

Agricultural Chemical Usage

2003 Selected Fruits - Apples, Peaches

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Pesticides

APPLES - Herbicides were applied to 34 percent of the 20,000 acres of apple trees. Simazine was the leading herbicide applied to apples at a total amount applied of 4,300 pounds. This was applied to 14 percent of the apple acreage at a rate of 1.40 pounds per acre. The second largest herbicide used on Pennsylvania apples was Diuron at 3,600 pounds.

Insecticides were applied to 86 percent of Pennsylvania's apple crop. Petroleum distillate was by far the largest insecticide applied to apples,

with a total amount of 214,400 pounds and applied to 42 percent of Pennsylvania's apple acreage. The next insecticide was Azinphos-methyl at 22,100 pounds.

Fungicides were applied to 80 percent of apples. Captan was the leading fungicide used on apples as it was applied to 60 percent of Pennsylvania's apple acreage. The total amount applied was 67,800 pounds, at a rate of 0.92 pounds per acre. The second leading fungicide used was Mancozeb at an amount of 40,400 pounds. This was applied to 35 percent of Pennsylvania's apple acreage.

Pennsylvania: Apples - Pesticide, Bearing Acreage, Percent of Area Receiving Applications and Total Applied, 2003

Crop	Bearing Acreage	Area Receiving and Total Applied							
		Herbicide		Insecticide ¹		Fungicide ¹		Other Chemicals	
	Acres	Percent	1,000 Lbs.	Percent	1,000 Lbs.	Percent	1,000 Lbs.	Percent	1,000 Lbs.
Apples	20,000	34	17.2	86	288.5	80	219.7	13	1.2

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

Pennsylvania: Apples - Agricultural Chemical Applications, 2003 ¹

Active Ingredient	Area Applied	Applications	Rate Per Application	Rate Per Crop Year	Total Applied
	Percent	Number	Pounds Per Acre		1,000 Lbs.
Herbicides:					
2,4-D	12	1.0	0.76	0.78	1.9
Diuron	15	1.0	1.19	1.23	3.6
Glyphosate	7	1.1	0.91	1.01	1.4
Paraquat	25	1.2	0.46	0.56	2.9
Simazine	14	1.0	1.40	1.53	4.3
Terbacil	4	1.0	0.59	0.61	0.4
Insecticides:					
Abamectin	12	1.7	0.004	0.008	(²)
Azinphos-methyl	62	6.3	0.28	1.77	22.1
Benzoic acid	36	2.0	0.11	0.21	1.5
Bifenazate	8	1.4	0.17	0.25	0.4
Carbaryl	25	1.3	0.96	1.30	6.5
Chlorpyrifos	27	1.4	0.67	0.99	5.4
Diazinon	35	2.7	0.51	1.38	9.7
Endosulfan	7	1.5	0.83	1.30	1.8
Esfenvalerate	19	1.5	0.02	0.03	0.1
Fenpropathrin	17	1.8	0.13	0.23	0.8
Imidacloprid	42	2.4	0.03	0.07	0.6
Indoxacarb	10	1.9	0.04	0.09	0.2
Lambda-cyhalothrin	13	1.6	0.009	0.01	(²)
Methomyl	19	2.3	0.20	0.47	1.8
Oxamyl	4	1.2	0.40	0.51	0.4
Permethrin	12	2.1	0.08	0.17	0.4
Petroleum distillate	42	1.3	19.25	25.53	214.4
Phosmet	37	3.8	0.70	2.65	19.7
Pyridaben	7	1.1	0.10	0.12	0.2
Fungicides:					
Basic copper sulfate	14	1.4	0.60	0.88	2.4
Benomyl	2	2.2	0.32	0.71	0.3
Captan	60	6.1	0.92	5.67	67.8
Copper hydroxide	10	1.0	2.49	2.61	5.5
Cyprodinil	15	1.5	0.14	0.21	0.6
Fenarimol	12	4.4	0.03	0.15	0.4
Kresoxim-methyl	13	3.2	0.08	0.27	0.7
Mancozeb	35	4.6	1.23	5.70	40.4
Maneb	*	4.8	1.22	5.96	0.9
Myclobutanil	46	4.6	0.05	0.25	2.3
Streptomycin	9	1.8	0.09	0.17	0.3
Sulfur	11	2.5	2.67	6.88	15.3
Thiophanate-methyl	53	4.3	0.21	0.94	10.0
Thiram	18	4.5	1.34	6.12	21.5
Trifloxystrobin	14	2.7	0.02	0.07	0.2
Triflumizole	12	3.9	0.09	0.37	0.8
Ziram	17	4.6	1.09	5.05	16.9
Other Chemicals:					
Benzyladenine	8	1.3	0.03	0.05	0.1
Butenoic Acid Hydro.	3	1.0	0.08	0.09	0.1
Ethephon	12	1.4	0.19	0.27	0.7
Gibberellins A4A7	8	1.3	0.01	0.01	(²)
NAA	18	1.1	0.02	0.02	0.1
Prohexadione calcium	4	2.3	0.10	0.24	0.2

* Area applied is less than 0.5 percent. ¹ Bearing acres in 2003 for Pennsylvania were 20,000 acres. ² Total applied is less than 50 lbs.