



## Wisconsin Ag News – Chemical Use Potatoes - Fall 2022



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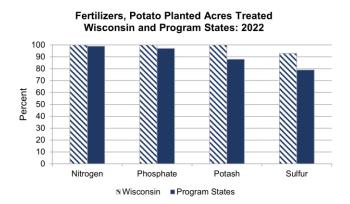
Media Contact: Greg Bussler

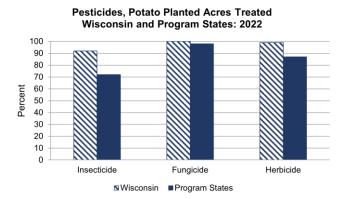
The National Agricultural Statistics Service (NASS) Agricultural Chemical Use Program is the U.S. Department of Agriculture's official source of statistics about on-farm and post-harvest fertilizer and pesticide use and pest management practices.

In the fall of 2022, NASS collected data for the 2022 crop year, the one-year period beginning after the 2021 harvest and ending with the 2022 harvest, about chemical use and pest management practices used on potato production. The data was collected as part of the Agricultural Resource Management Survey (ARMS) and the results are presented here.

Fertilizer Use: Of the three primary macronutrients, potash was the most widely used on potato acres planted in Wisconsin. Farmers applied potash to 100 percent of planted acres at an average rate of 278 pounds per acre per year. Macronutrients nitrogen and phosphate were applied at an average rate of 182 and 92 pounds per acre per year, respectively. The secondary macronutrient, sulfur, was applied to 93 percent of acres planted to potatoes.

Pesticide Use: Fungicide active ingredients were applied to 100 percent of the potato acres planted. Chlorothalonil was the most widely used pesticide on potato acres and was the active ingredient with the greatest total amount applied. Herbicides and insecticides were applied to 99 and 92 percent of potato acres planted in Wisconsin, respectively.





Posticida Usa on Potatogs - Wisconsin and Program States: 2022

		Wisconsin		Program States 1			
Active ingredient	Planted acres treated <sup>2</sup>	Yearly rate	Total applied	Planted acres treated <sup>2</sup>	Yearly rate	Total applied	
	(percent)	(lbs per acre)	(1,000 lbs)	(percent)	(lbs per acre)	(1,000 lbs)	
Fungicide							
Azoxystrobin	42	0.197	6	55	0.174	80	
Boscalid	52	0.315	11	25	0.279	58	
Chlorothalonil	99	3.591	237	64	2.659	1,432	
Mancozeb	26	4.652	82	38	3.148	1,003	
Mefenoxam	37	0.357	9	48	0.264	105	
Triphenyltin hydrox		0.341	11	11	0.281	25	
Total <sup>3</sup>			446	98		4,315	
Herbicide							
Diquat dibromide	97	0.611	40	45	0.448	170	
Linuron	43	0.663	19	16	0.772	104	
Metribuzin	-	0.543	14	63	0.434	228	
Pendimethalin	22	0.712	11	22	0.840	153	
Rimsulfuron		0.018	1	28	0.028	7	
S-Metolachlor		0.984	22	35	1.066	311	
Total <sup>3</sup>	99		151	87		1,770	
Insecticde							
Abamectin	34	0.026	1	22	0.030	5	
Chlorantraniliprole		0.059	(Z)	10	0.075	6	
Lambda-cyhalothrin		0.028	(Z)	24	0.050	10	
Spinetoram		0.066	1	4	0.076	2	
Spinosad	-	0.110	2	2	0.103	2	
Thiamethoxam	50	0.111	4	20	0.120	20	
Total <sup>3</sup>	92	5.111	13	72	5.120	908	
Other Chemicals							
Total <sup>3</sup>	19		1,030	26		24.97	

(Z) Less than half of the unit shown.

The 9 program states surveyed about Potatoes in the 2022 ARMS were Colorado, Idaho, Maine, Michigan, Minnesota, North Dakota, Oregon, Washington, and Wisconsin.

Acres with multiple nutrients are counted in each category.

Total Fungicide, Herbicide, and Insecticide includes pesticides that are not listed in this table.

Fertilizer Use on Potatoes - Wisconsin and Program States: 2022

	Wisconsin			Program states <sup>1</sup>			
Active ingredient	Planted acres treated <sup>2</sup>	Yearly rate	Total applied	Planted acres treated <sup>2</sup>	Yearly rate	Total applied	
	(percent)	(lbs per acre)	(1,000 lbs)	(percent)	(lbs per acre)	(1,000 lbs)	
Nitrogen	100	182	12,200	99	178	147,700	
Phosphate	100	92	6,100	97	132	107,600	
Potash	100	278	18,600	88	215	157,800	
Sulfur	93	63	3,900	79	77	51,000	

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Scouting for diseases was the top pest management practice on potato acreage in Wisconsin.

Pest Management Practices on Potatoes - Wisconsin and Program States: 2022

	Wis	Wisconsin		Program states 1	
	% of area planted	% of operations	% of area planted	% of operations	
Avoidance					
Crop or plant variety chosen for specific pest resistance		53	42	36	
Planting locations planned to avoid cross infestation of pests		63	40	51	
Planting or harvesting dates adjusted		50	32	30	
Rotated crops during past 3 years		94	99	98	
Row spacing, plant density, or row directions adjusted	25	26	48	42	
Monitoring					
Diagnostic laboratory services used for pest detection via soil					
or plant tissue analysis	61	46	48	42	
Field mapping data used to assist decisions		18	21	16	
Scouted -					
established process used	86	74	45	50	
for pests due to a pest advisory warning	36	35	19	16	
for pests due to a pest development model	58	57	26	22	
for pests or beneficial organisms-not scouted	(Z)	3	(Z)	1	
for pests or beneficial organism by conducting general					
observations while performing routine tasks	10	14	16	14	
for pests or beneficial organism by deliberately going to the					
crop acres or growing areas		83	84	86	
Scouted for diseases	99	96	99	98	
by employee		0	0	0	
by farm supply company or chemical dealer		0	0	0	
by independent crop consultant or commercial scout		0	0	0	
by operator, partner, or family member		100	100	100	
Scouted for insects and mites		95	97	96	
by employee		4	17	15	
by farm supply company or chemical dealer		1	2	2	
by independent crop consultant or commercial scout		68	32	38	
by operator, partner, or family member		27	49	45	
Scouted for weeds		94	97	96	
by employee		6	18	17	
by farm supply company or chemical dealer		1	2	2	
by independent crop consultant or commercial scout		68	32	37	
by operator, partner, or family member		24	48	45	
Weather data used to assist decisions		87	82	83	
Written or electronic records kept to track pest activity	91	82	80	81	
Prevention					
Beneficial insect or vertebrate habitat maintained		9	12	14	
Crop residues removed or burned down	9	10	9	9	
Equipment and implements cleaned after field work to reduce					
spread of pests	84	77	89	89	
Field edges, ditches, or fence lines chopped, sprayed, mowed,					
plowed, or burned		68	73	64	
Field left fallow previous year to manage insects		3	9	8	
Flamer used to kill weeds	` '	1	2	3	
No-till or minimum-till used	_	5	10	10	
Plowed down crop residue using conventional tillage		64	81	80	
Seed treated for insect or disease control after purchase		52	89	84	
Water management practices used	74	64	73	58	
Suppression					
Beneficial organisms applied or released	(Z)	1	12	8	
Biological pesticides applied		11	4	5	
Buffer strips or border rows maintained to isolate	·				
organic from non-organic crops	29	30	14	15	
Floral lures, atractants, repellants, pheromone traps,	23			1.5	
or biological pest controls used	(Z)	1	5	5	
Ground covers, mulches, or other physical barriers maintained		55	59	66	
Pesticides with different mechanisms of action to keep pest					
from becoming resistant to pesticides	97	84	79	79	
Scouting data compared to published information to assist decisions	_	0	0	0	
Trap crop grown to manage insects		4	3	4	
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More information and data for the USDA NASS Chemical Use Program can be found at: https://www.nass.usda.gov/Surveys/Guide\_to\_NASS\_Surveys/Chemical\_Use/.

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