

## Fall Potatoes - Pesticides, Fertilizers, Pest Management Practices

**Nitrogen:** Pennsylvania farmers applied nitrogen to 100 percent of the 15,000 acres of fall potatoes planted in 2003. Total nitrogen applied to fall potatoes in 2003 was 1.9 million pounds. The average rate per application was 64 pounds per acre with the average number of applications of 2.0.

**Phosphate:** Phosphate was applied to 99 percent of Pennsylvania's fall potato acres planted in 2003. Total phosphate applied to fall potatoes in 2003 was 1.3 million pounds.

**Potash:** Fall potato growers in the State applied potash to 99 percent of the 15,000 acres planted in 2003. The total amount applied was 1.4 million pounds at a rate of 99 pounds per acre per crop year.

**Pesticides:** Herbicides were applied to 91 percent of the fall potato acreage planted. S-Metolachlor was the most commonly used herbicide applied to fall potatoes with a total amount applied of 9,000 pounds on 42 percent of Pennsylvania's fall potato acreage. Insecticides were applied to 99 percent of fall potato acreage in Pennsylvania for the 2003 crop year. Methamidophos was the most common insecticide applied to fall potatoes with a total amount applied of 3,000 pounds on 18 percent of Pennsylvania's fall potato acreage. Fungicides were applied to 96 percent of the fall potato acreage in Pennsylvania for the 2003 crop year. Mancozeb the most common fungicide applied to fall potatoes with a total amount applied 91,000 pounds on 89 percent of Pennsylvania's fall potato acreage. Other chemicals were applied to 6 percent of the fall potato acreage. Diquat was applied to fall potatoes with a total amount applied of 2,000 pounds on 40 percent of the fall potato acreage.

### Pennsylvania: Fall Potatoes - Planted Acreage, Percent of Area Receiving Applications and Total Applied, 2003

Crop	Planted Acreage	Area Receiving and Total Applied							
		Herbicide		Insecticide <sup>1</sup>		Fungicide		Other	
	1,000 Acres	Percent	1,000 Lbs.	Percent	1,000 Lbs.	Percent	1,000 Lbs.	Percent	1,000 Lbs.
Fall Potatoes	15	91	28	99	23	96	126	6	3

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

### Pennsylvania: Fall Potatoes - Fertilizer Primary Nutrient Applications, 2003

Primary Nutrient	Planted Acreage	Area Applied	Applications	Rate Per Application	Rate Per Crop Year	Total Applied
	1,000 Acres	Percent	Number	Pounds Per Acre		Million Lbs.
<b>Fall Potatoes</b>	15					
Nitrogen		100	2.0	64	133	1.9
Phosphate		99	1.1	75	89	1.3
Potash		99	1.1	87	99	1.4

### Pennsylvania: Fall Potatoes - Agricultural Chemical Applications 2003 <sup>1</sup>

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.
<b>Herbicides:</b>					
Glyphosate	14	1.0	0.70	0.70	2
Metolachlor	18	1.0	2.02	2.02	5
Metribuzin	84	1.0	0.53	0.56	7
Pendimethalin	36	1.0	1.00	1.00	5
S-Metolachlor	42	1.0	1.45	1.46	9
<b>Insecticides:</b>					
Cyfluthrin	41	1.9	0.03	0.05	( <sup>2</sup> )
Dimethoate	23	2.1	0.18	0.39	1
Endosulfan	6	1.6	0.67	1.11	1
Imidacloprid	82	1.4	0.10	0.14	2
Methamidophos	18	1.0	0.94	1.02	3
Oxamyl	4	1.0	0.32	0.33	( <sup>2</sup> )
Permethrin	4	1.8	0.05	0.09	( <sup>2</sup> )
Spinosad	15	1.2	0.08	0.10	( <sup>2</sup> )
<b>Fungicides:</b>					
Azoxystrobin	16	1.2	0.11	0.14	( <sup>2</sup> )
Chlorothalonil	57	2.5	0.98	2.48	20
Copper hydroxide	9	2.0	0.57	1.19	2
Cymoxanil	17	1.5	0.12	0.18	( <sup>2</sup> )
Mancozeb	89	5.9	1.18	7.06	91
Mefenoxam	14	1.7	0.13	0.23	1
Metalaxyl	28	1.8	0.09	0.18	1
Metiram	11	5.2	1.05	5.49	9
<b>Other Chemicals:</b>					
Diquat	40	1.0	0.30	0.32	2

<sup>1</sup> Planted acres in 2003 for Pennsylvania were 15,000 acres. <sup>2</sup> Total applied is less than 500 lbs.