United States Department of Agriculture
National Agricultural Statistics Service

Wisconsin Ag News – Chemical Use
Vegetables: 2018

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Cooperating with the Wisconsin Department of Agriculture, Trade and Consumer Protection

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Cabbage, Chemical Use – Wisconsin: 2018
[Includes acreage for fresh market and processing.]

Active ingredient	Area applied	Applications	Rate per application	Rate per crop year	Total applied
	(percent)	(number)	(pounds per acre)		(1,000 pounds)
Fertilizer					
Nitrogen	99	1.9	64	121	407
Phosphate	99	1.0	78	79	267
Potash	99	1.4	172	236	795
Sulfur	77	1.0	56	56	147
Herbicides					
Trifluralin	36	1.1	0.621	0.658	0.8
Total herbicides	96				3.7
Insecticides					
BT Kurstaki abts-351	1	3.3	(NA)	(NA)	(NA)
Lambda-cyhalothrin	23	3	0.045	0.134	0.1
Total insecticides	47				0.5

(NA) Not available.

Carrots, Chemical Use – Wisconsin: 2018
[Includes acreage for fresh market and processing.]

Active ingredient	Area applied	Applications	Rate per application	Rate per crop year	Total applied
	(percent)	(number)	(pounds per acre)		(1,000 pounds)
Fertilizer					
Nitrogen	98	3.7	64	235	949
Phosphate	74	1.7	43	73	221
Potash	92	2.9	101	295	1,119
Sulfur	90	2.5	32	79	293
Herbicides					
Pendimethalin	83	1	0.809	0.821	2.8
Total herbicides	(D)				(D)
Insecticides					
Esfenvalerate	48	3.3	0.023	0.076	0.1
Total insecticides	(D)				(D)

(D) Withheld to avoid disclosing data for individual operations.

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Cucumbers, Chemical Use – Wisconsin: 2018
[Includes acreage for fresh market and processing.]

Active ingredient	Area applied	Applications	Rate per application	Rate per crop year	Total applied
	(percent)	(number)	(pounds per acre)		(1,000 pounds)
Fertilizer					
Nitrogen	100	10.8	43	464	2,354
Phosphate	99	3.9	15	58	292
Potash	99	8.5	9	74	373
Sulfur	51	5.0	2	12	31
Fungicides					
Total fungicides	91				11.5
Herbicides					
Clomazone	1	1	0.270	0.270	(Z)
Ethalfluralin	99	1	0.852	0.852	4.3
Total herbicides	99				4.5

(Z) Less than half the rounding unit.

Green Peas, Chemical Use – Wisconsin: 2018
[Includes acreage for fresh market and processing.]

Active ingredient	Area applied	Applications	Rate per application	Rate per crop year	Total applied
	(percent)	(number)	(pounds per acre)		(1,000 pounds)
Fertilizer					
Nitrogen	88	3.1	36	112	2,465
Phosphate	54	2.5	36	90	1,217
Potash	55	2.5	75	188	2,596
Sulfur	77	2.1	13	28	529
Herbicides					
Bentazon	75	1	0.313	0.313	5.9
Imazamox	66	1	0.020	0.020	0.3
Imazethapyr.	8	1.2	0.047	0.058	0.1
Pendimethalin	19	1	0.546	0.557	2.7
Total herbicides	96				9.5
Insecticides					
Bifenthrin	11	1.1	0.067	0.075	0.2
Total insecticides	11				0.2

Snap Beans, Chemical Use – Wisconsin: 2018
[Includes acreage for fresh market and processing.]

Active ingredient	Area applied	Applications	Rate per application	Rate per crop year	Total applied
	(percent)	(number)	(pounds per acre)		(1,000 pounds)
Fertilizer					
Nitrogen	97	3.1	29	91	6,123
Phosphate	89	1.1	31	34	2,146
Potash	95	1.7	47	82	5,459
Sulfur	83	2.1	21	44	2,546
Fungicides					
Copper chloride hyd.	8	1.7	0.384	0.646	3.7
Copper hydroxide	16	1.4	0.402	0.567	6.3
Thiophanate-methyl	3	1	1.239	1.239	2.8
Total fungicides	17				14.3
Herbicides					
Bentazon	47	1	0.463	0.478	15.9
Clethodim	2	1.1	0.150	0.167	0.2
Cyflumetofen	5	1	0.284	0.286	1.0
EPTC	32	1	2.643	2.643	59.7
Halosulfuron-methyl	31	1	0.028	0.029	0.6
Imazamox	29	1	0.024	0.024	0.5
Imazethapyr, ammon..	19	1	0.024	0.024	0.3
Metolachlor	18	1	1.642	1.685	21.8
Pendimethalin	10	1	0.923	0.924	6.7
Sethoxydim	13	1.1	0.220	0.240	2.1
S-metolachlor	23	1	1.081	1.103	17.7
Trifluralin	37	1	0.484	0.484	12.5
Total herbicides	98				142.6
Insecticides					
Bifenthrin	28	1.7	0.055	0.095	1.8
Zeta-cypermethrin	3	2.3	0.025	0.058	0.1
Total insecticides	27				2

Sweet Corn, Chemical Use – Wisconsin: 2018
[Includes acreage for fresh market and processing.]

Active ingredient	Area applied	Applications	Rate per application	Rate per crop year	Total applied
	(percent)	(number)	(pounds per acre)		(1,000 pounds)
Fertilizer					
Nitrogen	98	4.0	49	196	11,410
Phosphate	89	1.2	33	38	2,021
Potash	92	1.8	52	91	4,947
Sulfur	77	2.0	25	52	2,346
Fungicides					
Azoxystrobin	9	1.1	0.128	0.140	0.8
Propiconazole	6	1.2	0.131	0.150	0.5
Total fungicides	10				1.8
Herbicides					
Atrazine	79	1.4	0.654	0.886	41.5
Bicyclopyrone	2	1	0.033	0.035	(Z)
Dimethenamid-P	9	1.3	0.689	0.919	4.8
Glyphosate iso. salt	5	1	0.907	0.908	2.9
Glyphosate pot. salt	3	1	0.734	0.734	1.3
Mesotrione	4	1.1	0.140	0.159	0.4
Metolachlor	15	1	2.042	2.078	18.9
Simazine.	3	1	0.702	0.702	1.4
S-Metolachlor	72	1	0.957	0.964	41.0
Tembotrione	41	1.8	0.084	0.149	3.7
Topramezone	7	1.1	0.013	0.014	0.1
Total herbicides	97				117.6
Insecticides					
Bifenthrin	32	2.5	0.046	0.116	2.2
Lambda-cyhalothrin	3	3.2	0.028	0.089	0.2
Total insecticides	36				2.9

(Z) Less than half the rounding unit.

Vegetables, All, Pest Management Practices – Wisconsin and Program States: 2016 and 2018

	Wisconsin		Program States	
	2016	2018	2016 [1]	2018 [2]
	---------- (percent of operations)----------			
Avoidance Practices				
Crop or plant variety chosen for specific pest resistance	26	33	44	37
Planting locations planned to avoid cross infestation of pests	31	43	33	32
Planting or harvesting dates adjusted	15	17	19	18
Rotated crops during past 3 years	86	83	77	80
Row spacing, plant density, or row directions adjusted	14	25	21	22
Monitoring Practices				
Diagnostic laboratory services used for pest detection via soil or plant tissue analysis	48	23	24	16
Field mapping data used to assist decisions	45	22	22	13
Scouted				
-established process used	82	61	43	28
-for pests due to a pest advisory warning	58	26	20	12
-for pests due to a pest development model	26	35	25	13
-for pests or beneficial organism by conducting general observations while performing routine tasks	4	14	18	25
-for pests or beneficial organism by deliberately going to the crop acres or growing areas	95	84	79	72
Scouted for diseases	96	97	94	95
-by employee	3	6	4	3
-by farm supply company or chemical dealer	(Z)	3	5	4
-by independent crop consultant or commercial scout	1	5	11	5
-by operator, partner, or family member	16	42	62	73
-by processor	80	45	18	14
Scouted for insects & mites	99	94	95	96
-by employee	2	6	4	3
-by farm supply company or chemical dealer	(Z)	3	5	4
-by independent crop consultant or commercial scout	1	5	10	5
-by operator, partner, or family member	18	40	62	73
-by processor	79	46	17	14
Scouted for weeds	95	94	90	95
-by employee	3	6	5	4
-by farm supply company or chemical dealer	(Z)	3	5	4
-by independent crop consultant or commercial scout	1	4	9	4
-by operator, partner, employee, or family member	35	44	67	78
-by processor	60	43	13	9
Weather data used to assist decisions	61	65	70	68
Written or electronic records kept to track pest activity	87	57	41	35
Prevention Practices				
Crop acres cultivated for weed control	32	50	58	65
Equipment & implements cleaned after field work to reduce spread of pests	23	34	53	70
Field edges, ditches, or fence lines were chopped, sprayed, mowed, plowed, or burned	37	47	67	61
No-till or minimum till used	27	28	24	27
Plowed down crop residue using conventional tillage	56	53	62	73
Water management practices used	23	36	46	34
Suppression Practices				
Beneficial organisms applied or released	1	1	5	6
Biological pesticides applied	4	12	17	9
Floral lures, attractants, repellants, pheromone traps, or biological pest controls used	1	2	10	8
Ground covers, mulches, or other physical barriers maintained	31	41	49	44
Pesticides with different mechanisms of actions to keep pest from becoming resistant to pesticides	37	35	51	29
Scouting data compared to published information to assist decisions	76	45	37	21
Trap crop grown to manage insects	1	3	6	5

(Z) Less than half the rounding unit.

[1] The 19 program states in the 2016 Vegetable Chemical Use Survey were Arizona, California, Florida, Georgia, Illinois, Indiana, Michigan, Minnesota, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Washington, and Wisconsin.

[2] The 16 program states in the 2018 Vegetable Chemical Use Survey were Florida, Georgia, Illinois, Indiana, Michigan, Minnesota, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, Texas, Washington, and Wisconsin.