United States Department of Agriculture
National Agricultural Statistics Service

Wisconsin Ag News – Chemical Use
Barley: Fall 2023

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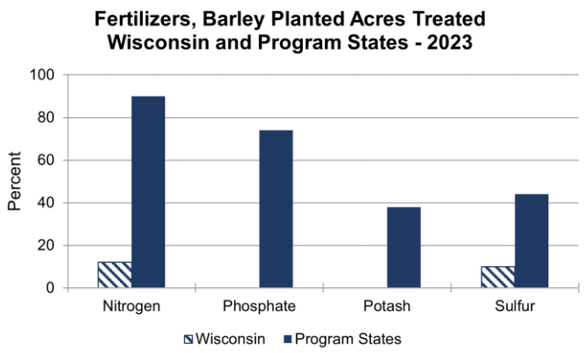
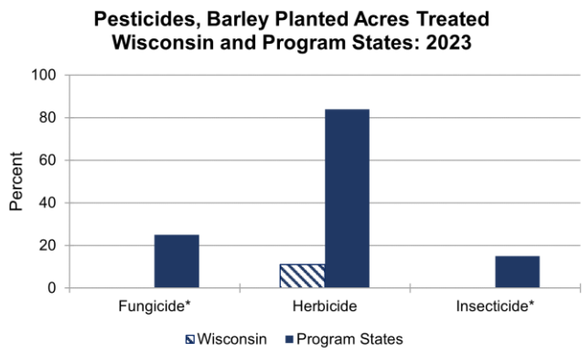
The National Agricultural Statistics Service (NASS) Agricultural Chemical Use Program is the U.S. Department of Agriculture's official source of statistics about on-farm and post-harvest fertilizer and pesticide use and pest management practices.

In the fall of 2023, NASS collected data for the 2023 crop year, the one-year period beginning after the 2022 harvest and ending with the 2023 harvest, about chemical use and pest management practices used on barley 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, nitrogen was the most widely used on barley acres planted in Wisconsin. Farmers applied nitrogen to 12 percent of planted acres at an average rate of 46 pounds per acre per year. The secondary macronutrient, sulfur, was applied to 10 percent of acres planted to barley.

Pesticide Use: Herbicide active ingredients were applied to 11 percent of the barley acres planted.





Pesticide Use on Barley - Wisconsin and Program States: 2023

Active ingredient	Wisconsin			Program states [1]		
	Planted acres treated [2]	Yearly rate	Total applied	Planted acres treated [2]	Yearly rate	Total applied
	(percent)	(lbs per acre)	(1,000 lbs)	(percent)	(lbs per acre)	(1,000 lbs)
Fungicide						
Total [3]	(D)		(D)	25		173
Herbicide						
Total [3]	11		(Z)	84		1,880
Insecticide						
Total [3]	(D)		(D)	15		15

(Z) Less than half of the unit shown.
[1] The 14 program states surveyed about barley in the 2023 ARMS were California, Colorado, Idaho, Minnesota, Montana, North Carolina, North Dakota, Oregon, Pennsylvania, South Dakota, Virginia, Washington, Wisconsin, and Wyoming.
[2] Acres with multiple nutrients are counted in each category.
[3] Total Fungicide, Herbicide, and Insecticide include pesticides not listed in the table.

Fertilizer Use on Barley – Wisconsin and Program States: 2023

Active ingredient	Wisconsin			Program states [1]		
	Planted acres treated	Yearly rate	Total applied	Planted acres treated	Yearly rate	Total applied
	(percent)	(lbs per acre)	(1,000 lbs)	(percent)	(lbs per acre)	(1,000 lbs)
Nitrogen	12	46	100	90	68	182,400
Phosphate	(D)	(D)	(D)	74	36	78,600
Potash	(D)	(D)	(D)	38	26	29,000
Sulfur	10	25	(Z)	44	16	20,500

(D) Withheld to avoid disclosing data for individual operations.
(Z) Less than half of the unit shown.
[1] The 14 program states surveyed about barley in the 2023 ARMS were California, Colorado, Idaho, Minnesota, Montana, North Carolina, North Dakota, Oregon, Pennsylvania, South Dakota, Virginia, Washington, Wisconsin, and Wyoming.

Pest Management Practices on Corn – Wisconsin and Program States: 2023

	Wisconsin		Program states [1]	
	% of area planted	% of operations	% of area planted	% of operations
Avoidance				
Crop or plant variety chosen for specific pest resistance	4	3	26	23
Planting locations planned to avoid cross infestation of pests	11	15	28	26
Planting or harvesting dates adjusted	28	13	23	22
Rotated crops during past 3 years	99	95	84	84
Row spacing, plant density, or row directions adjusted	22	6	31	23
Monitoring				
Diagnostic laboratory services used for pest detection via soil or plant tissue analysis	21	5	11	7
Field mapping data used to assist decisions	21	6	21	17
Scouted -				
established process used	23	7	13	10
for pests due to a pest advisory warning	3	2	8	6
for pests due to a pest development model	4	3	6	7
for pests or beneficial organisms-not scouted	29	24	6	12
for pests or beneficial organism by conducting general observations while performing routine tasks	26	51	23	31
for pests or beneficial organism by deliberately going to the crop acres or growing areas	45	24	71	57
Scouted for diseases	18	17	79	67
Scouted for insects and mites	24	16	79	68
Scouted for weeds	55	52	92	84
Weather data used to assist decisions	5	5	62	50
Written or electronic records kept to track pest activity	9	8	41	34
Prevention				
Beneficial insect or vertebrate habitat maintained	9	7	17	17
Crop residues removed or burned down	26	19	11	13
Equipment and implements cleaned after field work to reduce spread of pests	44	33	65	55
Field edges, ditches, or fence lines chopped, sprayed, mowed, plowed, or burned	28	30	41	43
Field left fallow previous year to manage insects	0	0	10	7
Flamer used to kill weeds	0	0	2	2
No-till or minimum-till used	38	44	59	54
Plowed down crop residue using conventional tillage	50	47	26	32
Seed treated for insect or disease control after purchase	1	1	53	39
Water management practices used	3	4	16	19
Suppression				
Beneficial organisms applied or released	0	0	3	2
Biological pesticides applied	0	0	5	3
Buffer strips or border rows maintained to isolate organic from non-organic crops	18	19	10	12
Floral lures, attractants, repellants, pheromone traps, or biological pest controls used	0	0	2	1
Ground covers, mulches, or other physical barriers maintained	36	46	54	54
Pesticides with different mechanisms of action to keep pest from becoming resistant to pesticides	3	3	35	26
Scouting data compared to published information to assist decisions	0	0	0	0
Trap crop grown to manage insects	0	0	1	1

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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/.