



AGRICULTURAL CHEMICAL USE

FRUIT CROPS 2009

Overview

The National Agricultural Statistics Service (NASS) Agricultural Chemical Use Program is the U.S. Department of Agriculture's official source of statistics about on-farm and post-harvest fertilizer and pesticide use and pest management practices.

In the fall of 2009, NASS collected data about chemical use and pest management practices for 23 fruit crops in 12 states. Apples, blueberries and peaches were the most prevalent fruit crops covered by the 2009 Fruit Chemical Usage Survey, with each being grown in at least six states.

	California	Florida	Georgia	Michigan	New Jersey	New York	North Carolina	Oregon	Pennsylvania	South Carolina	Texas	Washington
Target Crops by State, 2009 Fruit Chemical Use Survey												
Apples	X			X		X	X	X	X			X
Apricots	X											
Avocados	X											
Blackberries								X				
Blueberries			X	X	X		X	X				X
Cherries, Sweet	X			X				X				X
Cherries, Tart				X		X						X
Dates	X											
Figs	X											
Grapefruit	X	X									X	
Grapes, All	X					X						X
Kiwifruit	X											
Lemons	X											
Nectarines	X											
Olives	X											
Oranges, All	X	X										
Peaches	X		X	X	X				X	X	X	
Pears	X							X				X
Plums	X											
Prunes	X											
Raspberries								X				X
Tangelos		X										
Tangerines	X	X										



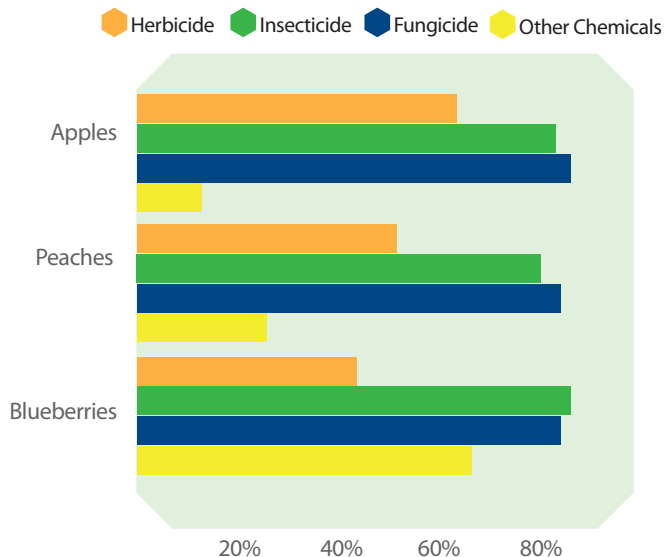
Pesticides

Fungicides were the most common type of pesticide used on apples, blueberries and peaches. They were applied to 87 percent of the blueberry acres and 85 percent of the peach and apple acres. Insecticides were applied to 87 percent of apple acres, 84 percent of blueberry acres and 81 percent of peach acres. Herbicides and other chemicals were less extensively used.

On apples, Carbaryl was the most widely used insecticide. It was applied to 51 percent of the apple acreage at a rate of 1.707 pounds per acre. On peaches, Esfenvalerate was the most widely used insecticide. It was applied to 51 percent of the peach acres at a rate of 0.126 pounds per acre.

On blueberries, the leading insecticide applied was Phosmet. It was applied to 36 percent of the blueberry acres at a rate of 1.848 pounds per acre.

Pesticides: Percent of Acres Treated, 2009 Program States



Top Insecticides Used, by Percent Acres Treated, 2009 Program States

Crop	Insecticide Active Ingredient	Acres Treated	Rate per Crop Year	Total Applied
		%	Lbs/Acre	Lbs
Apples	Carbaryl	51	1.707	248,000
	Petroleum distillate	48	30.634	4,217,000
	Chlorpyrifos	42	1.707	201,000
Peaches	Esfenvalerate	51	0.126	6,000
	Phosmet	30	3.498	102,000
	Petroleum distillate	25	28.111	681,000
Blueberries	Phosmet	36	1.848	36,000
	Malathion	28	3.248	48,000
	Esfenvalerate	24	0.061	1,000

Top Fungicides Used, by Percent Acres Treated, 2009 Program States

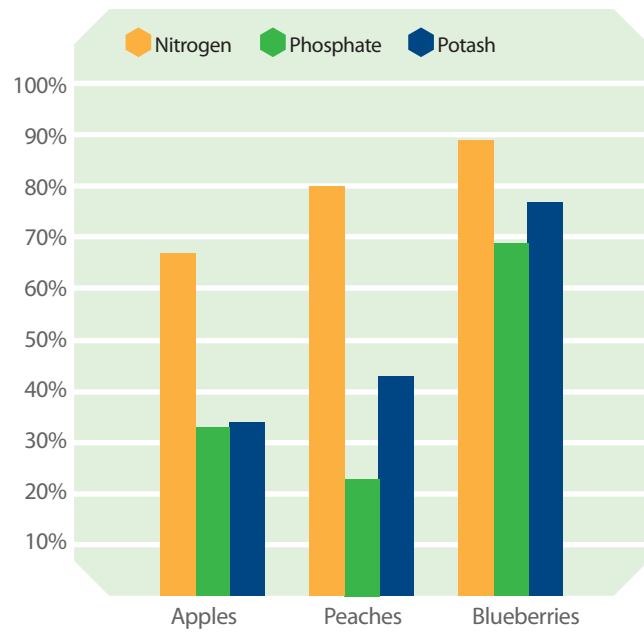
Crop	Fungicide Active Ingredient	Acres Treated	Rate per Crop Year	Total Applied
		%	Lbs/Acre	Lbs
Apples	Mancozeb	36	8.451	856,000
	Sulfur	36	9.615	976,000
	Triflumizole	35	0.419	41,000
Peaches	Sulfur	55	32.331	1,731,000
	Propiconazole	39	0.165	6,000
	Copper hydroxide	28	2.483	68,000
Blueberries	Fenbuconazole	58	0.179	5,000
	Pyraclostrobin	51	0.109	3,000
	Captan	43	3.726	85,000

Fertilizers

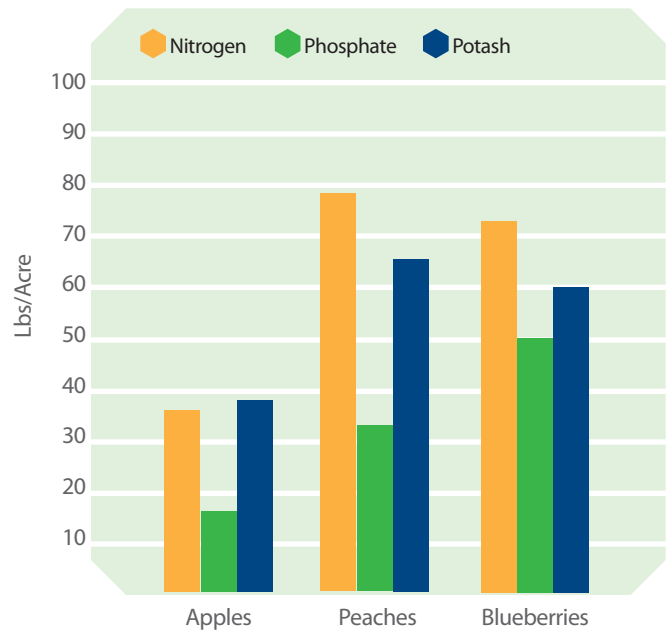
Nitrogen, the most widely used fertilizer ingredient, was applied to 89 percent of blueberry acres, 80 percent of the peach acres and 67 percent of the apple acres. Nitrogen was applied at an average rate of 79 pounds per acre to the peach crop, 73 pounds per acre to blueberries and 36 pounds per acre to apples.

Phosphate was applied to 69 percent of the blueberry acres, 33 percent of the apples acres and 23 percent of the peach acres. Potash and sulfur were less extensively used.

Fertilizers: Percent of Bearing Acres Treated, 2009 Program States



Fertilizers: Rate per Crop Year, 2009 Program States



Pest Management Practices

Fruit growers reported using several management practices to aid in the deterrence of pests through prevention, monitoring and suppression. Among the commonly used practices were: scouting for insects and diseases, irrigation of crop acres and the use of alternative pesticides with different mechanisms of action.

Top Pest Management Practices by Percent of Acres Treated, State level

Top Practice		All States	California	Florida	Michigan
		% All Fruit Crops			
Prevention	Crop acres irrigated	90	99	95	39
Monitoring	Scouted for insects and diseases	97	98	94	96
Suppression	Alternate pesticides with different mechanisms of action	73	67	74	94

For More Information

The 2009 agricultural chemical use data for fruit were published July 28, 2010 and are available through the Quick Stats database on the NASS website: www.nass.usda.gov.

To access the database directly, go to quickstats.nass.usda.gov and under **Sector**, select **Environmental**.

For assistance call the Agricultural Statistics Hotline at (800) 727-9540.

NASS will publish additional data from the Agricultural Chemical Use Program through 2011, including:

- Nursery and Floriculture, 2009 Crop Year - January 2011
- Post-harvest Wheat, 2010 Marketing Year - March 2011
- Corn, Organic Corn, Upland Cotton and Fall Potatoes, 2010 Crop Year - May 2011
- Vegetables, 2010 Crop Year - July 2011

