "Agricultural Chemical Usage" reports issued by the United States Department of Agriculture's National Agricultural Statistics Service (USDA-NASS). This report contains statistics for on-farm use of agricultural chemicals on cucumbers, squash, sweet corn, and tomatoes in New Jersey (as well as the other states in the program for these four commodities). The information in this publication is made possible by the voluntary cooperation of New Jersey vegetable producers. We go to the best source for the information, the producer.

Cucumbers, Fresh: Planted acres for cucumbers receiving chemical applications in 2004, totaled 3,100 acres. New Jersey applied herbicides to 59 percent of their fresh market cucumber acreage. Clomazone was the most commonly applied herbicide, being used on 34 percent of the acreage. Insecticides were applied to 73 percent of the acreage. Endosulfan was the most commonly applied insecticide, being used on 45 percent of the acreage. Fungicides were more widely used, applied to 93 percent of the planted acreage. Chlorothalonil was the fungicide predominantly used, applied to 79 percent of the acreage.

Squash: Planted acres for squash receiving chemical applications in 2004 totaled, 3,200 acres. New Jersey applied herbicides to 50 percent of their squash acreage. Clomazone was the most commonly applied herbicide, being used on 41 percent of the acreage. Insecticides were applied to 70 percent of the acreage. Endosulfan was the most commonly applied insecticide, being used on 32 percent of the acreage. Fungicides were more widely used, applied to 86 percent of the planted acreage. Chlorothalonil was the fungicide predominantly used, applied to 68 percent of the acreage.

Sweet Corn, Fresh: Planted acres for sweet corn receiving chemical applications in 2004 totaled, 8,200 acres. New Jersey applied herbicides to 76 percent of their fresh market sweet corn acreage. Atrazine was the most commonly applied herbicide, being used on 56 percent of the acreage. Insecticides were more widely used, applied to 88 percent of the acreage. Lambda-cyhalotrin was the most commonly applied insecticide, being used on 81 percent of the acreage. Fungicides were applied to 7 percent of the planted acreage. Chlorothalonil was the only fungicide used, it was applied to 4 percent of the acreage.

Tomatoes, Fresh: Planted acres for tomatoes receiving chemical applications in 2004 totaled, 3,000 acres. New Jersey applied herbicides to 34 percent of their fresh market tomato acreage. Napropamide was the most commonly applied herbicide, being used on 22 percent of the acreage. Insecticides were applied to 81 percent of the acreage. Spinosad was the most commonly applied insecticide, being used on 48 percent of the acreage. Fungicides were more widely used, applied to 85 percent of the planted acreage. Chlorothalonil was the fungicide predominantly used, applied to 61 percent of the acreage.

The full report, which includes information on 23 vegetable crops in 20 states, can be found on the NASS website.

The website is www.usda.gov/nass.

Cucumbers, Fresh: Pesticide, Planted Acreage, Percent of Area Receiving Applications and Total Applied Program States and Total, 2004

State	Planted Acreage	Area Receiving and Total Applied							
		Herbicide		Insecticide 1/		Fungicide 1/		Other	
		Percent	*1,000 lbs*	*Percent*	*1,000 lbs*	*Percent*	*1,000 lbs*	*Percent*	*1,000 lbs*
California 2/	3,400	34	1.7	36	1.2	28	0.6		
Florida	11,000	38	5.7	86	10.9	96	69.8	11	122.5
Georgia	15,000	43	7.1	88	37.6	100	61.4	33	145.6
Michigan 2/	7,500	66	4.2	66	5.6	96	38.3		
New Jersey	**3,100**	**59**	**3.3**	**73**	**6.3**	**93**	**40.1**		
New York	4,700	70	3.2	88	1.5	86	7.3		
North Carolina	7,000	47	2.4	64	6.3	73	33.7	31	207.5
Total	51,700	49	27.6	77	69.4	88	251.2	17	522.9

1/ Total Applied excludes Bt's (Bacillus thuringiensis) and other biologicals. Quantities are not available because amounts of active ingredient are not comparable between products.
2/ Insufficient reports to publish data for one or more pesticide classes.

Cucumbers, Fresh: Agricultural Chemical Applications, New Jersey, 2004 1/

Active Ingredient	Area Applied	Applications	Rate per Application	Rate per Crop Year	Total Applied
	Percent	*Number*	*Pounds per Acre*	*Pounds per Acre*	*1,000 lbs*
Herbicides					
Bensulide	14	1.0	5.38	5.38	2.4
Clomazone	34	1.0	0.18	0.18	0.2
Insecticides					
Carbaryl	14	3.1	0.83	2.56	1.1
Endosulfan	45	5.0	0.64	3.19	4.5
Esfenvalerate	4	1.4	0.04	0.05	2/
Imidacloprid	4	2.1	0.08	0.17	2/
Permethrin	11	1.6	0.07	0.12	2/
Fungicides					
Azoxystrobin	16	2.8	0.18	0.50	0.2
Chlorothalonil	79	5.1	1.46	7.44	18.2
Copper hydroxide	20	13.5	1.03	13.85	8.8
Cymoxanil	29	2.0	0.11	0.23	0.2
Famoxadone	29	2.0	0.11	0.23	0.2
Mancozeb	22	2.8	0.57	1.60	1.1
Maneb	27	9.1	1.14	10.35	8.5
Mefenoxam	16	2.8	0.14	0.41	0.2
Metalaxl	4	2.0	0.17	0.34	2/

1/ Planted acreage in 2004 for New Jersey was 3,100 acres.
2/ Total applied is less than 50 lbs.

Squash: Pesticide, Planted Acreage, Percent of Area Receiving Applications and Total Applied Program States and Total, 2004

State	Planted Acreage	Area Receiving and Total Applied							
		Herbicide		Insecticide 1/		Fungicide1/		Other	
		Percent	*1,000 lbs*	*Percent*	*1,000 lbs*	*Percent*	*1,000 lbs*	*Percent*	*1,000 lbs*
California	7,500	4	0.7	13	1.0	7	7.4		
Florida	10,500	41	7.3	87	19.5	93	56.3	14	146.8
Georgia	12,000	35	8.7	91	98.5	93	75.1	22	62.1
Michigan 2/	7,200	75	5.2	85	4.9	88	27.5		
New Jersey 2/	**3,200**	**50**	**1.6**	**70**	**3.0**	**86**	**15.5**		
North Carolina	3,900	44	1.2	50	2.2	54	13.1	2	12.4
Total	44,300	39	24.7	71	129.1	74	194.9	9	231.4

1/ Total Applied excludes Bt's (Bacillus thuringiensis) and other biologicals. Quantities are not available because amounts of active ingredient are not comparable between products.
2/ Insufficient reports to publish data for one or more pesticide classes.

Squash: Agricultural Chemical Applications, New Jersey, 2004 1/

Active Ingredient	Area Applied	Applications	Rate per Application	Rate per Crop Year	Total Applied
	Percent	*Number*	*Pounds per Acre*	*Pounds per Acre*	*1,000 lbs*
Herbicides					
Bensulide	9	1.5	1.62	2.41	0.7
Clomazone	41	1.0	0.15	0.16	0.2
Ethalfluralin	15	1.0	0.44	0.44	0.2
Insecticides					
Carbaryl	15	3.1	0.65	2.02	1.0
Endosulfan	32	2.2	0.56	1.26	1.3
Imidacloprid	13	2.2	0.07	0.16	0.1
Methomyl	3	2.8	0.58	1.62	0.2
Permethrin	10	2.1	0.13	0.26	0.1
Fungicides					
Azoxystrobin	11	1.7	0.15	0.25	0.1
Chlorothalonil	68	2.9	1.47	4.28	9.2
Copper hydroxide	25	3.9	0.46	1.81	1.5
Copper resinate	7	2.9	0.14	0.41	0.1
Cymoxanil	11	2.2	0.11	0.24	0.1
Famoxadone	11	2.2	0.11	0.24	0.1
Mancozeb	22	2.4	0.82	1.97	1.4
Maneb	18	2.2	1.48	3.25	1.9
Mefenoxam	11	1.9	0.14	0.27	0.1
Metalaxl	18	1.8	0.17	0.30	0.2
Myclobutanil	14	2.9	0.10	0.29	0.1

1/ Planted acreage in 2004 for New Jersey was 3,200 acres.

Sweet Corn, Fresh: Pesticide, Planted Acreage,
Percent of Area Receiving Applications and Total Applied Program States and Total, 2004

State	Planted Acreage	Area Receiving and Total Applied							
		Herbicide		Insecticide 1/		Fungicide 1/		Other	
		Percent	*1,000 lbs*	*Percent*	*1,000 lbs*	*Percent*	*1,000 lbs*	*Percent*	*1,000 lbs*
California	28,000	24	13.8	81	99.5	3	0.5		
Florida	38,900	94	54.5	98	213.2	94	259.1	9	652.4
Georgia	28,000	81	93.0	99	205.6	85	6.2		
Illinois	6,000	78	13.1	87	1.4	42	1.4		
Michigan	10,500	88	20.9	84	6.0	15	0.9		
New Jersey 2/	**8,200**	**76**	**17.0**	**88**	**9.2**	**7**	**0.6**		
New York	29,000	86	76.1	77	14.1	5	1.6		
North Carolina	8,200	83	15.5	94	22.4	4	1.6		
Ohio	16,700	93	40.4	86	20.1	27	8.5		
Oregon	4,700	95	7.1	94	2.3				
Pennsylvania	21,800	93	69.0	88	15.4	9	2.6		
Texas 2/	2,800	55	3.8	68	0.7				
Wisconsin 2/	7,700	87	14.5	66	0.8				
Total	210,500	79	438.7	88	610.7	36	283.0	2	657.5

1/ Total Applied excludes Bt's (Bacillus thuringiensis) and other biologicals. Quantities are not available because amounts of active ingredient are not comparable between products.
2/ Insufficient reports to publish data for one or more pesticide classes.

Sweet Corn, Fresh: Agricultural Chemical Applications, New Jersey, 2004 1/

Active Ingredient	Area Applied	Applications	Rate per Application	Rate per Crop Year	Total Applied
	Percent	*Number*	*Pounds per Acre*	*Pounds per Acre*	*1,000 lbs*
Herbicides					
Alachlor	20	1.0	1.61	1.61	2.6
Atrazine	56	1.1	1.35	1.46	6.8
S-Metolachlor	55	1.0	1.32	1.34	6.1
Insecticides					
Carbaryl	3	6.1	0.97	5.87	1.4
Esfenvalerate	6	5.8	0.04	0.21	0.1
Lambda-cyhalothrin	81	6.9	0.03	0.19	1.3
Methomyl	22	4.0	0.47	1.89	3.4
Terbufos	7	1.1	0.90	1.00	0.5
Fungicides					
Chlorothalnil	4	1.3	0.71	0.91	0.3

1/ Planted acres in 2004 for New Jersey was 8,200 acres.

Tomatoes, Fresh: Pesticide, Planted Acreage, Percent of Area Receiving Applications and Total Applied Program States and Total, 2004

State	Planted Acreage	Area Receiving and Total Applied							
		Herbicide		Insecticide 1/		Fungicide 1/		Other	
		Percent	*1,000 lbs*	*Percent*	*1,000 lbs*	*Percent*	*1,000 lbs*	*Percent*	*1,000 lbs*
California	37,500	37	15.5	80	78.3	73	362.9	8	481.6
Florida	42,400	86	42.3	100	165.2	100	1,600.6	81	7,524.8
Georgia	6,000	47	8.2	65	6.1	99	204.5	67	546.2
New Jersey	**3,000**	**34**	**1.5**	**81**	**5.0**	**85**	**30.6**	**13**	**5.7**
North Carolina	2,700	55	2.1	91	3.3	89	25.8	62	250.7
Ohio	7,000	89	26.6	93	5.7	97	169.5	71	730.3
Tennessee	6,700	92	13.2	99	73.7	98	389.4	82	956.5
Total	105,300	64	109.4	90	337.3	89	2,783.3	51	10,495.8

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

Tomatoes, Fresh: Agricultural Chemical Applications, New Jersey, 2004 1/

Active Ingredient	Area Applied	Applications	Rate per Application	Rate per Crop Year	Total Applied
	Percent	*Number*	*Pounds per Acre*	*Pounds per Acre*	*1,000 lbs*
Herbicides					
Metribuzin	16	1.0	0.37	0.37	0.2
Napropamide	22	1.0	1.20	1.20	0.8
S-Metolachlor	7	1.0	0.73	0.73	0.2
Insecticides					
Carbaryl	2	5.8	0.51	2.98	0.2
Cyfluthrin	18	3.1	0.04	0.13	0.1
Endosulfan	33	2.6	0.56	1.49	1.5
Esfenvalerate	15	2.0	0.02	0.05	2/
Imidacloprid	23	2.0	0.09	0.18	0.1
Lambda-cyhalothrin	29	3.6	0.02	0.09	0.1
Methomyl	11	1.6	0.49	0.77	0.2
Oxamyl	13	4.5	0.44	1.97	0.8
Spinosad	48	4.4	0.08	0.37	0.5
Fungicides					
Azoxystrobin	49	4.1	0.10	0.39	0.6
Chlorothalonil	61	4.0	1.43	5.66	10.4
Copper hydroxide	38	6.8	0.62	4.25	4.8
Copper resinate	18	5.4	0.18	0.97	0.5
Mancozeb	30	3.3	1.52	5.05	4.5
Maneb	29	6.2	1.23	7.63	6.5

1/ Planting acreage in 2004 for New Jersey was 3,000 acres.
2/ Total applied is less than 50 lbs.