

Agricultural Chemical Usage, 2009

Vegetables – Snap Beans, Sweet Corn, Pumpkins

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The following chemical use data is the most recent data available.

The following displays statistics for on-farm use of commercial fertilizers, agricultural chemicals, and integrated pest management practices from producers of targeted vegetable crops. Chemical application rates listed by active ingredient are also featured in this publication. The agricultural chemical use estimates in this report focus on the acreage treated with herbicides, insecticides, fungicides, and other pesticides for selected vegetable crops. Information is provided from a survey funded by the USDA Pesticide Data Program that targeted 23 vegetable crops and 19 states. Pennsylvania was surveyed for 3 different vegetable crops: snap beans for processing, fresh market sweet corn, and pumpkins.

Snap Beans, Processing: Growers of processed snap beans applied nitrogen to 96 percent of the crop's acreage. Phosphate and Potash were both applied to 81 percent of the acreage, while 30 percent of the acreage received sulfur applications. Herbicide applications were reported on 95 percent of the surveyed acres. The herbicides used most were **EPTC**, applied to 39 percent of the acreage, **Trifluralin**, used on 38 percent of the acreage, and **S-Metolachlor**, applied to 35 percent of the acreage. Insecticides were applied to 73 percent of the acres. Insecticides commonly used included **Bifenthrin** on 40 percent of the acreage, followed by **Acephate** and **Zetacypermethrin**, at 16 and 11 percent coverage, respectively. Fungicides were applied to 53 percent of the acres. **Thiophanate-methyl**, used on 37 percent of the acres, was the most widely used fungicide.

Corn, Sweet, Fresh: Nitrogen was applied to 95 percent of the 2006 fresh market sweet corn acreage in the following Program States: California, Colorado, Florida, Georgia, Illinois, Michigan, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, Texas, and Wisconsin. Phosphate, potash, and sulfur were applied to 91, 85, and 27 percent of the acreage, respectively. Herbicides were applied to 83 percent of the fresh market sweet corn acres. **Atrazine** was used on 71 percent of the acreage, followed by **S-Metolachlor** on 39 percent.

Insecticides were applied to 88 percent of the acreage; **Lambda-cyhalothrin**, applied to 52 percent of the acreage; and **Chlorpyrifos** and **Thiodicarb** which were both applied to 23 percent of the acreage. Fungicides were used on 20 percent of the acres. The most commonly used fungicides were **Mancozeb** and **Propiconazole**, both of which were applied to 11 percent of the acreage.

Pumpkins: Nitrogen was applied to 90 percent of the pumpkin acreage in the Program States: California, Illinois, Michigan, Ohio, and Pennsylvania. Phosphate, potash, and sulfur applications were made to 63, 85, and 13 percent of the acreage, respectively. Herbicides were applied to 75 percent of the acres planted to pumpkins, while insecticide and fungicide applications were made to 79 and 75 percent of the acres, respectively. Major herbicides used included **Clomazone**, applied to 60 percent of the acreage, followed by **Ethalfuralin**, applied to 25 percent of the acreage. The more commonly used insecticides were **Bifenthrin**, **Carbaryl**, and **Endosulfan**, covering 40, 18, and 16 percent of the acreage, respectively. **Chlorothalonil** was the most widely used fungicide and was applied on 48 percent of the acreage. **Copper hydroxide** was the most utilized fungicide, applied to 28 percent of the acreage, followed by **Azoxystrobin**, on 22 percent of the acreage.

Pennsylvania: Vegetable Crops – Planted Acreage, Pesticide, Percent of Area Receiving Applications and Total Applied, 2006

Crop	Planted acreage (acres)	Area receiving and total applied							
		Herbicide		Insecticide		Fungicide		Other	
		(percent)	(1,000 lbs)	(percent)	(1,000 lbs)	(percent)	(1,000 lbs)	(percent)	(1,000 lbs)
Snap beans, processed	10,900	93	19.7	89	2.1	41	2.9	(¹)	
Sweet corn, fresh	20,200	95	77.3	73	10.6	22	0.6	(¹)	
Pumpkins	8,500	87	16.7	90	7.7	90	30.4	(¹)	

¹ Insufficient reports to publish data for pesticide class.