

WINTER MALTING BARLEY TRIAL – 2022 RESULTS
Hickory Corners, Michigan

Variety	Yield (bu/A)	Test Weight (lbs/bu) #	Heading Date	Height (inch)
13ARS503-1	127.9	53.0	5/25	30.7
13ARS506-8	128.0	51.7	5/28	27.0
13ARS514-5	97.1	49.5	5/30	24.3
2MW18_4462-008	108.7	50.5	5/26	35.3
AC 15/172/43	121.0	50.0	5/25	33.7
Amaze 10*~	96.6	58.7	5/27	34.7
Avalon	105.2	53.9	5/27	36.7
Charles	113.4	47.6	5/27	27.3
Dementiel*	134.7	51.0	5/27	30.7
DH0214-007	107.2	51.0	5/26	30.3
DH02FL-028	103.5	49.4	5/30	30.7
DH141222	117.4	51.6	5/26	28.7
DH141225	113.3	52.7	5/27	31.3
DH141917	121.3	49.9	5/30	30.7
Endeavor	121.1	52.3	5/30	33.0
Flavia	105.0	51.2	5/27	28.3
Hirondella*	104.7	49.0	5/29	31.0
KWS Donau	122.6	51.3	5/30	31.0
KWS Faro*	121.8	50.8	5/25	30.3
KWS Somerset	111.8	51.3	5/30	32.3
LCS Calypso	105.6	48.5	5/27	31.0
LCS Puffin	100.6	51.8	5/27	27.7
LCS Violetta	104.2	51.6	5/27	29.7
Lyberac	114.7	50.8	5/28	28.7
Marouetta*	125.5	49.0	5/25	33.3
MW12_4007-001	122.2	49.5	5/22	34.7
Nomini**	66.9	48.5	5/20	36.7
Pixel*	133.1	47.6	5/27	30.3
RIL02FL-029	110.5	52.2	5/30	34.7
RIL02WI-013	107.2	49.7	5/29	33.7
SC 104865*	112.3	50.0	5/25	31.0
SC 113669*	110.8	50.7	5/26	32.7
Secretariat	97.5	49.6	5/23	30.3
Teepee	119.4	51.3	5/29	30.7
Thoroughbred*	125.7	51.6	5/25	34.3
VA15H-73 2R~	96.2	58.2	5/27	35.0
VA16BFHB-268 NA**	58.5	49.2	5/20	38.3
VA16M-84	109.0	53.0	5/30	37.0
VA17M-13DH1720*	116.4	49.8	5/26	31.7
VA19M-16DH2261	100.4	53.7	5/26	31.3
VA20MFHB-18DH541	114.8	51.0	5/27	29.3
Wintmalt	110.3	51.2	5/30	30.7
Grand Mean	110.6	51.1	5/26	31.7
STDEV	14.6	2.2	2.4	2.9

HICKORY CORNERS

Planting date: 10/20/2021

Fertility: 10/19/2021 – 30 lbs N/acre, 50 lbs P/acre, 10 lbs S/acre.

4/5/2022 60 lbs K/acre, 75 lbs N/acre, 10 lbs S/acre.

Herbicide: 5/5/2022 13.5 oz/acre Huskie

Fungicide: 5/31/2022 13.7 oz/acre Miravis Ace

Harvest: 7/07/2022

Growing season conditions: An average winter was followed by a wet spring, but a 3-week dry period in late June.

Research site details:

W.K. Kellogg Biological Station (KBS): Project managed by Brook Wilke, Josh Dykstra, James DeDecker and Christian Kapp

Previous crop: Soybeans

Soil type: Kalamazoo Loam

*Six-row varieties

**Awnless six -row varieties, both had substantial wildlife damage

~Hulless varieties

#Test Weights were recorded after cleaning grain for quality analysis



WINTER MALTING BARLEY TRIAL – 2022 QUALITY

Hickory Corners, Michigan

Variety	% Protein	Plump (6/64)	Thin	GE 4 ml	GE 8 ml	GC	RVU	DON (ppm)
13ARS503-1	9.1	95.3	0.3	69	25	99	118	0.3
13ARS506-8	9.8	94.5	0.3	90	55	99	138	0.17
13ARS514-5	9.9	88.9	1.1	48	26	84	48	0.14
2MW18_4462-008	11.2	98.5	0.1	96	92	97	163	0.34
AC 15/172/43	10.2	99	0.1	97	87	99	150	0.32
Amaze 10*~	10.9	46.9	4.6	100	96	98	163	0.29
Avalon	11.3	99.5	0.1	100	96	100	137	0.33
Charles	9.6	98.1	0.2	85	78	99	38	0.17
Dementiel*	9.3	97.6	0.2	99	87	98	159	0.48
DH0214-007	11.1	98.9	0.1	94	89	99	171	0.2
DH02FL-028	9.9	96.1	0.2	99	97	99	159	0.16
DH141222	9.7	99.2	0	96	86	100	134	0.24
DH141225	10	99.7	0	96	85	99	143	0.51
DH141917	10.3	99	0.1	98	90	99	148	0.13
Endeavor	10	87.6	1.1	52	17	88	71	0.17
Flavia	10.7	99.3	0	100	89	99	152	0.2
Hirondella*	10.4	97.8	0.1	99	100	100	155	0.41
KWS Donau	10.4	99.3	0.1	99	93	100	148	0.19
KWS Faro*	8.7	97.8	0.2	99	98	100	124	0.51
KWS Somerset	9.8	98.8	0.1	100	98	98	167	0.14
LCS Calypso	10.5	98.4	0	95	97	98	161	0.14
LCS Puffin	10	98.6	0.1	97	97	100	146	0.16
LCS Violetta	10.2	98.9	0.1	100	93	97	169	0.37
Lyberac	9.1	98	0.2	100	94	100	153	0.47
Marouetta*	9	98.5	0.1	99	99	100	137	0.57
MW12_4007-001	10.5	96.7	0.4	100	86	97	157	0.28
Nomini**	11.6	88.9	0.5	97	23	95	178	0.26
Pixel*	9.4	97.5	0.1	100	99	99	157	0.66
RIL02FL-029	10.8	93.8	0.3	99	65	97	166	0.13
RIL02WI-013	10.5	97.6	0.1	98	80	99	172	0.08
SC 104865*	9.3	98.2	0.1	98	92	97	156	0.78
SC 113669*	9.7	98.1	0.1	99	91	99	148	0.73
Secretariat	10.8	95.2	0.3	99	94	100	158	0.35
Teepee	10.1	98	0.2	100	94	99	145	0.21
Thoroughbred*	10.1	97.3	0.1	97	95	97	147	0.58
VA15H-73 2R~	11.5	73.5	1.2	97	97	99	171	0.17
VA16BFHB-268 NA**	11.4	77.7	0.6	98	15	97	161	0.24
VA16M-84	11.3	99.2	0	99	95	99	153	0.13
VA17M-13DH1720*	9.2	93.8	0.4	97	97	99	161	0.6
VA19M-16DH2261	11.2	99.4	0	99	96	99	182	0.1
VA20MFHB-18DH541	10.2	98.9	0.1	100	92	99	156	0.29
Wintmalt	9.9	97.5	0.3	95	88	98	154	0.21
Grand Mean	10.2	94.9	0.3	94.7	82.5	98.	147.0	0.3
STDEV	0.7	9.2	0.7	11.3	24.1	3.0	29.5	0.2

GRAIN QUALITY

Grain quality is the most important characteristic for malting barley.

If the barley doesn't meet quality specifications, it may be rejected by the malthouse. Conversely, premiums may be offered for barley that meets or exceeds quality standards.

Ideal values for the quality data shown on this page are shown below.

- GC >95%
- Plump >90%
- CP <12.5%
- DON <1.0 ppm
- RVU >120

Grain quality from the Hickory Corners site was analyzed six months after harvest. The consistent spring rainfall followed by dry periods during harvest produced high quality barley across most varieties.



WINTER MALTING BARLEY TRIAL – 2022 MALT QUALITY

Malt quality data on select varieties from the Winter Malting Barley Trial (KBS, 2022) are shown below. The American Malting Barley Association (AMBA) has published guidelines for [malting barley quality characteristics](#).

Variety	Fine Malt Ext. (%)	Color Agtron	Beta-glucan (ppm)	Wort Protein (%)	Malt Protein (%)	S/T (%)	FAN (mg/L)	Diastatic Power °ASBC	Alpha Amylase (20 D.U.)
2MW18_4462-008	78.8	63	366	6.04	11.8	53.2	216	100	72.4
AC 15/172/43	80.4	60	38	4.99	10.9	49.4	159	169	57.5
Amaze 10*~	*87.0	73	445	4.92	10.6	47.9	138	73	57.9
Avalon	81.8	57	35	5.3	11	51.3	195	142	62.3
Dementiel*	79.8	64	94	5.23	9.9	55.4	191	97	64.4
DH0214-007	78.7	64	348	5.38	11.7	49.7	131	137	54.4
DH02FL-028	79.3	66	26	4.73	10.6	46.9	115	121	46.9
DH141222	82.2	60	21	4.99	10.2	53.8	159	146	43.4
DH141225	82.3	59	22	5.15	10.4	53.3	157	147	39.6
DH141917	82.3	57	25	5.29	10.5	53.5	180	122	45.2
Flavia	80.8	59	62	4.92	11.2	46.8	143	129	45.4
Hirondella*	79.7	54	210	4.85	10.4	50.2	150	133	50.5
KWS Donau	80.7	65	52	4.89	10.4	49.3	147	129	46.5
KWS Faro*	81.2	66	138	4.96	8.3	62.9	166	60	48.2
KWS Somerset	81	61	61	4.88	10	49.7	150	125	51.3
LCS Calypso	81.7	58	32	4.97	10.4	50.7	149	161	50.2
LCS Puffin	81.1	67	99	5.19	9.7	54.5	162	121	47
LCS Violetta	82.4	58	29	5.23	11	48.7	162	167	63.9
Lyberac	82	67	25	4.64	9	52.2	134	134	43.8
Marouetta*	80.5	65	241	4.89	8.9	58.5	161	108	60.7
MW12_4007-001	81.2	65	184	5.79	11	55.2	203	127	68.3
Nomini**	75.6	47	*588	5.11	12.1	43.5	147	61	49.9
Pixel*	80.3	60	396	4.71	9.8	53.3	142	122	55.3
RIL02FL-029	80.5	70	276	5.08	11.3	48.4	138	155	45.1
RIL02WI-013	79.6	62	47	4.86	10.3	50.5	134	131	54.6
SC 104865*	81.7	66	116	5.25	9.9	56	177	131	61.2
SC 113669*	80.6	60	248	5.04	10	53.4	160	125	48.8
Secretariat	77.5	48	*597	5.3	11.3	48.4	185	68	47.6
Teepee	81.8	61	26	5.31	10.6	54.5	179	159	51.5
Thoroughbred*	79.7	65	*480	4.7	10.3	48.8	142	110	53.8
VA15H-73 2R~	84.3	49	425	4.58	11.5	43.7	101	70	52.3
VA16BFHB-268 NA**	75.3	49	*608	4.96	12	44.7	149	93	41
VA16M-84	80.5	65	339	5.22	11.5	47.9	129	121	50.3
VA17M-13DH1720*	79.8	57	288	4.53	9.5	52.1	131	109	41.3
VA19M-16DH2261	79.5	53	113	5.08	11.2	47.5	159	129	52.7
VA20MFHB-18DH541	81.3	59	50	4.73	10.2	49.2	125	121	43.6
Wintmalt	80.9	60	51	4.89	10.2	52.9	152	107	53.4
Grand Mean	80.5	60.5	149.3	5.0	10.5	51.0	155	120.5	52.0
STDEV	1.8	6.0	138.7	0.3	0.9	4.0	24.3	28.3	7.8