



## MONTANA 2022 BARLEY VARIETIES

### HIGHLIGHTS

This report provides the results of the barley portion of the 2022 Wheat and Barley Variety Survey, conducted by the National Agricultural Statistics Service, Mountain Regional Office. 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](http://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 2,044 with 1,821 usable reports for both wheat and barley. Usable positive barley reports totaled 618. 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 acres of barley seeded in Montana for 2022 are estimated at 1,090,000, up from 940,000 acres planted in 2021. Montana continues to rank first in barley planted acreage in the United States with 35.8 percent of the 3.05 million acres planted. Malting varieties account for 68.1 percent of planted acres in Montana. Forage varieties totaled 13.1 percent and feed varieties totaled 10.6 percent.

**AC Metcalfe** is the leading barley variety in Montana for 2022. AC Metcalfe accounts for 31.1 percent of the 1,090,000 acres of barley planted in 2022. Hockett ranks second with 15.9 percent of the barley acreage. Haxby ranked third with 6.8 percent of barley planted. Bill Coors 100 ranked fourth with 5.7 percent of barley planted. Haybet represents 4.4 percent of the barley planted and ranks fifth. These top five varieties account for 63.9 percent of the barley planted in 2022.

### TOP MALTING VARIETIES

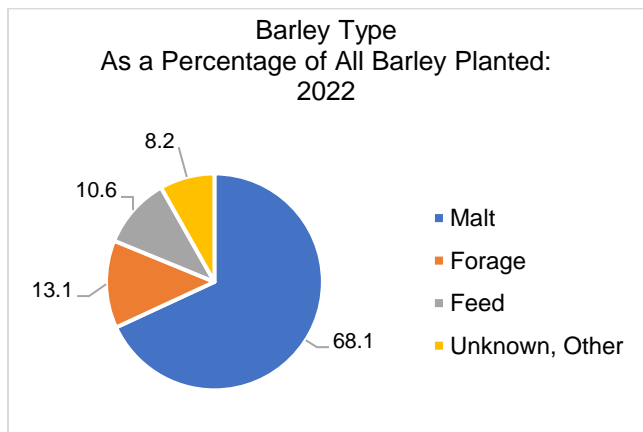
**AC Metcalfe** is also the leading malting barley variety in Montana for 2022, representing 31.1 percent of all acres seeded, as noted above. It is a two-row malting barley developed by Agriculture and Agri-Food Canada, located in Brandon, Manitoba. It has an 8 percent higher yield, but matures one 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 2022, planted on 15.9 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 2022, planted on 5.7 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.

**Moravian 165** is the fourth leading malting barley variety seeded for the 2022 crop year. An estimated 3.4 percent of all barley is planted to this variety. It is a two-rowed variety bred by Coors Brewing Company. It is a small-stature, high yielding variety suited for dryland ground and has a high malting quality. It originated as a cross between Moravian 119 and CDC Kendall.

**Conlon** ranked fifth among the malting varieties planted for 2022 and represents 2.8 percent of all barley varieties planted. 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, medium straw strength, and mid-season maturity. It is resistant to net blotch, the MCC form of stem rust, and powdery mildew.



## TOP FEED VARIETIES

Montana Top 5 Malting Barley Varieties	
Variety	Percent of Acres Planted
AC Metcalfe	31.1
Hockett	15.9
Bill Coors 100	5.7
Moravian 165	3.4
Conlon	2.8

## TOP FORAGE VARIETIES

**Haybet** is the top forage variety planted by Montana farmers, accounting for 4.4 percent of the total barley acres seeded in 2022. 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.

**Lavina** is the second most common forage barley variety planted in 2022, seeded on 4.0 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.

**Haymaker** ranked third among all forage barley acres planted for 2022, with 1.5 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.

**Bestford** ranks fourth among forage varieties at 1.1 percent of total planted acres in Montana for 2022. Bestford is a 6-row beardless variety with standard plant height, excellent yield potential, and good straw strength. Bestford has a high leaf to stem ratio which results in better forage.

**Stockford** ranked fifth among forage barley acres planted, with 0.2 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.

Montana Top 5 Forage Barley Varieties	
Variety	Percent of Acres Planted
Haybet	4.4
Lavina	4.0
Haymaker	1.5
Bestford	1.1
Stockford	0.2

**Haxby** is the leading feed barley variety planted in 2022 on 6.8 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.

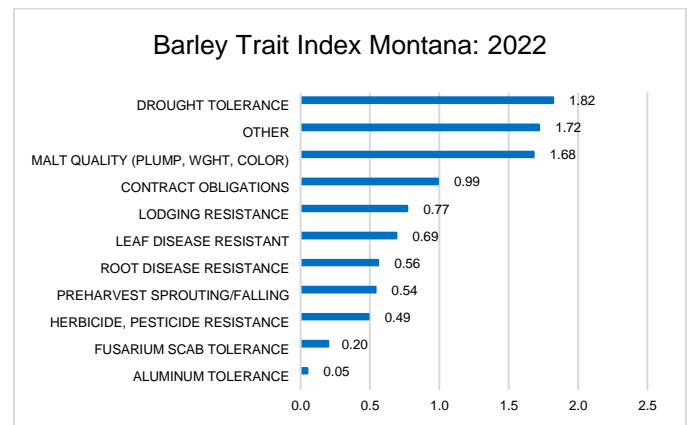
**Champion** is the second leading Montana feed barley variety in 2022, accounting for 1.1 percent of the 2022 planted barley acres. Champion was developed by WestBred LLC, Bozeman, Montana in 1997. It is a cross between Baronesse and Camas. It is a two-row spring barley that has a semi-erect to intermediate growth habit. Champion has fair to good resistance to lodging and shattering. It also shows strengths to neck breaking and drought.

**Baronesse** ranked third among feed varieties with 0.5 percent of all barley acres planted in 2022. It is a two-rowed feed variety, medium short in height and medium in maturity. It has a short, strong straw and good lodging resistance. It is both a dryland and irrigated variety, with higher yield potential when irrigated or when moisture is favorable.

Montana Top 3 Feed Barley Varieties	
Variety	Percent of Acres Planted
Haxby	6.8
Champion	1.1
Baronesse	0.5

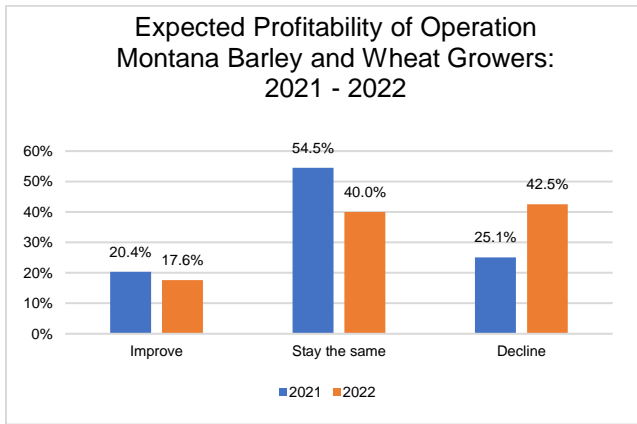
## IMPORTANCE OF BARLEY VARIETY TRAITS

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 2022. Drought tolerance was the highest ranked trait of importance with an average of 1.82 points out of 5.00. Other was ranked second with an average of 1.72 points. Malt quality was ranked third with an average of 1.68 points. Contract obligations was fourth at 0.99 points. These and all traits asked on the survey are illustrated in the chart below.



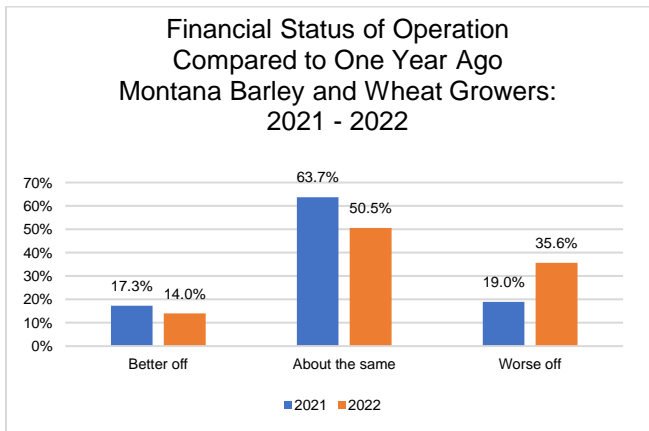
## PROFITABILITY OF OPERATION

Growers of both barley and wheat were asked about their expectations concerning the profitability of their operation over the next twelve months. Farmers who reported the profitability of their operation would be better off was 17.6 percent. This compares to 20.4 percent last year. No change in profitability of their operation was expected by 40.0 percent of farmers, compared to 54.5 percent last year. Farmers who expected their operation would decline stood at 42.5 percent. Last year farmers who expected their profitability would decline stood at 25.1 percent. Some farmers indicated drought, pests, and market conditions affected their answers.



## FINANCIAL COMPARISON TO ONE YEAR AGO

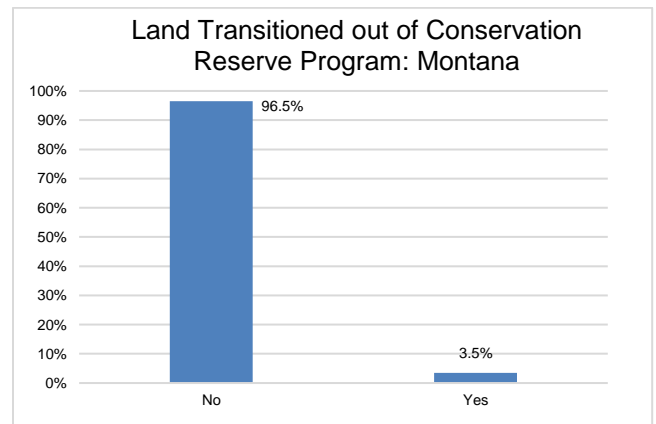
Growers of both barley and wheat were asked about the financial status of their operation compared to the previous year. Farmers who reported their operation was better off stood at 14.0 percent, compared to 17.3 percent last year. Farmers who reported their operation was about the same came to 50.5 percent, compared to 63.7 percent last year. Those who said their operation was worse off financially stood at 35.6 percent. Last year, 19.0 percent said their operation was worse off financially than in the previous year.



## LAND TRANSITIONED OUT OF THE CONSERVATION RESERVE PROGRAM TO CERTIFIED ORGANIC PRODUCTION

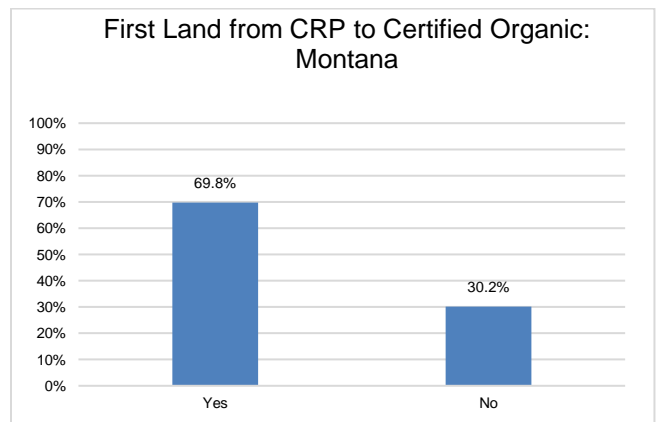
Farmers were asked if they had transitioned land coming out of the Conservation Reserve Program into certified organic production at any time. Farmers answering yes to transitioning land out of CRP to certified organic stood at 3.5 percent. The remainder, 96.5 percent, had not transitioned any land to certified organic production.

Farmers who answered yes to transitioning acres from the Conservation Reserve Program to certified organic were then asked to report the number of acres they had transitioned. The total number of acres transitioned to organic among wheat and barley growers in Montana is estimated to be about 72,000 acres. This is only an estimate of land transitioned among wheat and barley growers in Montana, and is not representative of all farmers and ranchers in Montana.



## FORMER CONSERVATION RESERVE PROGRAM LAND TO ORGANIC THE FIRST LAND THAT WAS CERTIFIED

Farmers who transitioned land out of CRP to certified organic were asked if the land transferred was the first land that was certified. Farmers who answered yes stood at 69.8 percent. Farmers who answered no stood at 30.2 percent.



## Barley: Reported Percent Planted by District and Variety, Montana 2022

Variety	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
	%	%	%	%	%	%	%	%
AC Metcalfe	--	39.8	--	37.8	16.1	--	--	31.1
Hockett	--	22.6	--	8.0	--	--	--	15.9
Haxby	43.7	5.6	--	7.0	--	--	--	6.8
Bill Coors 100	--	3.2	--	3.3	--	35.0	--	5.7
Haybet	--	2.6	22.7	1.1	--	--	12.1	4.4
Lavina	10.3	2.9	4.9	5.3	1.0	8.3	8.6	4.0
Moravian 165	--	4.5	--	--	--	4.2	--	3.4
Conlon	--	--	--	10.8	--	--	--	2.8
Haymaker	--	0.7	3.3	3.5	--	0.3	--	1.5
Buzz	--	2.4	--	--	--	--	--	1.5
AAC Synergy	--	--	--	--	12.2	12.7	--	1.4
Merit 57	--	2.2	--	--	--	--	--	1.4
Mayflower	--	1.4	--	--	--	--	--	1.3
Bestford	--	--	--	--	--	--	--	1.1
Champion	--	--	5.8	--	--	--	--	1.1
ABI Voyager	--	0.5	--	--	10.1	--	--	0.9
ABI Eagle	--	0.7	--	--	--	--	--	0.5
Baronesse	--	0.4	--	--	--	--	--	0.5
Copeland	--	--	1.5	--	--	--	--	0.4
Stockford	--	--	--	0.4	3.4	--	--	0.2
Conrad	--	--	--	--	--	2.8	--	0.2
Horsford	--	--	--	--	--	--	--	0.2
Other, Unknown <sup>1</sup>	46.0	10.5	61.8	22.8	57.2	36.7	79.3	13.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

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

<sup>1</sup> Other, Unknown includes Bowman, Harrington, Hector, LCS Genie, LCS Vespa, Legacy, Stark, Other, and Unknown varieties.

## Montana's Agricultural Districts

