

WASHINGTON AGRICULTURAL CHEMICAL USAGE SWEET CORN, PROCESSING August 2005



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Washington Field Office
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SWEET CORN, PROCESSING

Results of the 2004 Vegetable Chemical Use Survey are presented in the following tables. The survey was designed to collect data on chemical applications made from the end of the 2003 harvest through completion of the 2004 harvest from a sampling of vegetable growers in Washington. Targeted crops in Washington included asparagus, processing carrots, processing sweet corn, dry onions, and processing green peas. The probability nature of the survey allowed for estimates that are representative of chemical use on all targeted vegetables in the state.

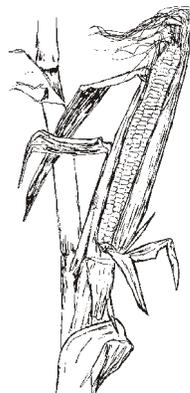
Survey results include estimates of total area treated, number of applications, rates per application and per crop year, and total pounds of chemicals applied. Data are summarized for the primary nutrients and for the active ingredients of pesticides and other chemicals applied. Pesticide data were collected for specific formulations of active ingredients (trade name products) and then converted to active ingredient. Therefore, the estimates associated with a particular active ingredient may represent applications of several trade name products. Pesticide application rates also reflect partial coverage applications as a result

of band, spot, and alternate row spraying techniques.

Five states were surveyed for **processing sweet corn** in 2004: Minnesota, New York, Oregon, Washington, and Wisconsin. Surveyed acreage totaled 362,800 acres and Washington accounted for 26 percent of total surveyed acreage.

For the five program states, herbicides were used on 92 percent of the surveyed acres. Atrazine was applied to 69 percent of the acreage, S-metolachlor was on 30 percent, and Dimethenamid-P on 15 percent. Almost as many acres were treated with insecticides as states reported 71 percent of the acres covered. The two predominately used were Lambda-cyhalothrin on 37 percent of the acres and Zeta-cypermethrin on 17 percent. Fungicides were only reported on 17 percent of the acreage. Azoxystrobin and Propiconazole were the main fungicides utilized.

Fertilizers were not surveyed on the 2004 Vegetable Chemical Usage Survey.

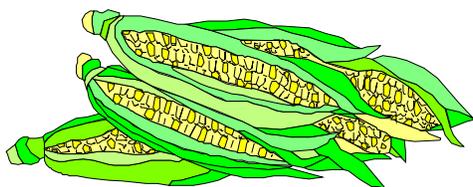


Sweet Corn, Processing: Pesticide Applications, Planted Acreage & Percentage Receiving Applications, Program States & Total, 2002 & 2004

State	Planted Acreage		Area Receiving 1/							
			Herbicides		Insecticides		Fungicides		Other Chemicals	
	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004
	1,000 Acres		Percent							
Minnesota	148,000	138,000	70	91	95	83	13	25	**	**
New York	17,600	19,500	93	95	62	44	**	13	**	**
Oregon	33,000	28,500	98	98	38	69	**	**	**	**
Washington	97,700	96,100	89	95	80	75	**	**	**	**
Wisconsin	92,100	80,700	95	87	85	53	**	27	6	**
TOTAL	388,400	362,800	84	92	82	71	6	17	2	**

** Insufficient reports to publish percent of area receiving.

1/ Refers to acres receiving one or more applications of a specific pesticide class.



Sweet Corn, Processing: Fertilizer Use Percent of Acres Treated, Program States, Total 2002 & 2004

State	Planted Acreage		Percent of Acres Treated 1/					
			Nitrogen		Phosphate		Potash	
	2002	2004	2002	2004	2002	2004	2002	2004
	1,000 Acres		Percent					
Minnesota	148,000	138,000	88	-	72	-	57	-
New York	17,600	19,500	100	-	100	-	99	-
Oregon	33,000	28,500	98	-	91	-	89	-
Washington	97,700	96,100	92	-	84	-	71	-
Wisconsin	92,100	80,700	100	-	87	-	97	-
TOTAL	388,400	362,800	93	-	81	-	75	-

1/ Refers to acres receiving one or more applications of a specific fertilizer ingredient.

- Fertilizer use was not included in the 2004 Vegetable Chemical Use Survey.

Sweet Corn, Processing: Agricultural Chemical Applications, Washington, 2002 & 2004 1/

Active Ingredient 2/	Area Applied 3/		Applications		Rate Per Application		Rate Per Crop Year		Total Applied	
	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004
	Percent		Number		Pounds Per Acre				1,000 Pounds	
Herbicides										
Alachlor	12	40	1.0	1.0	2.37	1.99	2.46	2.01	28.5	77.7
Atrazine	68	45	1.1	1.2	0.75	0.60	0.84	0.70	55.7	30.2
Bentazon	5	5	1.0	1.0	0.12	0.65	0.12	0.65	0.5	3.1
Carfentrazone-ethyl	11	19	1.0	1.2	0.02	0.02	0.02	0.02	0.2	0.4
Dimethenamid	2	-	1.0	-	0.99	-	1.05	-	1.7	-
Dimethenamid-P	37	16	1.0	1.4	0.65	0.68	0.66	0.96	23.9	14.6
EPTC	6	-	1.0	-	3.24	-	3.28	-	20.1	-
Fluroxypyr	25	-	1.2	-	0.12	-	0.15	-	3.8	-
Glyphosate	49	15	1.0	1.1	0.52	0.78	0.54	0.86	25.9	12.2
Nicosulfuron	-	4	-	1.0	-	0.03	-	0.03	-	0.1
Pendimethalin	52	31	1.4	1.2	0.47	0.56	0.69	0.70	35.0	20.6
S-Metolachlor	20	7	1.0	1.7	1.12	1.31	1.12	2.24	22.4	16.1
Insecticides										
Bifenthrin	5	15	2.3	1.9	0.04	0.05	0.11	0.10	0.5	1.4
Chlorpyrifos	9	7	1.0	1.1	1.15	1.12	1.17	1.24	10.7	8.8
Lambda-cyhalothrin	23	13	1.7	2.3	0.02	0.03	0.04	0.07	0.9	0.8
Permethrin	5	16	1.2	2.9	0.16	0.12	0.20	0.34	0.9	5.3
Zeta-cypermethrin	35	33	2.1	2.7	0.05	0.04	0.11	0.10	3.6	3.3

1/ Planted acres in 2002 and 2004 for Washington were 97,700 acres and 96,100 acres respectively.

2/ Insufficient reports to publish data for the following agricultural chemicals: 2002: Herbicides: 2,4-D, 2,4-D, Dimeth. salt, Nicosulfuron, Paraquat, Propachlor. Insecticides: Cyfluthrin, Esfenvalerate, Ethoprop, Methidathion, Petroleum distillate, Tefluthrin. Fungicides: Azoxystrobin, Sulfur. Other Chemicals: Monocarbamide dihyd. 2004: Herbicides: 2,4-D, Dimeth. salt, Bromoxynil, Dimethenamid, EPTC, Fluroxypyr, MCPA, Metribuzin, Paraquat. Insecticides: Chlorethoxyfos, Dimethoate, Esfenvalerate, Tefluthrin. Fungicides: Azoxystrobin. Other Chemicals: Monocarbamide dihyd.

3/ Refers to acres receiving one or more applications of a specific agricultural chemical.

Note: Data may not multiple across due to rounding.

Sweet Corn, Processing: Agricultural Chemical Applications, Program States, 2002 & 2004 1/

Active Ingredient 2/	Area Applied 3/		Applications		Rate Per Application		Rate Per Crop Year		Total Applied	
	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004
Herbicides	Percent		Number		Pounds Per Acre				1,000 Pounds	
2, 4-D	3	1	1.2	1.4	0.34	0.38	0.41	0.52	4.4	1.7
Alachlor	12	23	1.0	1.1	1.96	1.97	2.01	2.16	93.1	178.1
Atrazine	65	69	1.0	1.1	0.74	0.64	0.78	0.72	196.4	181.9
Bentazon	17	31	1.0	1.0	0.35	0.55	0.35	0.56	23.3	64.2
Carfentrazone-ethyl	11	13	1.0	1.1	0.01	0.01	0.01	0.01	0.4	0.7
Cyanazine	2	-	1.1	-	0.94	-	1.08	-	6.7	-
Dimethenamid	6	2	1.0	1.0	1.19	1.23	1.20	1.24	27.0	8.6
Dimethenamid-P	24	15	1.0	1.2	0.71	0.77	0.73	0.89	66.7	48.4
EPTC	5	7	1.0	1.0	3.95	3.35	4.01	3.38	80.0	84.0
Fluroxypyr	6	2	1.2	1.3	0.12	0.07	0.15	0.09	3.8	0.6
Glyphosate	17	8	1.0	1.1	0.53	0.75	0.55	0.85	37.7	25.9
Metolachlor	-	1	-	1.3	-	1.20	-	1.51	-	4.7
Nicosulfuron	10	10	1.0	1.0	0.03	0.03	0.03	0.03	1.1	1.0
Paraquat	4	1	1.0	1.0	0.35	0.49	0.37	0.50	5.1	1.4
Pendimethalin	15	10	1.4	1.2	0.52	0.61	0.74	0.74	44.3	27.2
S-Metolachlor	27	30	1.0	1.1	1.42	1.50	1.44	1.66	152.8	176.8
Simazine	***	2	1.0	1.0	0.95	0.87	0.95	0.90	2.9	5.8
Insecticides										
Bifenthrin	12	8	2.2	2.0	0.04	0.05	0.09	0.09	4.2	2.6
Chlorethoxyfos	-	1	-	1.0	-	0.19	-	0.19	-	0.6
Chlorpyrifos	4	4	1.0	1.1	1.19	1.20	1.20	1.34	20.6	17.8
Cyfluthrin	-	*	-	1.0	-	0.02	-	0.02	-	**
Esfenvalerate	***	1	1.5	1.9	0.03	0.03	0.05	0.06	0.2	0.2
Ethoprop	1	1	1.0	1.0	1.10	0.96	1.14	0.99	5.4	5.2
Lambda-cyhalothrin	51	37	3.0	2.7	0.02	0.02	0.07	0.07	14.2	8.9
Permethrin	5	6	1.3	2.5	0.14	0.12	0.18	0.30	3.7	6.4
Petroleum distillate	***	-	1.0	-	3.17	-	3.17	-	10.9	-
Tebupirimphos	-	*	-	1.0	-	0.13	-	0.13	-	0.1
Tefluthrin	1	2	1.0	1.0	0.10	0.13	0.10	0.13	0.5	0.9
Zeta-cypermethrin	16	17	1.9	2.7	0.05	0.04	0.10	0.11	5.8	6.7
Fungicides										
Azoxystrobin	4	15	1.0	1.5	0.10	0.09	0.11	0.13	1.5	7.0
Propiconazole	4	10	1.1	1.3	0.11	0.09	0.12	0.11	2.1	3.9
Other Chemicals										
Aminopyridine	2	-	1.9	-	0.000	-	0.001	-	**	-

* Area applied is less than 0.5 percent. ** Total applied is less than 50 pounds. *** Area applied is less than one percent.

1/ Planted acres in 2002 for the 5 major states were 388,400, and planted acres in 2004 for the 5 major states were 362,800. States included in 2002 and 2004 were MN, NY, OR, WA, & WI.

2/ Insufficient reports to publish data for the following agricultural chemicals: 2002: Herbicides: 2,4-D, Dimeth. salt, Acetic acid, Fluazifop-P-butyl, Glyphosate diam salt, Halosulfuron, Mesotrione, Metolachlor, Prometryn, Propachlor, Sulfosate, Vernolate. Insecticides: Carbofuran, Cyfluthrin, Malathion, Methidathion, Methomyl, Methyl parathion, Oxydemeton-methyl, Tebupirimphos. Fungicides: Sulfur. Other Chemicals: Harpin protein, Monocarbamide dihyd. 2004: Herbicides: 2,4-D, Dimeth. salt, Acetic acid (2,4-D), Ametryn, Bromoxynil, Clomazone, Clopyralid, Cyanazine, Dicamba, Ethalfuralin, Glyphosate diam salt, Halosulfuron, MCPA, MCPB, Metribuzin. Insecticides: Dimethoate, Malathion, Methomyl, Methyl parathion, Mevinphos, Petroleum distillate. Fungicides: Captan, Mancozeb, Thiophanate-methyl. Other Chemicals: Aminopyridine, Garlic oil, Monocarbamide dihyd.

3/ Refers to acres receiving one or more applications of a specific agricultural chemical.

Note: Data may not multiple across due to rounding.