

2-ROW SPRING

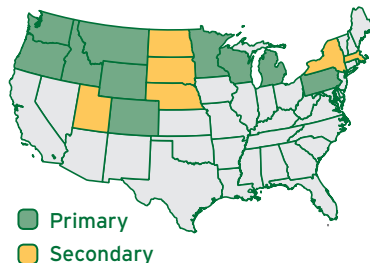
LCS Genie



The Genie Is in the Bottle

With a malting profile tailored for the craft industry and yield levels comparable with feed varieties, LCS Genie is a favorite of brewers, maltsters and farmers alike.

Areas of Adaptation



Malting & Brewing LCS Genie

Malting Specifications

Specification	2016 LCS ¹ Fort Collins, Colorado	2016 MSU ² Bozeman, Montana	2015 MSU ³ Combined Michigan	2013 AMBA ⁴ Idaho Falls, Idaho	2013 AMBA ⁴ Pullman, Washington
	Barley				
Plump (On 6/64) (%)	93.2	99.9	97.5	96.6	92.4
Moisture (%)	10.8	-	15.1	8.0	8.3
Total Protein (% d.b.)	10.9	-	11.0	11.0	11.6
Pre-Harvest Sprouting (RVA)	158	-	115	-	-
DON (ppm)	< 0.1	-	0.1	-	-
Malt					
Extract, Fine Grind (% d.b.)	81.8	79.6	83.2	82.7	80.4
Wort Color (Deg. Lov.)	1.57	2.00	2.55	3.40	1.60
Diastatic Power (Deg. L)	137	173	103	143	153
Alpha Amylase (D.U.)	54.7	50.1	59.6	60.0	61.4
Soluble Protein (% d.b.)	4.40	4.15	4.28	5.40	4.50
Total Protein (% d.b.)	10.9	13.2	10.7	11.6	11.9
Soluble/Total Protein (% d.b.)	40.4	32.4	42.8	46.9	38.0
Beta-Glucan (ppm)	66	67	36	48	51
Free Amino Nitrogen (FAN)	175	151	206	230	168

Malt House Analysis¹

Chitting (%)	Steep Out Moisture (%)	Malt Yield (%)	96-Hour Acrospire Count				
			0-1/4	>1/4-1/2	>1/2-3/4	>3/4-1	>1
95	46.8	90.5	0	0	5	90	5

¹ LCS data, obtained from Hartwick College:

hartwick.edu/about-us/centers-institutes/center-for-craft-food-and-beverage/

² Data obtained from Montana State University: plantsciences.montana.edu/crops/index.html

³ Data obtained from Michigan State University: msue.anr.msu.edu/topic/malting_barley/research

⁴ Data obtained from the American Malting Barley Association: ambainc.org/

By the Numbers

Dependable fine grind extract
81.5+% d.b.

Recommended

variety by the American Malting Barley Association (AMBA)

Beta-glucan

content consistently under 100 ppm



Unauthorized propagation prohibited. U.S. Protected Variety – 1994 PVPA. Single-season use grower agreement required.



970.498.2200

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Growing LCS Genie

Yield & Protein Content

MEAN ▶		
3-Year WSU High Rainfall	LCS Genie 109.8 bu/ac yield Trial Avg. 101.9 bu/ac	108% of mean
	Associated protein content: 11.8%	
3-Year WSU Med. Rainfall	LCS Genie 80.8 bu/ac yield Trial Avg. 76.3 bu/ac	106% of mean
	Associated protein content: 12.6%	
3-Year WSU Low Rainfall	LCS Genie 63.3 bu/ac yield Trial Avg. 59.1 bu/ac	107% of mean
	Associated protein content: 13.8%	
2-Year OSU	LCS Genie 84.3 bu/ac yield Trial Avg. 80.3 bu/ac	105% of mean
	Associated protein content: 12.2%	
2016 UI North	LCS Genie 121.0 bu/ac yield Trial Avg. 111.7 bu/ac	108% of mean
	Associated protein content: N/A	
3-Year UI South	LCS Genie 131.7 bu/ac yield Trial Avg. 126.3 bu/ac	104% of mean
	Associated protein content: 11.5%	
2016 MSU (MT) Irrigated	LCS Genie 127.3 bu/ac yield Trial Avg. 112.0 bu/ac	114% of mean
	Associated protein content: 10.0%	
2016 MSU (MT) Dryland	LCS Genie 97.3 bu/ac yield Trial Avg. 86.6 bu/ac	112% of mean
	Associated protein content: 11.5%	
2016 UMN	LCS Genie 98.7 bu/ac yield Trial Avg. 94.4 bu/ac	105% of mean
	Associated protein content: N/A	
3-Year MSU (MI)	LCS Genie 74.1 bu/ac yield Trial Avg. 72.7 bu/ac	102% of mean
	Associated protein content: 11.0%	

Agronomic Features

University of Idaho South				Oregon State		
	TW (lb/bu)	Height (in)	Heading		TW (lb/bu)	Height (in)
LCS Genie	49.7	26.7	3.2	LCS Genie	50.4	25.3
CDC Copeland	49.1	34.3	0.5	Full Pint	53.5	25.2
AAC Synergy	48.5	32.7	-1.1	CDC Copeland	50.3	29.0
AC Metcalfe	50.0	33.7	-1.5	AAC Synergy	52.8	29.4
Moravian 69	46.0	27.0	3.2			

Montana State						
	Irrigated			Dryland		
	TW (lb/bu)	Height (in)	Heading	TW (lb/bu)	Height (in)	Heading
LCS Genie	53.7	27.2	3.2	53.9	24.5	3.4
CDC Copeland	53.9	31.9	2.2	53.3	27.8	1.3
AC Metcalfe	54.0	32.6	-1.8	53.6	29.5	-1.1
AAC Synergy	52.5	31.7	0.2	53.0	28.7	-0.5

University of Minnesota			
	Lodging (1-9)	Height (in)	Heading (DOM*)
LCS Genie	2.5	30.6	4.8
ND Genesis	3.2	35.2	-0.9
AC Metcalfe	4.9	35.0	0.6
AAC Synergy	3.7	34.2	1.1

Michigan State				
	TW (lb/bu)	Height (in)	Heading (DOM*)	PHS (RVA)
LCS Genie	50.7	22.2	0.7	115.3
CDC Copeland	37.2	24.0	1.7	77.8
AC Metcalfe	50.3	25.6	-1.0	51.7
AAC Synergy	50.4	24.7	-1.7	36.7

Washington State				
		TW (lb/bu)	Height (in)	Heading (DOM*)
High Rainfall	LCS Genie	52.3	28.3	8.0
	CDC Copeland	51.4	38.0	8.4
Medium Rainfall	LCS Genie	53.1	26.3	2.5
	CDC Copeland	51.6	35.0	3.5
Low Rainfall	LCS Genie	53.3	25.5	1.0
	CDC Copeland	52.5	34.0	3.0

Data sets are available in their entirety at individual university websites. Links to these websites are listed on **page 32** of this guide. *Days off mean of trial