

## WINTER MALTING BARLEY TRIAL – 2020 RESULTS

### Hickory Corners

Variety	Yield (bu/ac)	Test Weight (lbs/bu)	Heading Date	Maturity Date	Fall Vigor# (0-10)
08ARS509-1	113.0	45.0	5/25	6/26	8.3
08ARS632-5	118.2	44.2	5/27	6/27	9.3
13ARS537-13	102.7	45.8	5/24	6/25	8.7
13ARS537-19	77.4	46.2	5/24	6/25	10.0
AC13/028/53*	117.7	43.4	5/23	6/26	10.0
Charles	85.0	38.9	5/24	6/25	9.3
Delicatesse	114.9	45.2	5/26	6/25	9.3
DH130910	101.9	46.5	5/25	6/27	9.3
DH140088	108.4	45.6	5/25	6/29	8.7
DH140963	120.4	43.8	5/27	6/26	9.3
DH141132	114.4	43.1	5/28	6/27	9.0
Endeavor	85.0	43.9	5/27	6/27	10.0
Flavia	112.6	47.2	5/26	6/26	9.0
Hirondella*	104.3	44.2	5/27	6/28	9.7
KWS Donau*	103.2	43.5	5/27	6/27	9.0
KWS Faro*	131.6	46.0	5/23	6/28	9.0
KWS Flemming*	98.6	40.4	5/27	6/28	9.0
KWS Orbit*	86.8	40.4	5/26	6/29	10.0
KWS Scala	99.7	41.3	5/27	6/26	9.7
KWS Somerset*	128.8	46.1	5/27	6/28	10.0
LCS Calypso	104.2	43.2	5/25	6/25	10.0
LCS Casanova	132.5	48.7	5/26	6/25	10.0
LCS Nenea	104.0	44.1	5/24	6/25	9.7
LCS Puffin	112.7	48.6	5/25	6/25	9.7
LCS Violetta	71.7	37.2	5/27	6/27	5.3
Lyberac	121.8	46.2	5/25	6/27	9.3
MW12_4007-001*	81.3	39.7	5/23	6/25	8.3
Nomini*	106.0	42.3	5/21	6/25	8.7
Pixel*	123.2	43.5	5/25	6/28	9.3
Rossignola*	115.9	44.1	5/24	6/28	10.0
Secretariat	100.1	40.7	5/21	6/28	6.3
Thoroughbred*	114.3	44.7	5/23	6/28	8.7
Thunder	96.1	44.2	5/25	6/25	9.0
VA16M-81	113.5	48.9	5/25	6/28	9.3
VA16M-84	92.0	47.4	5/26	6/27	9.3
Visuel*	117.0	42.0	5/25	6/27	9.0
Wintmalt	103.5	39.9	5/28	6/27	8.3
<b>Grand Mean</b>	<b>107.2</b>	<b>43.98</b>	<b>5/25</b>	<b>6/26</b>	<b>9.1</b>
<b>CV</b>	<b>17.12</b>	<b>4.37</b>	<b>1.6</b>	<b>1.2</b>	<b>8.45</b>
<b>LSD @ 10%</b>	<b>24.97</b>	<b>2.61</b>	<b>1.67</b>	<b>1.1</b>	<b>1.04</b>

## HICKORY CORNERS

Planting date: 10/10/2019

Fertility: 10/8/2018 – 32 lbs N/acre, 52 lbs P/acre, 12 lbs S/acre.

3/27/2020 60 lbs K/acre, 100 lbs N/acre, 10 lbs S/acre.

Fungicide: 5/27/2020 13.7 oz/acre Miravis Ace

Harvest: 6/30/2020

Growing season conditions: A cool and wet period in April and early May was followed by intermittent dry periods until harvest.

Research site details:

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

Previous crop: Soybeans

Soil type: Kalamazoo Sandy Loam

\*Six-row varieties, all others two-row

#Fall Vigor Scores

7-10: Thick stand with lush, multi leafed plants ~4" tall.

5-6: Occasionally spotty. Plants ~3" tall.

3-4: Has bare spots. Stand is thin with small plants.

0-2: Few to no plants.



## WINTER MALTING BARLEY TRIAL – 2020 RESULTS

### Kawkawlin

Variety	Yield (bu/ac)	Test Weight (lbs/bu)	Heading Date	Maturity Date	Fall Vigor# (0-10)
08ARS509-1	92.6	42.6	NA	NA	3.7
08ARS632-5	59.4	40.5	NA	NA	3.0
13ARS537-13	78.9	44.2	NA	NA	4.0
13ARS537-19	92.1	43.2	NA	NA	3.7
AC13/028/53*	106.9	42.3	NA	NA	2.7
Charles	57.2	38.5	NA	NA	3.0
Delicatesse	70.5	40.3	NA	NA	3.0
DH130910	54.1	43.0	NA	NA	3.0
DH140088	95.9	40.8	NA	NA	3.7
DH140963	71.9	40.0	NA	NA	3.0
DH141132	68.0	40.9	NA	NA	2.7
Endeavor	62.5	39.7	NA	NA	3.0
Flavia	79.8	41.8	NA	NA	2.0
Hirondella*	90.2	41.1	NA	NA	3.3
KWS Donau*	43.5	36.7	NA	NA	2.7
KWS Faro*	103.7	43.6	NA	NA	2.0
KWS Flemming*	68.3	41.0	NA	NA	2.7
KWS Orbit*	76.6	42.8	NA	NA	2.7
KWS Scala	70.6	41.8	NA	NA	2.0
KWS Somerset*	65.3	40.0	NA	NA	2.0
LCS Calypso	56.3	41.5	NA	NA	2.3
LCS Casanova	74.5	44.9	NA	NA	3.0
LCS Nenea	86.4	43.4	NA	NA	2.0
LCS Puffin	64.5	45.1	NA	NA	3.0
LCS Violetta	25.5	39.4	NA	NA	0.0
Lyberac	41.0	43.8	NA	NA	2.7
MW12_4007-001*	47.2	40.1	NA	NA	2.3
Nomini*	64.8	42.6	NA	NA	0.0
Pixel*	74.3	42.8	NA	NA	2.7
Rossignola*	77.2	44.8	NA	NA	2.3
Secretariat	66.2	41.3	NA	NA	0.0
Thoroughbred*	64.6	41.8	NA	NA	2.0
Thunder	70.2	41.9	NA	NA	2.3
VA16M-81	59.1	35.9	NA	NA	2.3
VA16M-84	33.3	38.0	NA	NA	2.5
Visuel*	60.2	41.6	NA	NA	2.7
Wintmalt	28.0	36.0	NA	NA	3.0
<b>Grand Mean</b>	<b>68.6</b>	<b>41.2</b>	NA	NA	<b>2.5</b>
<b>CV</b>	<b>27.1</b>	<b>3.4</b>	NA	NA	<b>1.3</b>

## KAWKAWLIN

Planting date: 10/26/2019

Fertility: 10/26/2019 – 15 lbs N/acre, 15 lbs P/acre, 45lbs K/acre.

5/16/2020 100 lbs N/acre (urea)

Fungicide: None

Harvest: 7/17/2020

Growing season conditions: Late planting led to limited fall growth, including no fall emergence for a few varieties. A portion of the plot area was removed from analysis due to winter injury from ponding.

Research site details:

Cooperating Farmers: Don Shelagowski and Chris Schmidt.

Previous crop: Dry beans

Soil type: Wixom Sandy Loam

\*Six-row varieties, all others two-row

#Fall Vigor Scores

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7-10: Thick stand with lush, multi leafed plants ~4" tall.

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## WINTER MALTING BARLEY TRIAL – 2020 QUALITY

### Hickory Corners

Variety	% Protein	Plump (6/64)	Thin	GE 4 ml	GE 8 ml	GC	RVA	DON (ppm)
08ARS509-1	10.3	81	1.6	100	93	100	81	0.04
08ARS632-5	10.4	97	0.1	100	96	99	154	0.01
13ARS537-13	9.2	94.6	0.6	79	53	80	32	0.06
13ARS537-19	10.5	97.2	0.2	85	43	84	25	0.02
AC13/028/53*	9.7	95.8	0.1	95	94	98	123	0.18
Charles	10.4	93.2	0.6	98	93	99	64	0.05
Delicatesse	10.5	96.3	0.2	100	98	100	149	0.09
DH130910	10.5	95.4	0.8	100	97	99	143	0.05
DH140088	10.7	97	0.2	99	88	99	92	0.11
DH140963	10.1	96.3	0.1	96	92	95	121	0.1
DH141132	10.4	93	0.6	94	93	98	139	0.11
Endeavor	10.1	72.5	2.2	98	83	99	75	0.09
Flavia	9.5	96.9	0.4	99	87	99	128	0.1
Hirondella*	11	96.7	0.1	94	76	99	136	0.1
KWS Donau*	10	96.8	0.3	99	97	100	143	0.02
KWS Faro*	9.1	94.4	0.7	90	62	95	104	0.05
KWS Flemming*	10	94.9	0.4	96	85	90	141	0.12
KWS Orbit*	10.8	96.5	0.2	96	61	99	142	0.14
KWS Scala	10.1	97.8	0.4	100	97	99	138	0.12
KWS Somerset*	9.8	98.6	0.1	99	98	100	148	0.07
LCS Calypso	10.9	95.9	0.4	99	98	99	135	0.03
LCS Casanova	10.5	98.6	0.2	98	99	100	143	0.05
LCS Nenea	10.8	86.7	2	99	96	100	148	0.07
LCS Puffin	10.3	91.2	0.5	99	97	100	152	0.04
LCS Violetta	10.3	96	0.4	99	99	99	139	0.04
Lyberac	10	92.7	0.8	95	94	97	140	0.13
MW12_4007-001*	9.6	81.5	1.7	100	90	100	157	0.11
Nomini*	11	81	1.6	78	56	87	165	0.03
Pixel*	9.5	95.4	0.3	96	89	98	134	0.12
Rossignola*	10.4	97.9	0.1	96	95	98	131	0.15
Secretariat	10.9	88.5	0.7	100	96	99	157	0.12
Thoroughbred*	9.8	83.9	1.5	100	92	99	138	0.09
Thunder	10.3	96.7	0.4	97	92	96	104	0.02
VA16M-81	11.6	96.7	0.3	90	88	99	145	0.05
VA16M-84	11.6	97	0.3	93	94	100	146	0.03
Visuel*	9.6	94.6	0.4	100	98	98	140	0.16
Wintmalt	9.6	95.8	0.3	100	97	100	127	0.07
<b>Grand Mean</b>	<b>10.3</b>	<b>93.3</b>	<b>0.6</b>	<b>96.1</b>	<b>88.0</b>	<b>97.3</b>	<b>126</b>	<b>0.1</b>

## 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.

Grain quality from the Hickory Corners site was analyzed five months after harvest.

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

