



MONTANA 2024 BARLEY VARIETIES

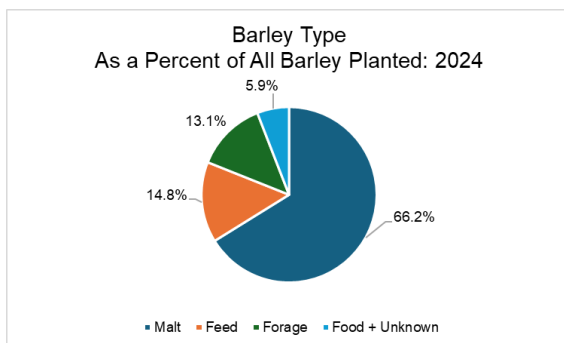
HIGHLIGHTS

This report provides the results of the barley portion of the 2024 Wheat and Barley Variety Survey, conducted by the National Agricultural Statistics Service, Mountain Regional Office, USDA. The survey was funded by the Montana Wheat and Barley Committee. Access to this report is available for free or online at www.nass.usda.gov/mt. Thank you to each person who supplied data, and made this report possible.

All variety acreage numbers in this publication are based on survey averages. Survey respondents totaled 1,956 with 1,694 usable reports for both wheat and barley. Usable, positive barley reports totaled 578. At the district level, the number of reports for minor varieties is generally limited. Thus, yearly fluctuations in the district variety acreage may be the result of sample variation.

Total area seeded to barley in Montana for 2024 is estimated at 920,000 acres, down from 1.19 million acres planted in 2023. Montana continues to rank first in barley planted acreage in the United States, with 38.3 percent of the 2.41 million acres planted. Malting varieties account for 66.2 percent of planted acres in Montana. Feed varieties totaled 14.8 percent and forage varieties totaled 13.1 percent. Varieties reported in the other and unknown categories totaled 6.0 percent of planted acres.

AC Metcalfe remains the leading barley variety in Montana for 2024, accounting for 25.4 percent of the 920,000 acres planted in 2024. Hockett ranks second with 12.4 percent of the barley acreage. Bill Coors 100 represents 10.6 percent of the barley planted, and ranks third. AAC Synergy ranks fourth with 5.6 percent of barley planted. Haxby accounts for 5.0 percent of the barley acres, and ranks fifth. These top five varieties account for 58.9 percent of the barley planted in 2024.



TOP MALTING VARIETIES

AC Metcalfe is once again the leading malting barley variety in Montana for 2024, representing 25.4 percent of all acres seeded, as noted above. It is a two-row malting barley developed by Agriculture and Agri-Food Canada, located in Brandon, Manitoba. It has an 8 percent higher yield, but matures one day later than Harrington. It is resistant to loose smut, and is moderately resistant to the spot-form of net blotch, surface-borne smuts, and common root rot. It has plump kernels and high test weight, but it is susceptible to scald and Septoria.

Hockett is the second leading malting barley variety in 2024, planted on 12.4 percent of the total barley acres. Hockett is a two-rowed dry land variety that was developed by Montana State University (MSU) in 2008. When compared to Harrington, Hockett has a higher yield and better malt quality given dry land conditions. It is susceptible to lodging and stripe rust.

Bill Coors 100 ranked third among malting barley varieties seeded for 2024, planted on 10.6 percent of the total acres. Bill Coors 100 is well suited for irrigation. It has a short straw length, with high yield and early maturity. It is a two-row variety leaving minimal stubble and residue.

AAC Synergy is the fourth leading malting barley variety seeded for the 2024 crop year. An estimated 5.6 percent of all barley is planted to this variety. It is a two-row malting barley, and is adapted to growing in regions of the northern plains. It has a great yield potential, and a favorable quality profile for the malt market.

Conlon is the fifth leading malting barley variety seeded for the 2024 crop year. An estimated 3.4 percent of all barley is planted to this variety. Conlon is a two-rowed variety with large, plump kernels. It was developed at the North Dakota Agricultural Experiment Station. It has high test weight, medium straw length, and mid-season maturity. It is resistant to net blotch, the MCC form of stem rust, and powdery mildew.

TOP FEED VARIETIES

Haxby is again the leading feed barley variety planted in 2024, representing 5.0 percent of all barley acreage. Haxby is a two-rowed barley developed by MSU. Yields are equal to Baronesse and Eslick, and are higher than Gallatin and Valier varieties. It is medium height and maturity, and has superior performance in low moisture conditions. Haxby has high test weights in both dry land and irrigated areas.

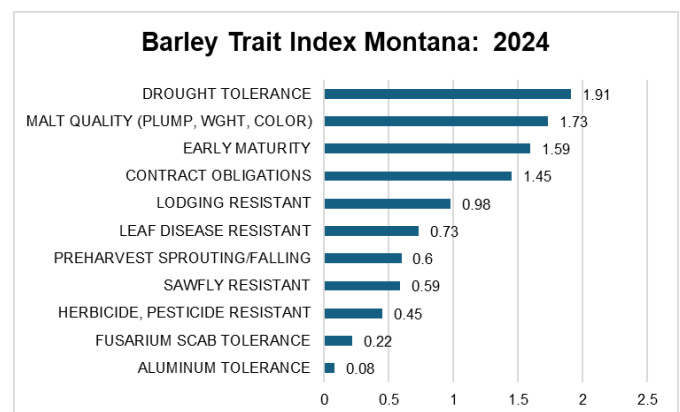
Claymore ranked second for feed varieties planted in 2024, at 2.5 percent of all barley acres seeded. It is a two-row, bearded barley with high-test weight, medium height, excellent yield, superior straw strength, excellent standability, and Fusarium head blight tolerance.

Champion is the third leading Montana feed barley variety in 2024, accounting for 2.2 percent of the 2024 planted barley acres. Champion was developed by WestBred LLC, Bozeman, Montana in 1997. It is a cross between Baronesse and Camas. It is a two-row spring barley that has a semi-erect to intermediate growth habit. Champion has fair to good resistance to lodging and shattering. It also shows strengths to neck breaking and drought.

Montana Top 3 Feed Barley Varieties	
Variety	Percent of Acres Planted
Haxby	5.0
Claymore	2.5
Champion	2.2

IMPORTANCE OF BARLEY VARIETY TRAITS

Survey respondents were asked to rank barley traits in order of importance where 5.00 is the highest and 1.00 is the lowest when choosing a barley variety for 2024. Drought tolerance was rated highest with 1.91 points out of 5.00. Malt quality was rated second with 1.73 points. Early maturity was rated third with 1.59 points. Contract obligations and lodging resistance were rated fourth and fifth, with 1.45 and 0.98 points, respectively. These, and all traits asked on the survey, are illustrated in the chart below.



Montana Top 5 Malting Barley Varieties	
Variety	Percent of Acres Planted
AC Metcalfe	25.4
Hockett	12.4
Bill Coors 100	10.6
AAC Synergy	5.6
Conlon	3.4

TOP FORAGE VARIETIES

Lavina is the top forage barley variety planted in 2024, seeded on 3.8 percent of the total barley acres planted. It is a two-rowed, hooded hay barley developed by MSU, and is a cross between Haybet and Baronesse varieties. Lavina was released as a replacement for Haybet with the attributes of slightly higher forage production potential, and much higher grain production potential.

Haybet is the second rated forage variety planted by Montana farmers, accounting for 3.5 percent of the total barley acres seeded in 2024. It was developed cooperatively by the Agricultural Research Service, USDA, and the Montana Agricultural Experiment Station in 1989. It is a two-rowed, hooded, white-kernel spring hay barley. Compared to Horsford hay barley, Haybet is 3 days later in heading, and similar in plant height and percent lodging. Haybet is higher in hay yield than Horsford, but they are similar in grain yield.

Haymaker once again ranks third among all forage barley acres planted for 2024, with 2.3 percent of all barley planted to this variety. Haymaker is a two-row forage barley exhibiting high yields with excellent feed quality. Because of its height, it is great for baling and silage.

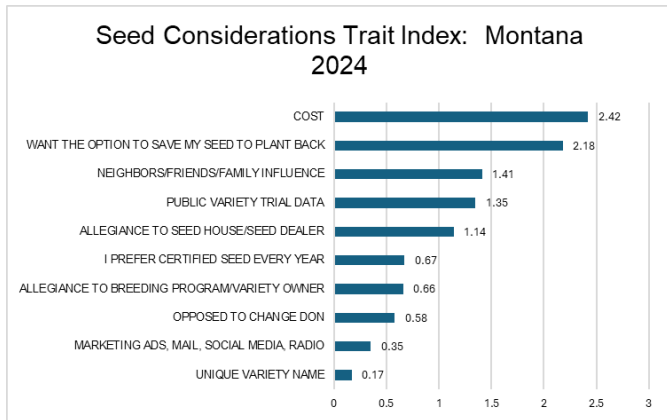
Stockford ranks fourth among forage barley acres planted, with 0.7 percent of all barley planted acres. Stockford is a two-row hooded hay barley. It is medium tall, and matures mid-season. It was developed by WestBred, and is adapted to the intermountain area of the Pacific Northwest and western areas of Canada.

Redrock ranks fifth among forage varieties, at 0.4 percent of total planted acres in Montana for 2024. Redrock is an excellent forage variety. It is a two-row hooded variety with high yield, and has great standability when irrigated.

Montana Top 5 Forage Barley Varieties	
Variety	Percent of Acres Planted
Lavina	3.8
Haybet	3.5
Haymaker	2.3
Stockford	0.7
Redrock	0.4

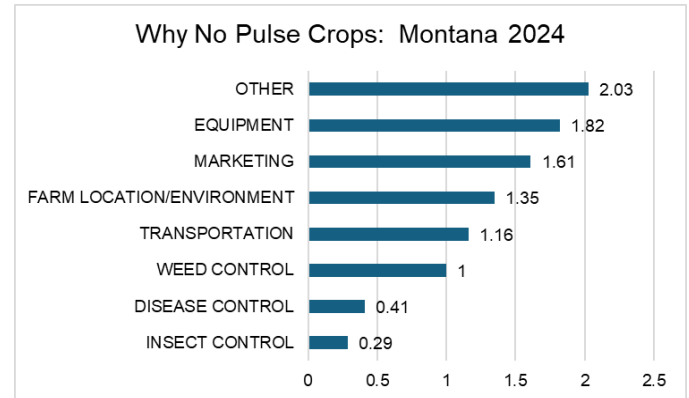
SEED CONSIDERATIONS

Growers of both barley and wheat were asked about the factors they consider when purchasing and planning for seed. Growers ranked these factors in order of importance, where 5.00 is the highest and 1.00 is the lowest. Cost was rated highest, with 2.42 points out of 5.00. This was followed by wanting the option to save seed, at 2.18 points. The influence of neighbors, friends, or family was rated third, at 1.41 points. Public variety trial data was rated fourth, with 1.35 points. Allegiance to breeding program or variety owner was rated fifth at 1.14 points. These, and all other seed considerations listed on the survey, are illustrated on the following chart.



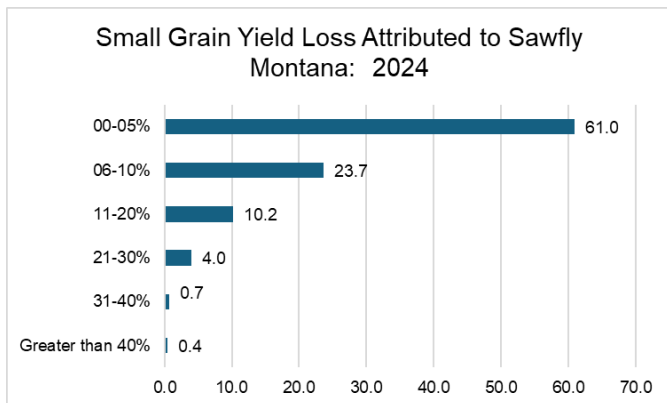
REASONS FOR NOT GROWING PULSE CROPS

Lastly, farmers were asked if they raise pulse crops. If growers answered no, they were asked to rank the top five reasons why they are not growing pulse crops, where 5.00 is the highest and 1.00 is the lowest. Other was in first place with 2.03 out of 5.0 points. Equipment was ranked second with 1.82 points. Marketing was ranked third, with an average of 1.61 points. Farm location or environment, and transportation were ranked fourth and fifth, at 1.35 and 1.16 points, respectively. These, and all other reasons listed on the survey, as well as their rankings, are illustrated in the chart below.

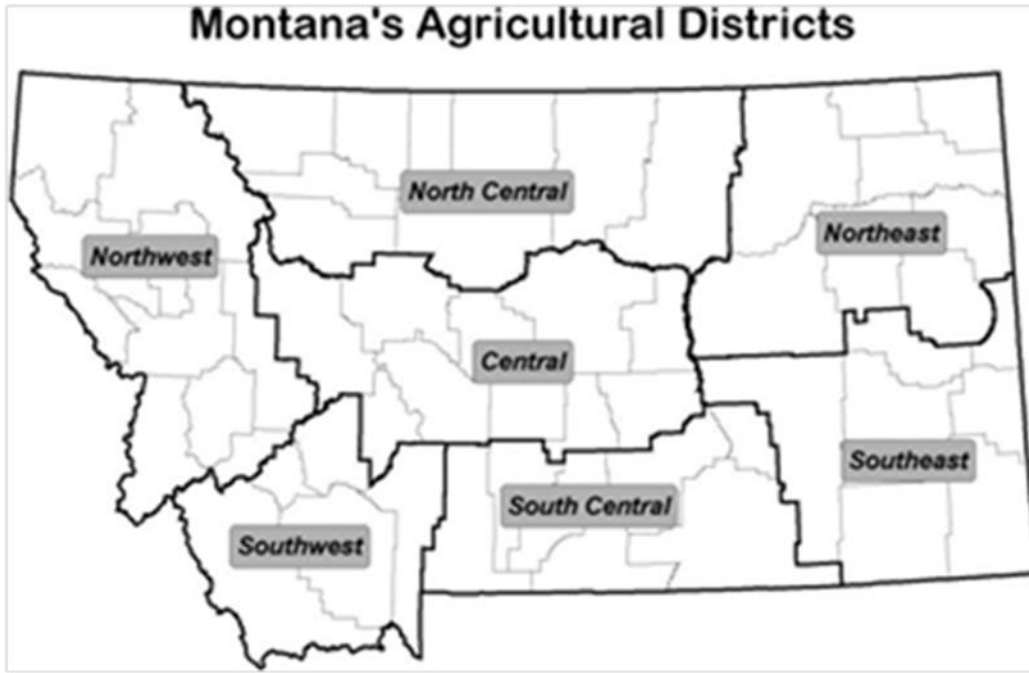


YEARLY ANTICIPATED SMALL GRAIN YIELD LOSS ATTRIBUTED TO SAWFLY

Growers were also asked about their yearly anticipated small grain yield loss that is attributed to sawfly. Sixty-one percent of growers reported that 0-5% of small grain yield is lost to sawfly. This was followed by 23.7 percent of growers who reported that 6-10 percent of small grain yield is lost to sawfly. Growers reporting that 11-20 percent of yield is lost to sawfly were 10.2 percent of the sample. Loss of 31-40 percent was reported by 0.7 percent of growers, and loss of 40 percent or higher was reported by 0.4 percent of growers. Percentages of yearly anticipated grain yield loss attributed to sawfly are illustrated on the graph below.



Montana's Agricultural Districts



Barley: Reported Percent Planted by District and Variety – Montana: 2024

Variety ¹	District 10 Northwest	District 20 North Central	District 30 Northeast	District 50 Central	District 70 Southwest	District 80 South Central	District 90 Southeast	State Total
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
AC Metcalfe	--	34.1	--	17.3	--	--	--	25.4
Hockett	--	15.6	--	13.1	--	--	--	12.4
Bill Coors 100.....	--	9.5	--	7.9	--	44.6	3.3	10.5
AAC Synergy	--	5.1	--	4.1	14.8	17.5	--	5.6
Haxby	28.0	3.8	5.8	12.7	--	--	--	5.0
Lavina	8.3	2.8	10.8	4.1	--	2.1	21.1	3.8
Haybet	--	1.1	20.0	6.5	--	--	17.4	3.5
Conlon	--	3.0	--	10.0	--	--	--	3.4
Moravian 165	--	4.8	--	--	--	--	--	3.4
Claymore	--	2.1	--	--	--	--	--	2.5
Haymaker	0.3	0.6	15.0	3.3	--	2.1	--	2.3
Champion	--	--	--	--	--	--	--	2.2
Mayflower	--	--	--	--	--	--	--	1.3
ABI Eagle.....	--	1.9	--	--	--	--	--	1.3
Altorado	--	--	--	--	--	--	--	1.0
ABI Voyager.....	--	0.9	--	--	--	--	--	0.9
Stockford.....	--	--	6.3	--	5.4	0.4	--	0.7
Expedition	--	0.6	--	--	--	--	--	0.5
Baronesse.....	--	--	--	--	--	--	--	0.4
Redrock	--	0.4	--	--	--	1.7	--	0.4
LCS Genie	--	--	--	--	--	--	--	0.3
Vaquero	--	--	--	1.3	--	--	--	0.2
Westford	--	--	--	0.5	--	--	--	0.2
Other, Unknown ² ..	63.4	13.7	42.1	19.2	79.8	31.6	58.2	12.8
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(--) No data, minor amount reported, or withheld to avoid disclosing data for individual operations.

¹⁾ AAC=Agriculture and Agri-foods Canada, ABI=Bush Agricultural Resources, AC=Agri-foods Canada, LCS=Limagrain Cereal Seeds, MT=Montana State University.

²⁾ Other, Unknown includes Bestford, Bowman, Buzz, Connect, Copland, Esma, Harrington, Hector, Horsford, Legacy, MT Cowgirl, Stark, and Vespa, Other, and Unknown varieties.